

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

HOBBS OCD

AUG 02 2013

RECEIVED

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 Corporation	Contact Bruce Baker
Address PO BOX 1849, Eunice, NM 88231	Telephone No. (575) 394-1503
Facility Name NEDU #519	Facility Type Production Line Release
Surface Owner State	Mineral Owner
Lease No. 30-025-34413	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	15	21S	37E	305'	FNL	607'	FEL	Lea

Latitude 32°29'7.069"N Longitude 103°8'39.45"W

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release	Volume Recovered
Source of Release Rupture in poly line	Date and Hour of Occurrence 4/3/13	Date and Hour of Discovery
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Geoff Leking	
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.*

A rupture was discovered in the poly line at the site. Vacuum trucks were mobilized to remove the standing water from the site.

Describe Area Affected and Cleanup Action Taken.* On April 4th, 2013, samples were taken from the release area from the surface and with depth. The samples were field tested for chlorides and hydrocarbons and the surface samples were taken to a commercial laboratory for analysis of chlorides, GRO and DRO. Laboratory results showed that chlorides were elevated at the surface but showed little to no GRO and DRO. Three verticals were installed at the site beginning on April 8th, 2013. The verticals were dug to three feet bgs and the bottom two samples from each vertical were sent to a commercial laboratory for analysis. All samples returned chloride results below 250 mg/kg with GRO and DRO results of non-detect. A temporary monitor well was installed on April 8th, 2013 to determine the depth to groundwater at the site. The bore was drilled to 50 ft bgs and left open for over 48 hours to allow water to accumulate in the bore hole. The water level was gauged and depth to groundwater was determined to be 39 ft bgs. Excavation of the site began on April 11th, 2012. A total of 1,825 yards was excavated and disposed of at a NMOCD approved facility. The north excavation was dug to 2.5 feet deep and the south excavation was dug to 1.5 feet. Final grab samples were taken from the excavation walls and a 5 point bottom composite was taken from the bottom of each excavation. These samples were field tested for chlorides and hydrocarbons, and representative samples were taken to a commercial laboratory for analysis. The wall and bottom composite samples from each excavation returned chloride results below 250 mg/kg and GRO and DRO results of non-detect. On April 23rd, 2013, NMOCD-District 1 verbally approved the final excavation sampling and allowed the site to be backfilled. A total of 2,075 yards of soil was imported to the site. The site was backfilled with the soil and contoured to the surrounding location. A sample of the imported soil was taken to a commercial laboratory for analysis of chlorides and returned a result of 64 mg/kg.

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

Signature: <i>Bruce Baker</i>	OIL CONSERVATION DIVISION <i>Geoffrey Leking</i>	
Printed Name: Bruce Baker	Approved by District Supervisor: Environmental Specialist	
Title: <i>Environmental Tech</i>	Approval Date: <i>8-2-2013</i>	Expiration Date: <i>-</i>
E-mail Address: <i>Larry.baker@apachecorp.com</i>	Conditions of Approval: <i>-</i>	Attached <input type="checkbox"/>
Date: <i>8-1-13</i> Phone: (575) 394-1503		<i>IRP-8-13-2941</i>

* Attach Additional Sheets If Necessary



EXPLORING WHAT'S POSSIBLE

approved
Shuffey Sekim
Environmental Specialist
NMOC D - DIST 1
8/2/13

APACHE CORPORATION

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

HOBBS OCD

AUG 02 2013

RECEIVED

NEDU #519

Termination Report

API 30-025-34413

Release Date: April 3rd, 2013

Unit Letter A, Section 15, Township 21S, Range 37E

Rice Environmental Consulting & Safety

P.O. Box 2948 Hobbs, NM 88241

Phone 575.393.2967

June 6th, 2013

Mr. Geoff Leking

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau – District 1

1625 N. French Drive

Hobbs, New Mexico 88240

**RE: Termination Request
Apache Corporation – NEDU #519
UL/A sec. 15 T21S R37E
API No. 30-025-34413**

Mr. Leking:

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

Background and Previous Work

The site is located 3 miles north of Eunice, New Mexico in Unit Letter 'A', sec. 15, T21S R37E in Lea County. Soil bore installed at the site showed that groundwater was located at 39 ft bgs.

On April 3rd, 2013, a poly line ruptured releasing produced water. On April 4th, 2013, RECS personnel were on site to begin work on the NEDU #519 release. Samples were taken from the release area from the surface and with depth (Figure 1). The samples were field tested for chlorides and hydrocarbons and the surface samples were taken to a commercial laboratory for analysis of chlorides, GRO and DRO (Appendix A). Laboratory results showed that chlorides were elevated at the surface but showed little to no GRO and DRO.

The active lines at the site were spotted and stripped back so they wouldn't be hit during excavation. Three verticals were installed at the site beginning on April 8th, 2013 (Figure 2). The verticals were dug to three feet bgs and the bottom two samples from each vertical were sent to a commercial laboratory for analysis. All samples returned chloride results below 250 mg/kg with GRO and DRO results of non-detect (Appendix A). A temporary monitor well was installed on April 8th, 2013 to determine the depth to groundwater at the site (Appendix B). The bore was drilled to 50 ft bgs and left open for over 48 hours to allow water to accumulate in the bore hole. The water level was gauged and depth to groundwater was determined to be 39 ft bgs.

Excavation of the site began on April 11th, 2012. A total of 1,825 yards was excavated and disposed of at a NMOCD approved facility. The north excavation was dug to 2.5 feet deep and the south excavation was dug to 1.5 feet. Final grab samples were taken

from the excavation walls and a 5 point bottom composite was taken from the bottom of each excavation (Figure 3). These samples were field tested for chlorides and hydrocarbons, and representative samples were taken to a commercial laboratory for analysis (Appendix A). The wall and bottom composite samples from each excavation returned chloride results below 250 mg/kg and GRO and DRO results of non-detect. On April 23rd, 2013, NMOCD-District 1 verbally approved the final excavation sampling and allowed the site to be backfilled. A total of 2,075 yards of soil was imported to the site. The site was backfilled with the soil and contoured to the surrounding location. A sample of the imported soil was taken to a commercial laboratory for analysis of chlorides and returned a result of 64 mg/kg (Appendix A). Photo documentation of this can be found in Appendix C.

Since all the impacted soil was removed from the site and replaced with clean, imported soil, RECS, on behalf of Apache Corporation, submits the final C-141 (Appendix D) and respectfully requests the closure of the regulatory file for this site.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 631-6432 if you have any questions or wish to discuss the site.

Sincerely,

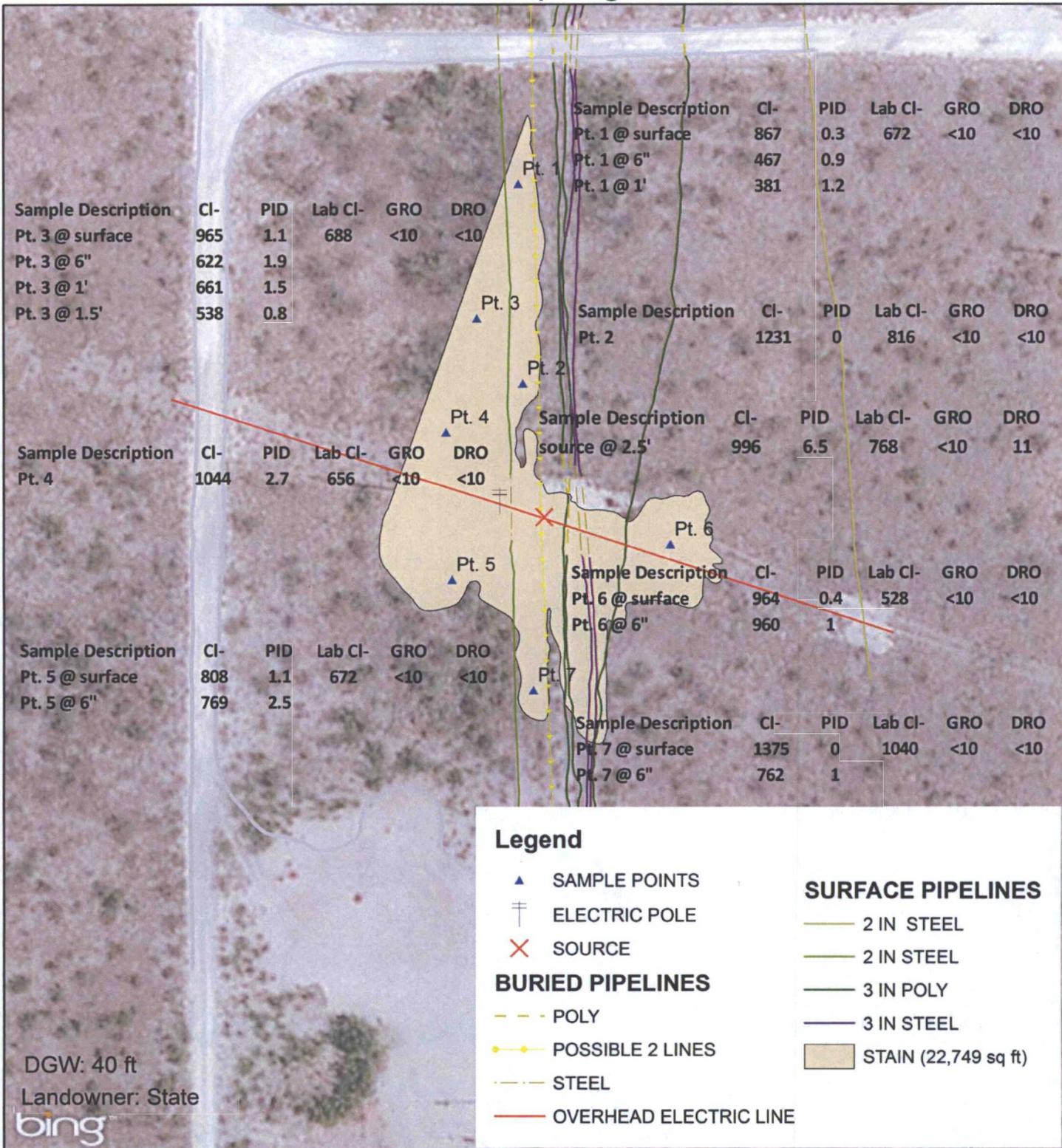


Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Attachments:

- Figure 1 – Initial Sampling Data
- Figure 2 – Verticals and Temporary MW Installation
- Figure 3 – Final Excavation Sampling
- Appendix A – Laboratory Analyses
- Appendix B – Temporary Monitor Well Documentation
- Appendix C – Photo Documentation
- Appendix D – Final C-141

Initial Sampling Data



Legend

- ▲ SAMPLE POINTS
 - ⊥ ELECTRIC POLE
 - ✗ SOURCE
 - POLY
 - POSSIBLE 2 LINES
 - STEEL
 - OVERHEAD ELECTRIC LINE
- SURFACE PIPELINES**
- 2 IN STEEL
 - 2 IN STEEL
 - 3 IN POLY
 - 3 IN STEEL
 - STAIN (22,749 sq ft)

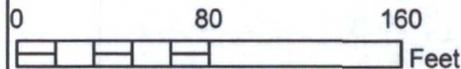
DGW: 40 ft
Landowner: State



APACHE NEDU #519

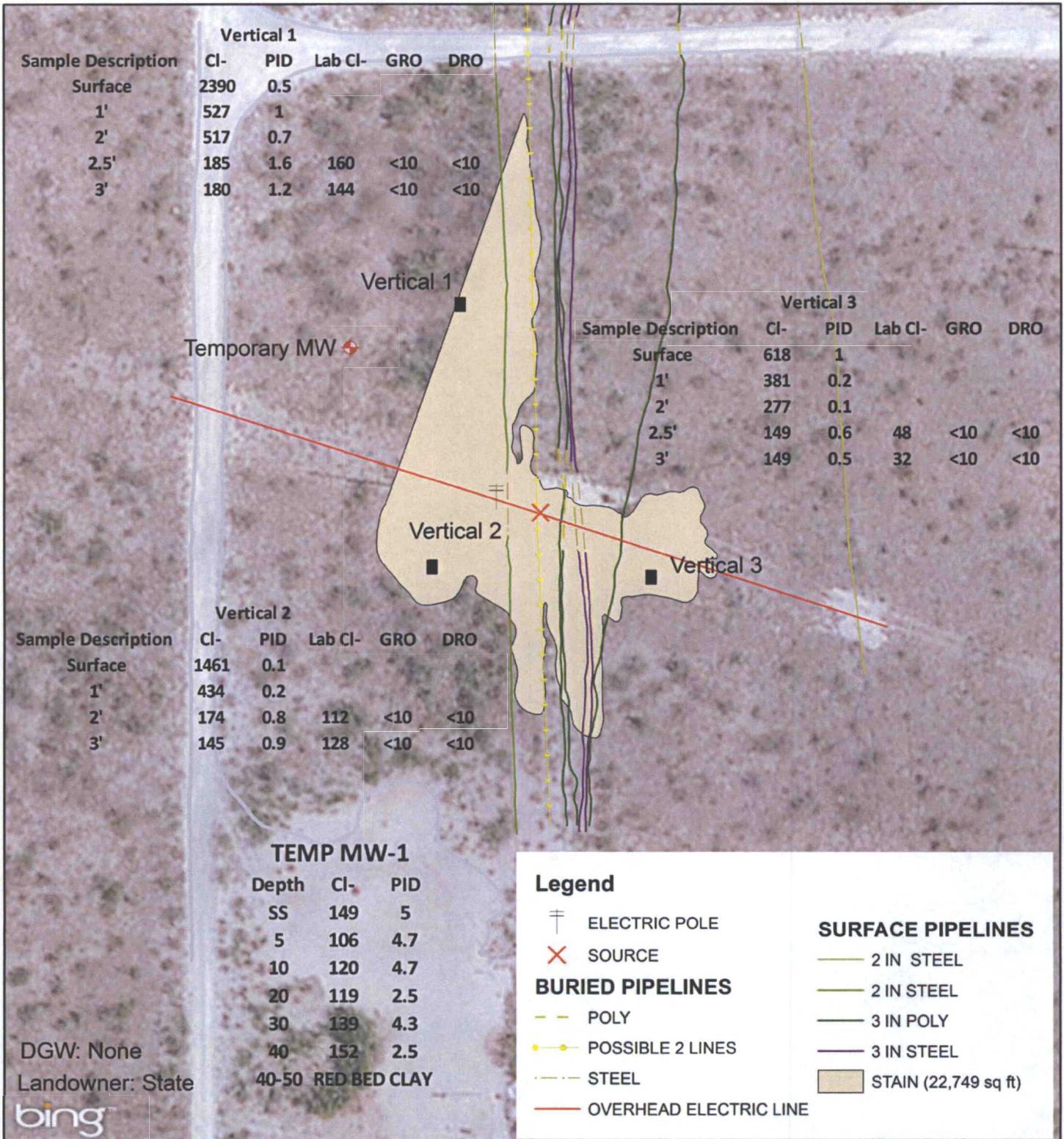
LEGALS: UL/A sec. 15
T-21-S R-37-E
LEA COUNTY, NM

Figure 1



GPS date: 4/4/13 TG
Drawing date: 4/5/13
Drafted by: L. Weinheimer

Verticals and Temporary MW Installation



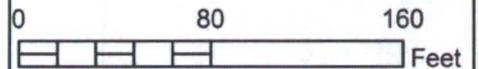
bing



APACHE NEDU #519

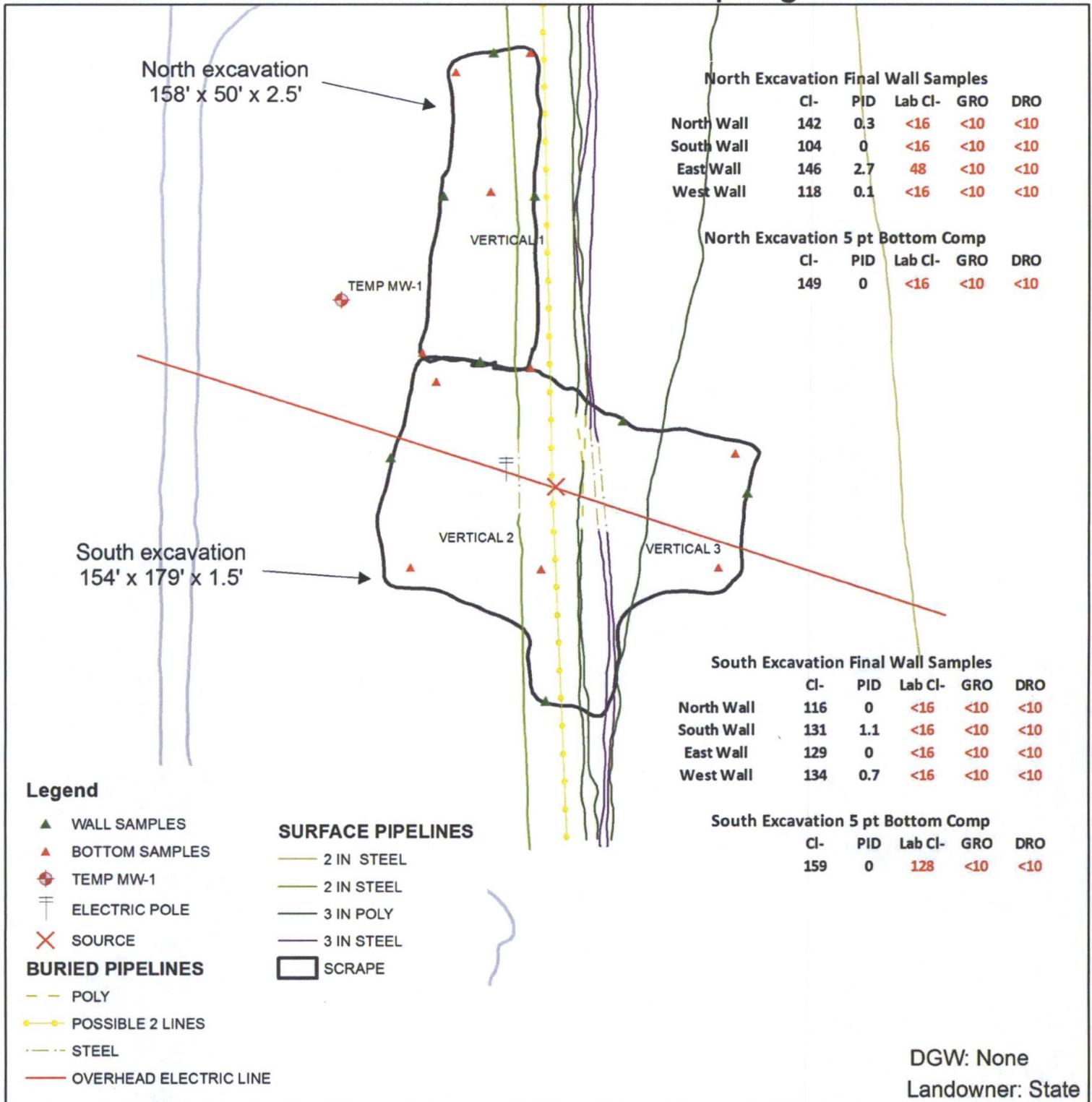
LEGALS: UL/A sec. 15
T-21-S R-37-E
LEA COUNTY, NM

Figure 2



GPS date: 4/4/13 TG
Drawing date: 4/11/13
Drafted by: L. Weinheimer

Final Excavation Sampling



APACHE NEDU #519

LEGALS: UL/A sec. 15
T-21-S R-37-E
LEA COUNTY, NM

Figure 3



0 30 60
Feet

GPS date: 4/18/13 JK
Drawing date: 4/22/13
Drafted by: L. Weinheimer, T. Grieco



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 11, 2013

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU CENTRAL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 04/08/13 14:30.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

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: 04/08/2013
 Reported: 04/11/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/04/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 1 SURFACE (H300838-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	672	16.0	04/10/2013	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	04/10/2013	ND	211	105	200	4.47		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	208	104	200	4.21		

Surrogate: 1-Chlorooctane 109 % 65.2-140
 Surrogate: 1-Chlorooctadecane 112 % 63.6-154

Sample ID: PT. 2 SURFACE (H300838-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	816	16.0	04/10/2013	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	04/10/2013	ND	222	111	200	5.04		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	218	109	200	5.96		

Surrogate: 1-Chlorooctane 87.1 % 65.2-140
 Surrogate: 1-Chlorooctadecane 108 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/08/2013
 Reported: 04/11/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/04/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 3 SURFACE (H300838-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	688	16.0	04/10/2013	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	04/10/2013	ND	222	111	200	5.04		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	218	109	200	5.96		

Surrogate: 1-Chlorooctane 91.6 % 65.2-140
 Surrogate: 1-Chlorooctadecane 109 % 63.6-154

Sample ID: PT. 4 SURFACE (H300838-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	04/10/2013	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	04/10/2013	ND	222	111	200	5.04		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	218	109	200	5.96		

Surrogate: 1-Chlorooctane 87.6 % 65.2-140
 Surrogate: 1-Chlorooctadecane 109 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/08/2013
 Reported: 04/11/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/04/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 5 SURFACE (H300838-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	672	16.0	04/10/2013	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	04/10/2013	ND	222	111	200	5.04		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	218	109	200	5.96		
Surrogate: 1-Chlorooctane	90.3 %	65.2-140								
Surrogate: 1-Chlorooctadecane	109 %	63.6-154								

Sample ID: PT. 6 SURFACE (H300838-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	04/10/2013	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	04/10/2013	ND	222	111	200	5.04		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	218	109	200	5.96		
Surrogate: 1-Chlorooctane	88.5 %	65.2-140								
Surrogate: 1-Chlorooctadecane	109 %	63.6-154								

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/08/2013
 Reported: 04/11/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/04/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 7 SURFACE (H300838-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1040	16.0	04/10/2013	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	04/10/2013	ND	222	111	200	5.04		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	218	109	200	5.96		
Surrogate: 1-Chlorooctane	89.8 %	65.2-140								
Surrogate: 1-Chlorooctadecane	107 %	63.6-154								

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



April 11, 2013

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU CENTRAL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 04/08/13 14:30.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

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: 04/08/2013
 Reported: 04/11/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/08/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL 1 @ 2.5' (H300837-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	04/10/2013	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	04/10/2013	ND	211	105	200	4.47		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	208	104	200	4.21		
Surrogate: 1-Chlorooctane	80.7 %	65.2-140								
Surrogate: 1-Chlorooctadecane	97.6 %	63.6-154								

Sample ID: VERTICAL 1 @ 3' (H300837-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	04/10/2013	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	04/10/2013	ND	211	105	200	4.47		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	208	104	200	4.21		
Surrogate: 1-Chlorooctane	94.2 %	65.2-140								
Surrogate: 1-Chlorooctadecane	108 %	63.6-154								

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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: 04/08/2013
 Reported: 04/11/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/08/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL 2 @ 2' (H300837-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	04/10/2013	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	04/10/2013	ND	211	105	200	4.47		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	208	104	200	4.21		
<i>Surrogate: 1-Chlorooctane</i>		<i>90.4 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>106 %</i>	<i>63.6-154</i>							

Sample ID: VERTICAL 2 @ 3' (H300837-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	04/10/2013	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	04/10/2013	ND	211	105	200	4.47		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	208	104	200	4.21		
<i>Surrogate: 1-Chlorooctane</i>		<i>87.4 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>104 %</i>	<i>63.6-154</i>							

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/08/2013
 Reported: 04/11/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/08/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL 3 @ 2.5' (H300837-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	04/10/2013	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	04/10/2013	ND	211	105	200	4.47		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	208	104	200	4.21		
<i>Surrogate: 1-Chlorooctane</i>		89.2 %	65.2-140							
<i>Surrogate: 1-Chlorooctadecane</i>		108 %	63.6-154							

Sample ID: VERTICAL 3 @ 3' (H300837-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/10/2013	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	04/10/2013	ND	211	105	200	4.47		
DRO >C10-C28	<10.0	10.0	04/10/2013	ND	208	104	200	4.21		
<i>Surrogate: 1-Chlorooctane</i>		92.1 %	65.2-140							
<i>Surrogate: 1-Chlorooctadecane</i>		108 %	63.6-154							

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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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

Company Name: Apache Corp. **P.O. #:**

Project Manager: Natalie Gladden **Company:**

Address: **Attn:**

City: **State:** **Zip:**

Phone #: **Fax #:**

Project #: **Project Owner:**

Project Name: NEDU Cnt'l Battery AD

Project Location:

Sampler Name: JKAMPLAIN

Lab I.D.	Sample I.D.	MATRIX						PRESERV	SAMPLING	DATE	TIME
		GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID/BASE:				
H300637	Vent 1 @ 2.5'	0	1	1	1	1	1	1	4-8-13	9:00	
	Vent 1 @ 3'	0	1	1	1	1	1	1		9:05	
	Vent 2 @ 2'	0	1	1	1	1	1	1		9:30	
	Vent 2 @ 3'	0	1	1	1	1	1	1		9:35	
	Vent 3 @ 2.5'	0	1	1	1	1	1	1		10:20	
	Vent 3 @ 3'	0	1	1	1	1	1	1		10:25	

FOR LAB USE ONLY

Chlorides **TPH 8015 M** **BTEX** **Texas TPH** **Complete Cations/Anions** **TDS**

Relinquished By: [Signature] **Received By:** [Signature] **DATE:** 4/8/13 **TIME:** 2:30

Relinquished By: [Signature] **Received By:** [Signature]

Delivered By: (Circle One) **Sample Condition**

Sampler - UPS - Bus - Other: **Cool/Intact** **Yes** **No**

Checked By: [Signature]

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

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

REMARKS:

email results
 natalie.gladden@apachecorp.com
 Zconder@rice-ecs.com; Bbaker@rice-ecs.com;
 hconder@rice-ecs.com; Lweinheimer@rice-ecs.com;
 JKAMPLAIN@RICE-ECS.COM

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

26



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 19, 2013

STEVEN FLEMING

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU CENTRAL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 04/18/13 15:55.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in cursive script that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/18/2013
 Reported: 04/19/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: N EXC- N WALL CENTER (H300926-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	432	108	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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		

 Surrogate: 1-Chlorooctane 80.3 % 65.2-140
 Surrogate: 1-Chlorooctadecane 96.8 % 63.6-154

Sample ID: N EXC- S WALL CENTER (H300926-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	432	108	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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		

 Surrogate: 1-Chlorooctane 80.2 % 65.2-140
 Surrogate: 1-Chlorooctadecane 98.8 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/18/2013
 Reported: 04/19/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: N EXC- E WALL CENTER (H300926-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	04/19/2013	ND	432	108	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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		
Surrogate: 1-Chlorooctane		71.1 %	65.2-140							
Surrogate: 1-Chlorooctadecane		87.7 %	63.6-154							

Sample ID: N EXC- W WALL CENTER (H300926-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	432	108	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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		
Surrogate: 1-Chlorooctane		82.3 %	65.2-140							
Surrogate: 1-Chlorooctadecane		98.6 %	63.6-154							

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/18/2013
 Reported: 04/19/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: N EXC- 5 PT. BTM @ 2.5' (H300926-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	432	108	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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		

 Surrogate: 1-Chlorooctane 74.2 % 65.2-140
 Surrogate: 1-Chlorooctadecane 95.2 % 63.6-154

Sample ID: S EXC- N WALL CENTER (H300926-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	416	104	400	200		
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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		

 Surrogate: 1-Chlorooctane 77.3 % 65.2-140
 Surrogate: 1-Chlorooctadecane 99.5 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/18/2013
 Reported: 04/19/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/18/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S EXC- S WALL CENTER (H300926-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	416	104	400	200		
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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		
<i>Surrogate: 1-Chlorooctane</i>		<i>85.1 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>103 %</i>	<i>63.6-154</i>							

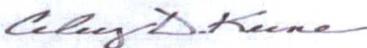
Sample ID: S EXC- E WALL CENTER (H300926-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	416	104	400	200		
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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		
<i>Surrogate: 1-Chlorooctane</i>		<i>82.0 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>103 %</i>	<i>63.6-154</i>							

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/18/2013
 Reported: 04/19/2013
 Project Name: NEDU CENTRAL BATTERY AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/18/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S EXC- W WALL CENTER (H300926-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/19/2013	ND	416	104	400	200		
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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		
<i>Surrogate: 1-Chlorooctane</i>		<i>79.4 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>96.9 %</i>	<i>63.6-154</i>							

Sample ID: S EXC- 5 PT. BTM @ 1.5' (H300926-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	04/19/2013	ND	416	104	400	200		
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	04/19/2013	ND	210	105	200	4.29		
DRO >C10-C28	<10.0	10.0	04/19/2013	ND	204	102	200	4.96		
<i>Surrogate: 1-Chlorooctane</i>		<i>80.2 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>101 %</i>	<i>63.6-154</i>							

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager

Rush

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

101 East Mariland, 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: <i>Steven Fleming</i>		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>NE Ok Cont'l Battery AA</i>		Fax #:			
Sampler Name: JKAMPLAIN		Matrix:			
FOR LAB USE ONLY		PRESERV:			
Lab I.D.		# CONTAINERS		DATE	
H300925		(G) RAB OR (C)OMP.		TIME	
1 N. Excavation		GROUNDWATER		4-17-13	
2 S. Wall Cont		WASTEWATER		2:00	
3 E. Wall Cont		SOIL		2:05	
4 W. Wall Cont		SLUDGE		2:10	
5 Sp. Btm Q. 25		OTHER:		2:15	
6 S. Excavation		ACID/BASE:		2:20	
7 S. Wall Cont		ICE / COOL		1:00	
8 E. Wall Cont		OTHER:		1:05	
9 W. Wall Cont		OTHER:		1:10	
10 Sp. Btm Q. 15		OTHER:		1:15	
				1:20	

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Relinquished By: <i>[Signature]</i>	Received By: <i>Debi Jensen</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #: _____
Relinquished By: _____	Received By: _____	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #: _____
Delivered By: (Circle One)	Sample Condition	REMARKS:	
Sampler - UPS - Bus - Other:	Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/>	email results	
	30c	mailto:gladden@apacelcorp.com	
		Zconder@rice-ecs.com; Bbaker@rice-ecs.com;	
		hconder@rice-ecs.com; Lweinheimer@rice-ecs.com;	
		JKAMPLAIN@RICE-ECS.COM	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476 #54



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 09, 2013

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU CENTRAL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 04/08/13 14:30.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

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:	04/08/2013	Sampling Date:	04/05/2013
Reported:	04/09/2013	Sampling Type:	Soil
Project Name:	NEDU CENTRAL BATTERY AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: IMPORTED SOIL (H300836-01)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: DW							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/09/2013	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

Cardinal Laboratories

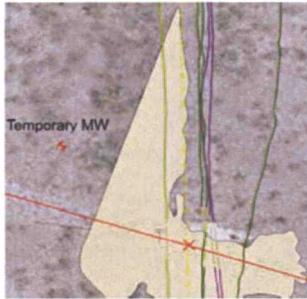
*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Logger: Kyle Norman
Driller: Harrison & Cooper, Inc.
Drilling Method: Air rotary
Start Date: 4/8/2013
End Date: 4/8/2013



Apache NEDU #519 **Well ID:**
 SB-1

Comments:
 DRAFTED BY: L. Weinheimer
 TD = 50 ft GW = 39 ft

Location: UL/I sec. 15 T-21-S R-37-E
Lat: 32°29'7.996"N **County:** Lea
Long: 103°8'40.724"W **State:** NM

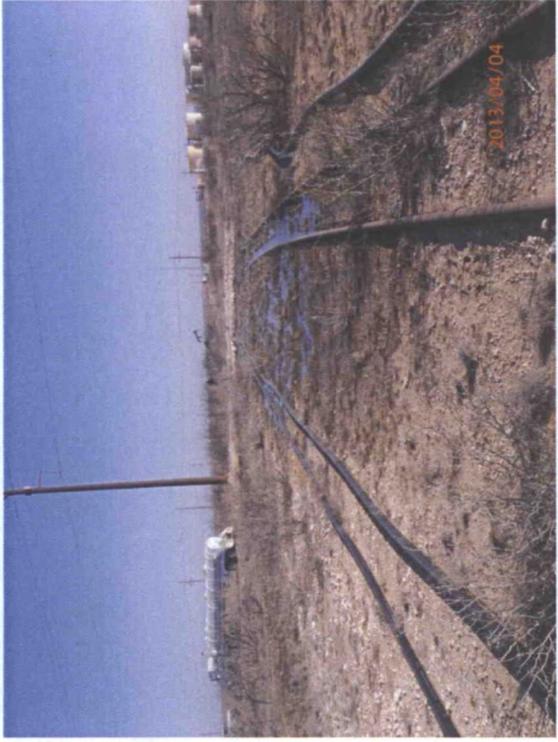
Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction			
				6" Brown Sand Top Soil					
SS	149		5	Caliche/Sandstone					
5 ft	106		4.7						
10 ft	120		4.7						
20 ft	119		2.5						
30 ft	139		4.3						
40 ft	152		2.5						
50 ft							Red Bed Clay		

bentonite seal

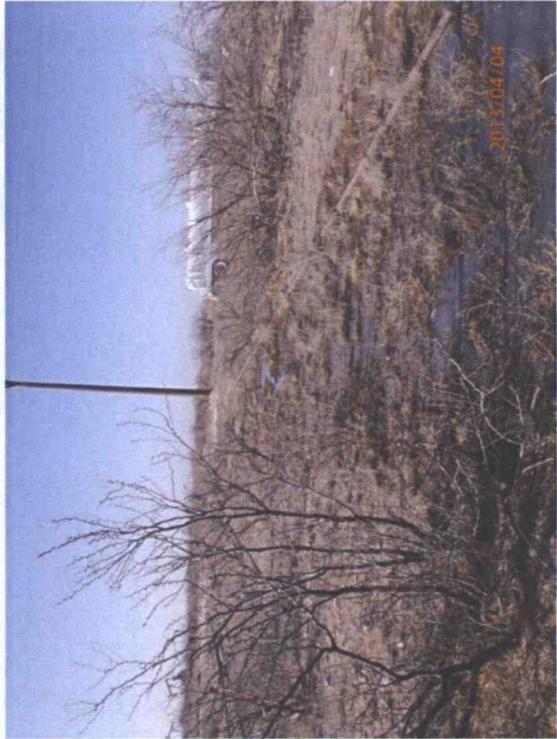
Apache NEDU #519
Unit Letter A, Section 15, T21S, R37E



Initial release area, facing west 4/4/13



Initial release area, facing north 4/4/13



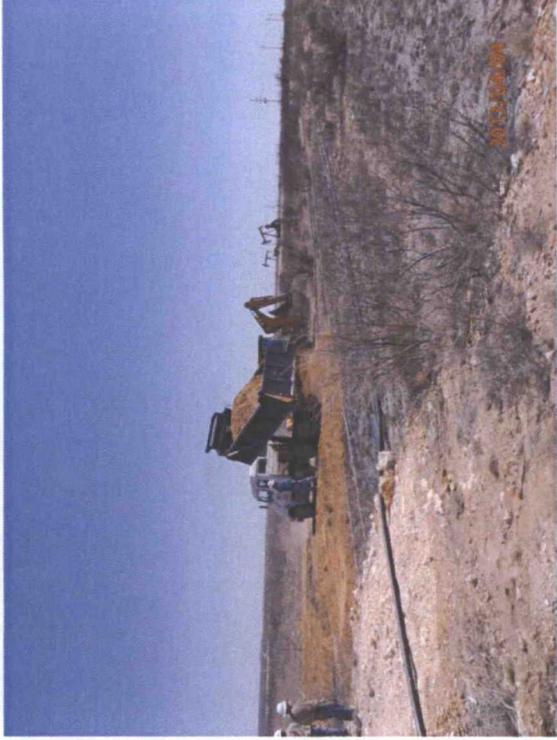
Initial release area, facing south 4/4/13



Covering exposed lines, facing south 4/4/13



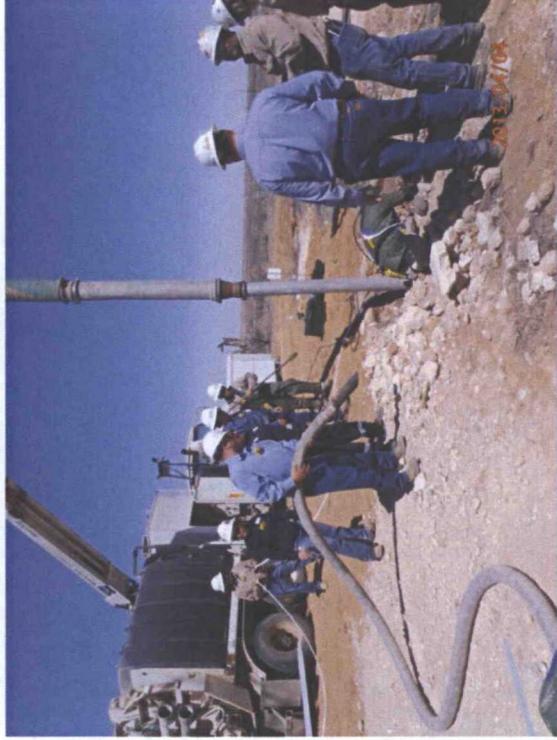
Hand auguring for samples, facing northeast 4/4/13



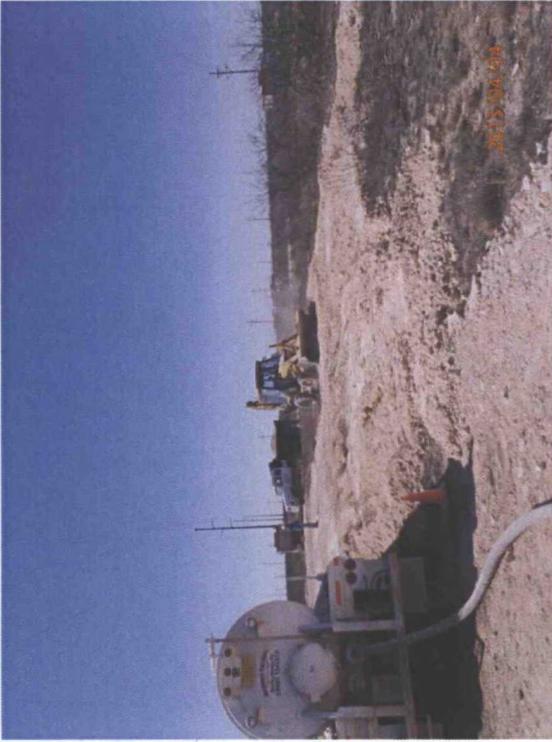
Importing soil, facing northeast 4/4/13



Covering exposed lines, facing northeast 4/4/13



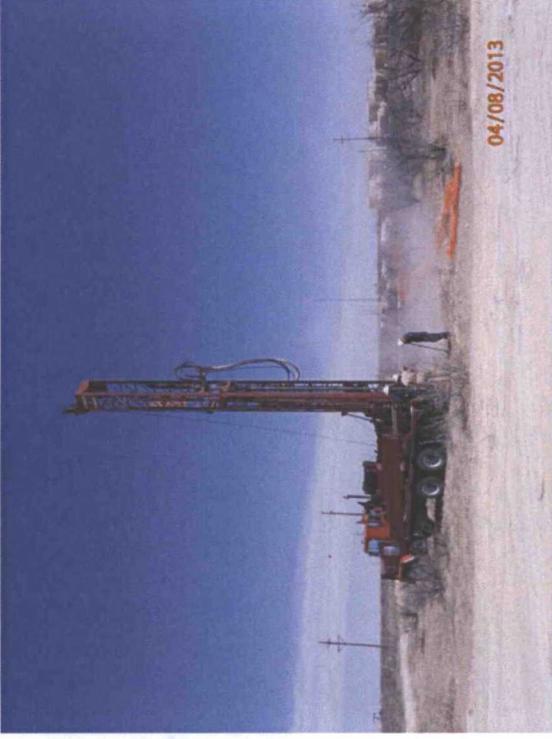
Spotting lines, facing northeast 4/4/13



Building pad, facing northwest

4/4/13

2013/04/04



Inserting temporary MW, facing north

4/8/13

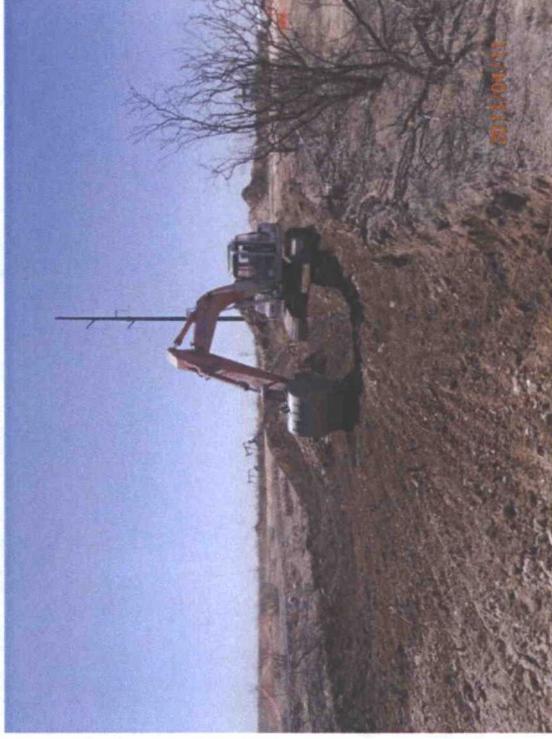
04/08/2013



Digging vertical, facing southwest

4/8/13

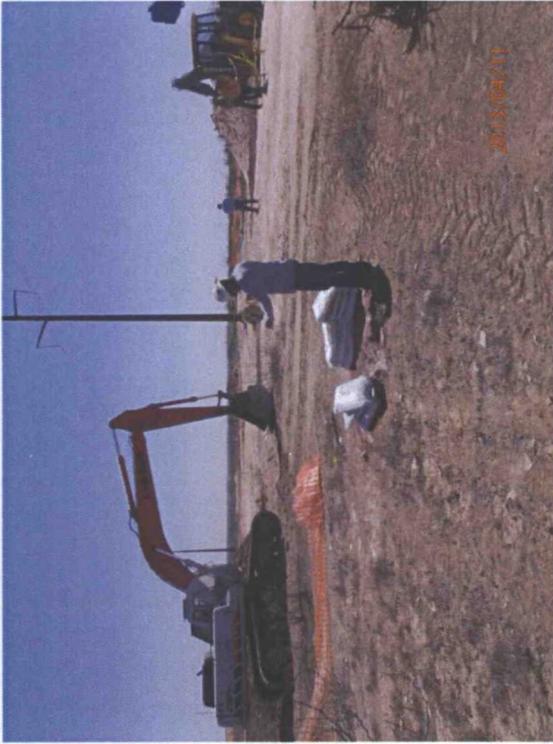
2013/04/08



Excavating leak area, facing south

4/11/13

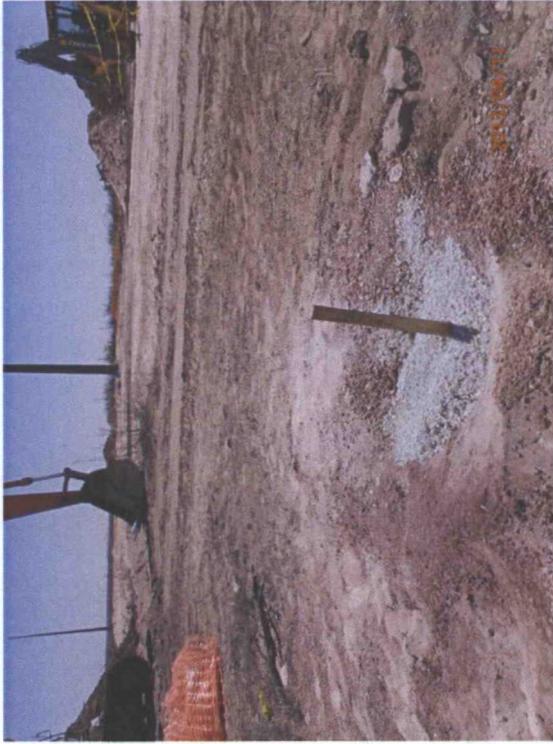
2013-04-11



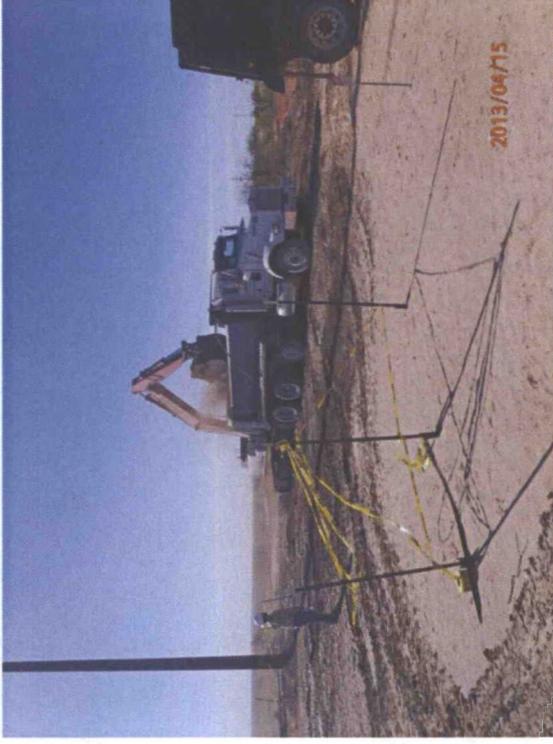
Gauging temporary MW, facing southeast 4/11/13



Plugging temporary MW in total with bentonite, facing southeast 4/11/13

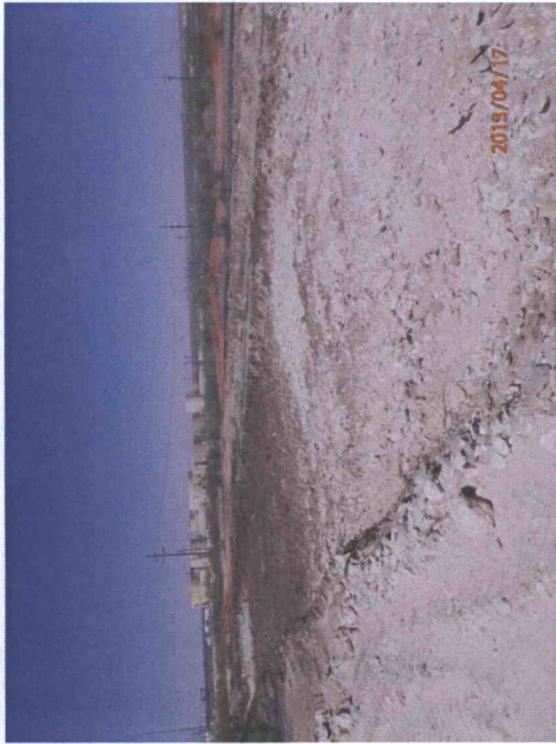


Completed temporary MW, facing southeast 4/11/13

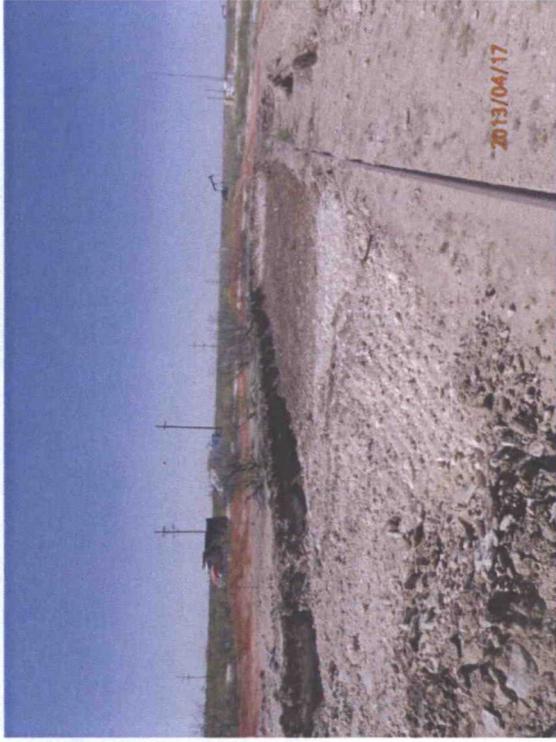


Exporting soil, facing southeast

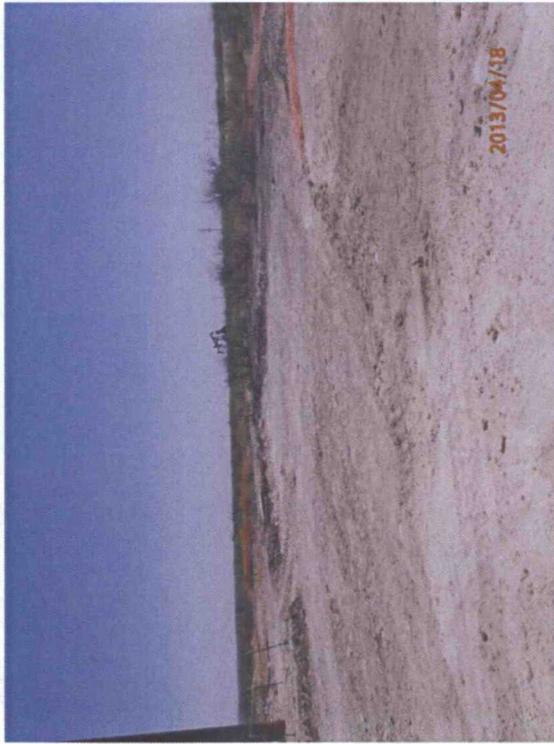
4/15/13



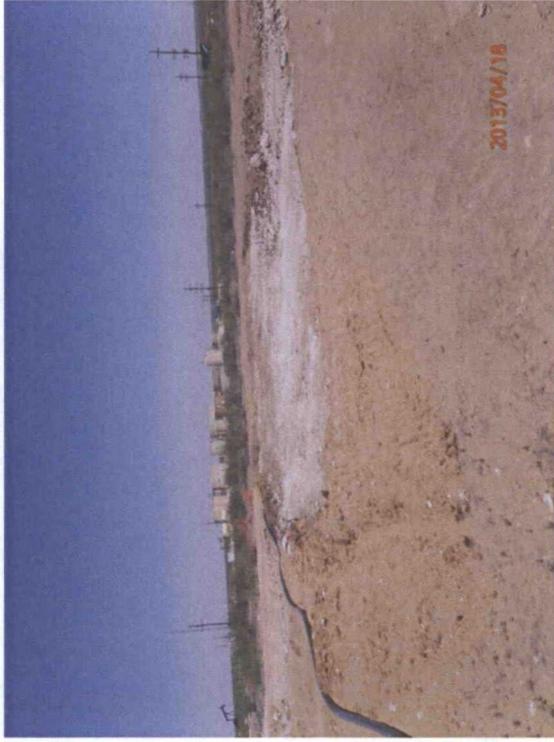
North excavation completed, facing northeast 4/17/13



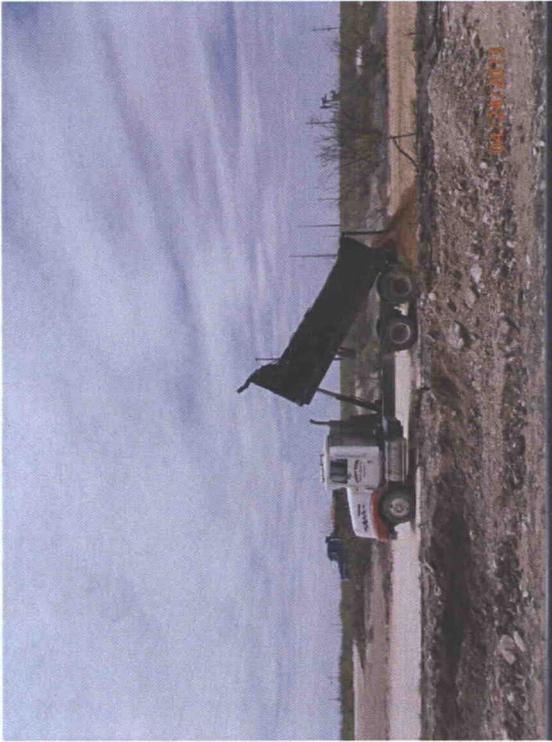
North excavation completed, facing northwest 4/17/13



South excavation completed, facing southeast 4/18/13

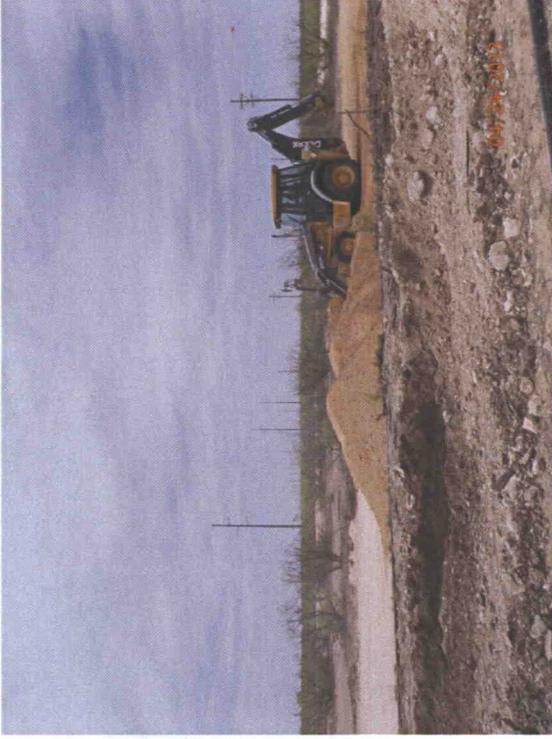


South excavation completed, facing southeast 4/18/13



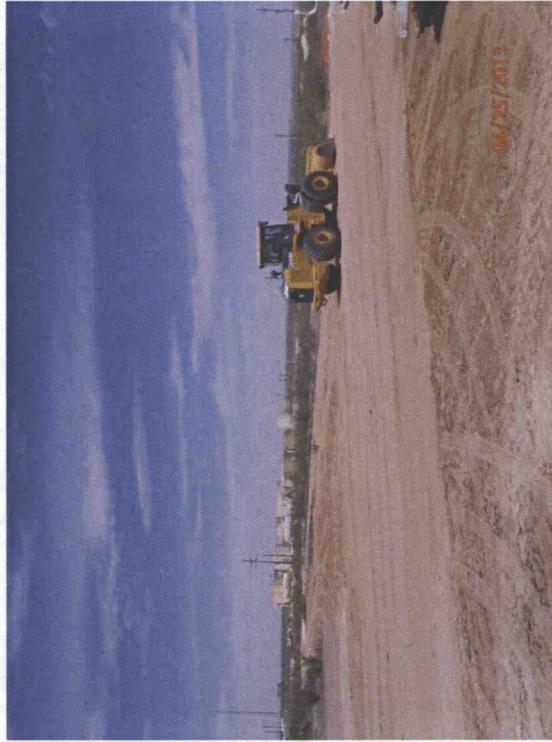
Importing soil, facing west

4/24/13



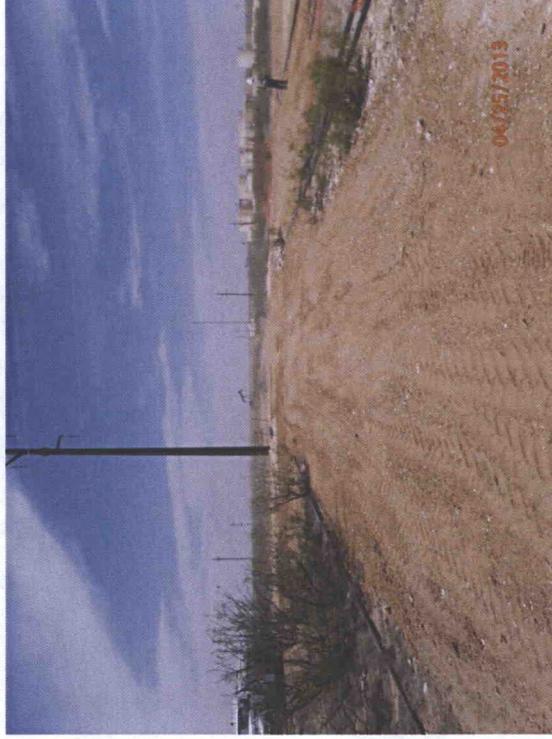
Backfilling site, facing west

4/24/13



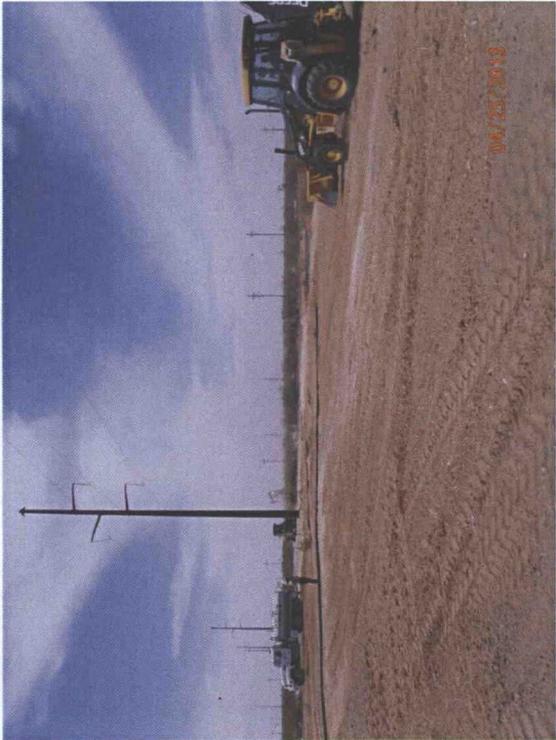
Backfill completed, facing northeast

4/25/13

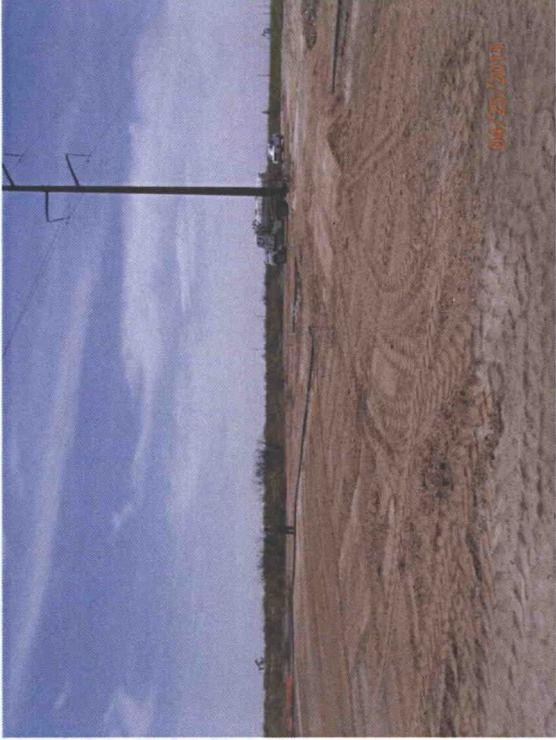


Backfill completed, facing north

4/25/13



Backfill completed, facing northwest 4/25/13



Backfill completed, facing southwest 4/25/13