

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD

FEB 20 2014

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

Form C-141
Revised August 8, 2011

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Apache Corporation	Contact Bruce Baker	
Address 8 Ellison Lane Eunice, NM 88231	Telephone No. (432) 631-6982	
Facility Name Lockhart A -17 Battery (nearest WBDU # 69)	Facility Type Tank Battery	
Surface Owner Chevron	Mineral Owner	API No. 30-025-38204

LOCATION OF RELEASE

Unit Letter I	Section 17	Township 21S	Range 37E	Feet from the 2630'	North/South Line FSL	Feet from the 120'	East/West Line FEL	County Lea
------------------	---------------	-----------------	--------------	------------------------	-------------------------	-----------------------	-----------------------	---------------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release oil and produced water	Volume of Release 20 oil and 480 produced water	Volume Recovered 450 total fluid
Source of Release water transfer line	Date and Hour of Occurrence 2/8/14	Date and Hour of Discovery 2-8-14 at 10:30 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Gcoffrey Leking	
By Whom? Bruce Baker	Date and Hour 2/10/14 at 9:00 a.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

DTW = 70'

Describe Cause of Problem and Remedial Action Taken.*

The water transfer line froze and ruptured in two separate areas of the line. One area was inside the lined facility containment and the second outside the containment wall. A vacuum truck was dispatched to pick-up standing fluid. The line was repaired.

Describe Area Affected and Cleanup Action Taken.*

The release affected two areas one inside the lined contained facility and the second area was in pasture (4,932 square feet). The standing fluid was picked up and the area was mapped and will be delineated and a corrective action plan will be submitted to NMOCD.

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>Gcoffrey Leking</i> Approved by Environmental Specialist <i>Environmental Specialist</i>	
Printed Name: Bruce Baker	Approval Date: 2/20/14	Expiration Date: 4/21/14
Title: Environmental Technician	Conditions of Approval: <i>SUGGEST FIRM</i> <i>en m l r e 4/21/14</i>	Attached <input type="checkbox"/>
E-mail Address: larry.baker@apachecorp.com	Date: 2/20/14	Phone: (432) 631-6982
RP-06-14-3098		

* Attach Additional Sheets If Necessary



EXPLORING WHAT'S POSSIBLE

HOBBS OCD

APR 03 2014

RECEIVED

APACHE CORPORATION

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

Lockhart A-17

Corrective Action Plan

approved
Jeffrey Sekim
Environmental Specialist
NMOCB-DIST 1
4/03/14

API 30-025-38204

Release Date: February 8th, 2014

Unit Letter I, Section 17, Township 21S, Range 37E

Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241

Phone 575.393.2967

March 28th, 2014

Geoffrey Leking

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau – District 1

1625 N. French Dr.

Hobbs, NM 88240-9273

RE: Corrective Action Plan

Apache Corporation – Lockhart A-17

UL/I sec. 17 T21S R37E

API No. 30-025-38204

Mr. Leking:

Apache Corporation (Apache) 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 approximately 2.5 miles northwest of Eunice, New Mexico at UL/I sec. 17 T21S R37E. NM OSE and USGS records indicate that groundwater will likely be encountered at a depth of approximately 76 +/- feet.

On February 8th, 2014, Apache discovered a release of oil and produced water from a water transfer line. The transfer line froze and ruptured in two separate places. One area was inside the bermed, lined facility containment and the other occurred outside the containment wall. A total of 20 barrels of oil and 480 barrels of produced water were released over 10,603 square feet of facility and pasture land. A vacuum truck was called to the site and recovered a total of 450 barrels of fluid. NMOCD was notified of the release on February 10th, 2014 and an initial C-141 was sent to NMOCD for their approval (Appendix A).

RECS personnel were on site beginning on February 10th, 2014 to assess the release. Four points within the pasture area were sampled at the surface and with depth (Figure 1). The samples were field tested for chlorides and organic vapors, and representative samples were taken to a commercial laboratory for analysis (Appendix B). Vertical 1 was installed to a depth of 18 ft bgs. Laboratory chloride readings returned results of 816 mg/kg at 4 ft bgs and 352 mg/kg at 17 ft and 18 ft bgs. Vertical 2 was installed to a depth of 12 ft bgs. Laboratory chloride readings returned results of 2,120 mg/kg at 5 ft bgs, 224 mg/kg at 11 ft bgs and 128 mg/kg at 12 ft bgs. Vertical 3 was installed to a depth of 14 ft bgs. Laboratory chloride readings returned results of 1,730 mg/kg at 3 ft bgs, 160 mg/kg at 13 ft bgs and 208 mg/kg at 14 ft bgs. Vertical 4 was installed to a depth of 16 ft bgs. Laboratory chloride readings returned results of 1,040 mg/kg at 2 ft bgs, 176 mg/kg at 15

ft bgs and 48 mg/kg at 16 ft bgs. Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) readings returned results of non-detect in all verticals.

Photo documentation of these activities can be found in Appendix C.

Corrective Action Plan

Based on the laboratory analysis of the site, the pasture area will be excavated to a depth of 4 ft bgs. All excavated soils will be evaluated to use as backfill and any soils that do not meet requirements will be disposed of at a NMOCD approved facility. The remaining excavated soils will be blended on site with clean, imported soil. A sample of the blended backfill will be taken and field tested to verify that chloride levels are at or below 500 mg/kg and organic vapors are below 100 ppm. Wall samples will be taken to a commercial laboratory to determine that the remaining constituents are below regulatory standards. At the base of the 4 ft excavation, a 20-mil reinforced poly liner will be installed and properly seated (Figure 2). The site will be backfilled with the blended soil to surface level and contoured to the surrounding location.

Since the release in the facility occurred over a lined containment, the contaminated gravel overlaying the liner will be removed and taken to a NMOCD approved facility for disposal. Clean gravel will be imported to the site to replace the contaminated caliche.

Once these corrective actions have been completed, a report will be submitted requesting 'remediation termination' and site closure.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,



Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Attachments:

- Figure 1 – Site Location Map
- Figure 2 – Proposed Corrective Actions
- Appendix A – Initial C-141
- Appendix B – Initial Sampling Labs
- Appendix C – Photo Documentation



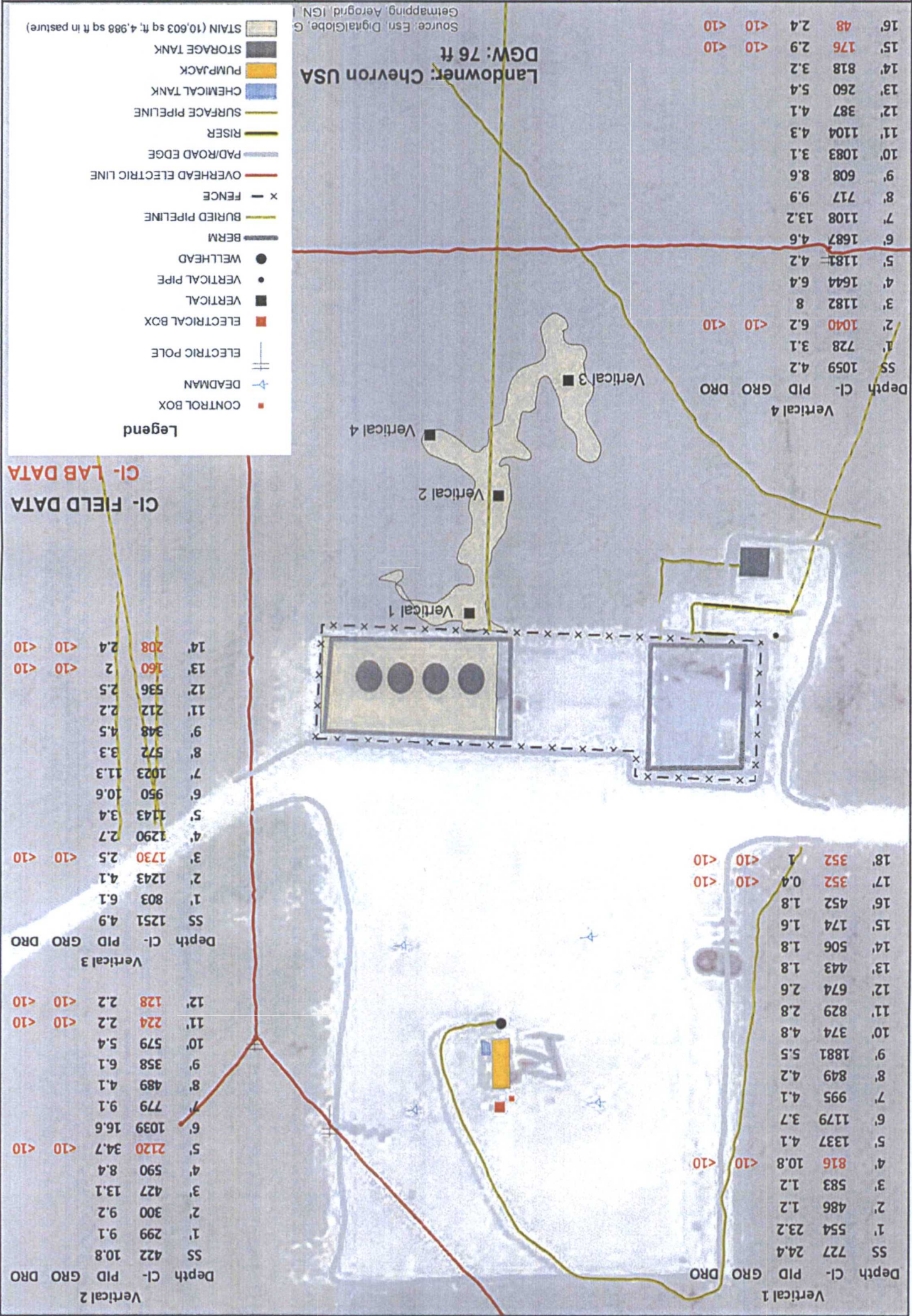
APACHE LOCKHART A-17

Legals: UL/I sec. 17
T-21-S-R-37-E
LEA COUNTY, NM

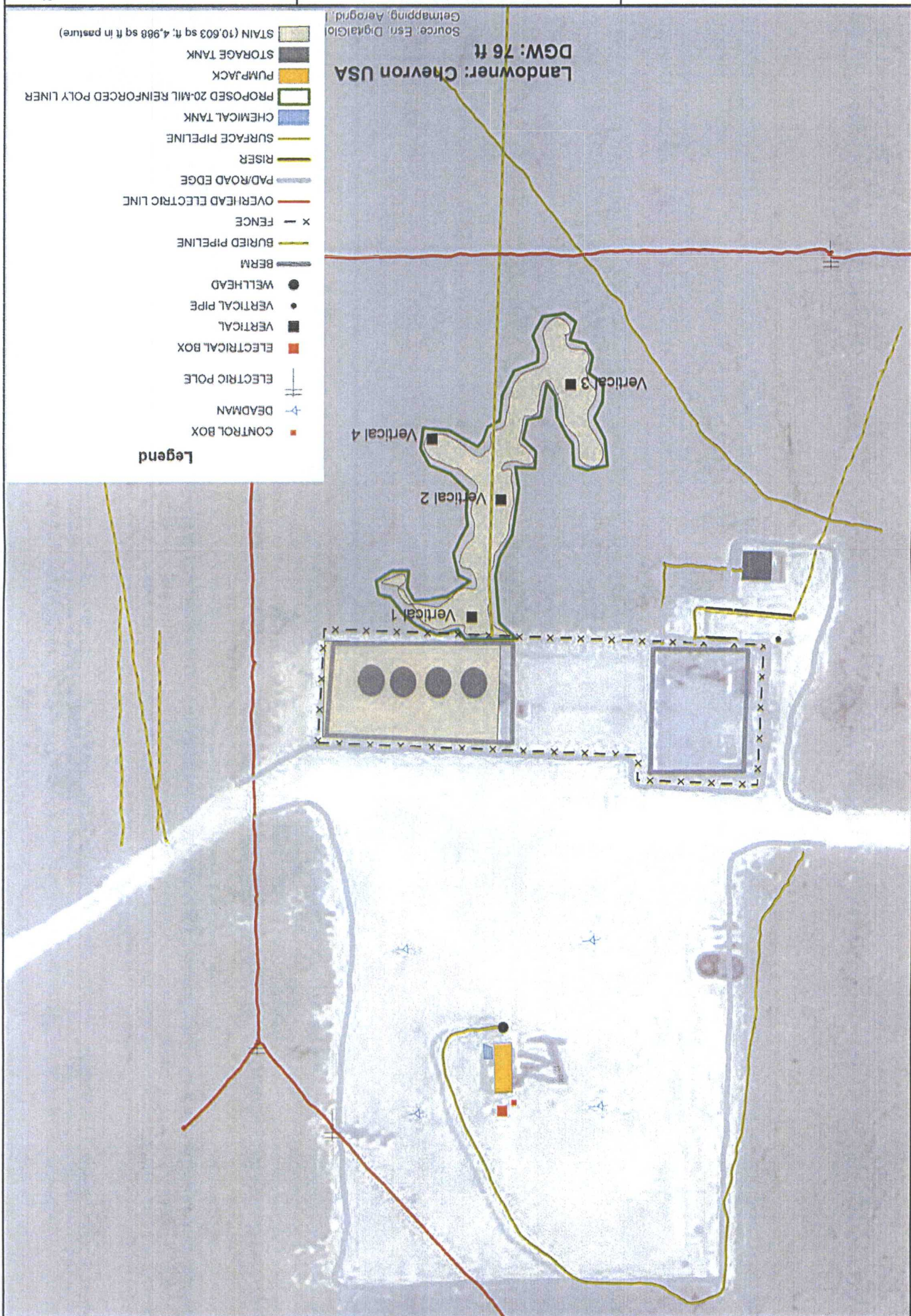
GPS date: 2/27/14 AG
Drawing date: 3/5/14
Drafted by: L. Weinheimer



Figure 1



Vertical Sampling Data





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

March 03, 2014

BRUCE BAKER

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: LOCKHART A-17

Enclosed are the results of analyses for samples received by the laboratory on 02/25/14 16:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 dark ink, reading "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" being more prominent.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

 Received: 02/25/2014
 Reported: 03/03/2014
 Project Name: LOCKHART A-17
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/25/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERT 2 @ 5 FT (H400572-01)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2120	16.0	02/28/2014	ND	416	104	400	7.41		
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	03/01/2014	ND	217	108	200	3.10		
DRO >C10-C28	<10.0	10.0	03/01/2014	ND	212	106	200	0.309		
Surrogate: 1-Chlorooctane	90.8 %	65.2-140								
Surrogate: 1-Chlorooctadecane	93.0 %	63.6-154								

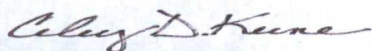
Sample ID: VERT 2 @ 11 FT (H400572-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	02/28/2014	ND	416	104	400	7.41	
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	03/01/2014	ND	217	108	200	3.10	
DRO >C10-C28	<10.0	10.0	03/01/2014	ND	212	106	200	0.309	
Surrogate: 1-Chlorooctane		82.5 %	65.2-140						
Surrogate: 1-Chlorooctadecane		89.6 %	63.6-154						

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
 BRUCE BAKER
 P. O. BOX 1849
 EUNICE NM, 88231
 Fax To: 394-2425

 Received: 02/25/2014
 Reported: 03/03/2014
 Project Name: LOCKHART A-17
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/25/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERT 2 @ 12 FT (H400572-03)

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	02/28/2014	ND	416	104	400	7.41	
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	03/01/2014	ND	217	108	200	3.10	
DRO >C10-C28	<10.0	10.0	03/01/2014	ND	212	106	200	0.309	

Surrogate: 1-Chlorooctane 77.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 82.7 % 63.6-154

Sample ID: VERT 3 @ 3 FT (H400572-04)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1730	16.0	02/28/2014	ND	416	104	400	7.41	
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	03/01/2014	ND	217	108	200	3.10	
DRO >C10-C28	<10.0	10.0	03/01/2014	ND	212	106	200	0.309	

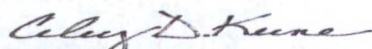
Surrogate: 1-Chlorooctane 75.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 81.9 % 63.6-154

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
 BRUCE BAKER
 P. O. BOX 1849
 EUNICE NM, 88231
 Fax To: 394-2425

 Received: 02/25/2014
 Reported: 03/03/2014
 Project Name: LOCKHART A-17
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/25/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERT 3 @ 13 FT (H400572-05)

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	02/28/2014	ND	416	104	400	7.41	
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	03/01/2014	ND	217	108	200	3.10	
DRO >C10-C28	<10.0	10.0	03/01/2014	ND	212	106	200	0.309	
Surrogate: 1-Chlorooctane	88.2 %	65.2-140							
Surrogate: 1-Chlorooctadecane	91.1 %	63.6-154							

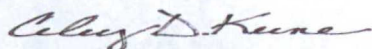
Sample ID: VERT 3 @ 14 FT (H400572-06)

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	02/28/2014	ND	416	104	400	7.41	
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	03/01/2014	ND	217	108	200	3.10	
DRO >C10-C28	<10.0	10.0	03/01/2014	ND	212	106	200	0.309	
Surrogate: 1-Chlorooctane	87.5 %	65.2-140							
Surrogate: 1-Chlorooctadecane	97.1 %	63.6-154							

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

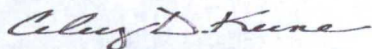
Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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



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

BILL TO										ANALYSIS REQUEST												
Company Name: Apache										P.O. #:												
Project Manager: Bruce Baker										Company:												
Address: Larry Baker @ apachecorp.com										Attn:												
City: Hobbs										State: NM Zip: 88240												
Phone #:										Fax #:												
Project #:										Project Owner:												
Project Name: Lockhart A-17										City:												
Project Location:										State: Zip:												
Sampler Name: Amber Groves										Phone #:												
Fax #:										Chlorides												
										TPH 8015 M												
										BTEX												
										Texas TPH												
										Complete Cations/Anions												
										TDS												
Lab I.D.	Sample I.D.	(G) RAB OR (C) OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	PRESERV.	SAMPLING	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS
H400572	1 Vert 2 @ 5ft	0	1	✓											2-25-14	12:00	✓					
	2 Vert 2 @ 11ft	0	1	✓											2-25-14	12:20	✓					
	3 Vert 2 @ 12ft	0	1	✓											2-25-14	12:25	✓					
	4 Vert 3 @ 3ft	0	1	✓											2-25-14	2:15	✓					
	5 Vert 3 @ 13ft	0	1	✓											2-25-14	3:00	✓					
	6 Vert 3 @ 14ft	0	1	✓											2-25-14	3:10	✓					

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 use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Amber Groves Date: 2-25-14 Time: 4:15
 Relinquished By: Joan Jensen Date: 2-25-14 Time: 4:15

Delivered By: (Circle One) UPS
 Sampler - UPS - Bus - Other:

Checked By: [Signature]
 Sample Condition: Cool ☒ Impact ☐ Yes ☐ No ☐ Yes ☐ No ☐

Phone Result: ☐ Yes ☒ No Add'l Phone #:
 Fax Result: ☐ Yes ☒ No Add'l Fax #:
 REMARKS:
 email results
 Knorman@rice-ecs.com
 KJones@riceswd.com; jkamlain@rice-ecs.com
 hconder@rice-ecs.com; Lweinheimer@rice-ecs.com;
 sedwards@rice-ecs.com; lflores@rice-ecs.com; agroves@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

March 04, 2014

BRUCE BAKER

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: LOCKHART A-17

Enclosed are the results of analyses for samples received by the laboratory on 02/27/14 16:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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/ga/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 dark ink, reading "Coley D. Keene". The signature is fluid and cursive, with the first name "Coley" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received: 02/27/2014
Reported: 03/04/2014
Project Name: LOCKHART A-17
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 02/25/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: VERT 1 @ 4 FT (H400603-01)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	816	16.0	03/04/2014	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	03/03/2014	ND	206	103	200	7.94		
DRO >C10-C28	<10.0	10.0	03/03/2014	ND	197	98.7	200	8.31		
Surrogate: 1-Chlorooctane	100 %	65.2-140								
Surrogate: 1-Chlorooctadecane	105 %	63.6-154								

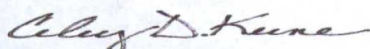
Sample ID: VERT 1 @ 17 FT (H400603-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	03/04/2014	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	03/04/2014	ND	216	108	200	2.10	
DRO >C10-C28	<10.0	10.0	03/04/2014	ND	202	101	200	1.52	
Surrogate: 1-Chlorooctane		99.2 %	65.2-140						
Surrogate: 1-Chlorooctadecane		104 %	63.6-154						

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
 BRUCE BAKER
 P. O. BOX 1849
 EUNICE NM, 88231
 Fax To: 394-2425

 Received: 02/27/2014
 Reported: 03/04/2014
 Project Name: LOCKHART A-17
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/27/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERT 1 @ 18 FT (H400603-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	03/04/2014	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	03/04/2014	ND	216	108	200	2.10		
DRO >C10-C28	<10.0	10.0	03/04/2014	ND	202	101	200	1.52		

Surrogate: 1-Chlorooctane 99.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

Sample ID: VERT 4 @ 2 FT (H400603-04)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1040	16.0	03/04/2014	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	03/04/2014	ND	216	108	200	2.10		
DRO >C10-C28	<10.0	10.0	03/04/2014	ND	202	101	200	1.52		

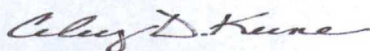
Surrogate: 1-Chlorooctane 96.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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
 BRUCE BAKER
 P. O. BOX 1849
 EUNICE NM, 88231
 Fax To: 394-2425

 Received: 02/27/2014
 Reported: 03/04/2014
 Project Name: LOCKHART A-17
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/27/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERT 4 @ 15 FT (H400603-05)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	03/04/2014	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	03/04/2014	ND	216	108	200	2.10		
DRO >C10-C28	<10.0	10.0	03/04/2014	ND	202	101	200	1.52		
Surrogate: 1-Chlorooctane	99.2 %	65.2-140								
Surrogate: 1-Chlorooctadecane	102 %	63.6-154								

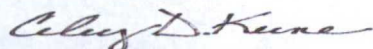
Sample ID: VERT 4 @ 16 FT (H400603-06)

Chloride, SM4500Cl-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	03/04/2014	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	03/04/2014	ND	216	108	200	2.10		
DRO >C10-C28	<10.0	10.0	03/04/2014	ND	202	101	200	1.52		
Surrogate: 1-Chlorooctane	94.1 %	65.2-140								
Surrogate: 1-Chlorooctadecane	98.6 %	63.6-154								

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

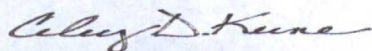
Notes and Definitions

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

Cardinal Laboratories

* = Accredited Analyte

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



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: <u>Apache</u>		P.O. #:		ANALYSIS REQUEST									
Project Manager: <u>Bruce Baker</u>		Company:		TPH 8015 M		BTEX		Texas TPH		Complete Cations/Anions		TDS	
Address:		State: NM Zip: 88240											
City: Hobbs		Attn:											
Phone #:		Address:											
Project #:		City:											
Project Name: <u>Hobbs A-17</u>		State:											
Project Location:		Phone #:											
Sampler Name: <u>Amber Groves</u>		Fax #:											
Lab I.D.	Sample I.D.	MATRIX	PRESERV	SAMPLING	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS	
14001023	1 Vort 1 @ 4ft	GROUNDWATER	OTHER: ICE / COOL		2-27-14	8:35	✓	✓					
2	Vort 1 @ 17ft	WASTEWATER	ACID/BASE:		2-27-14	8:45	✓	✓					
3	Vort 1 @ 17ft 18ft 18ft	SOIL	OTHER:		2-27-14	8:50	✓	✓					
4	Vort 4 @ 2ft	SLUDGE			2-27-14	10:00	✓	✓					
5	Vort 4 @ 15ft	OIL			2-27-14	10:20	✓	✓					
6	Vort 4 @ 11ft	GROUNDWATER			2-27-14	10:30	✓	✓					

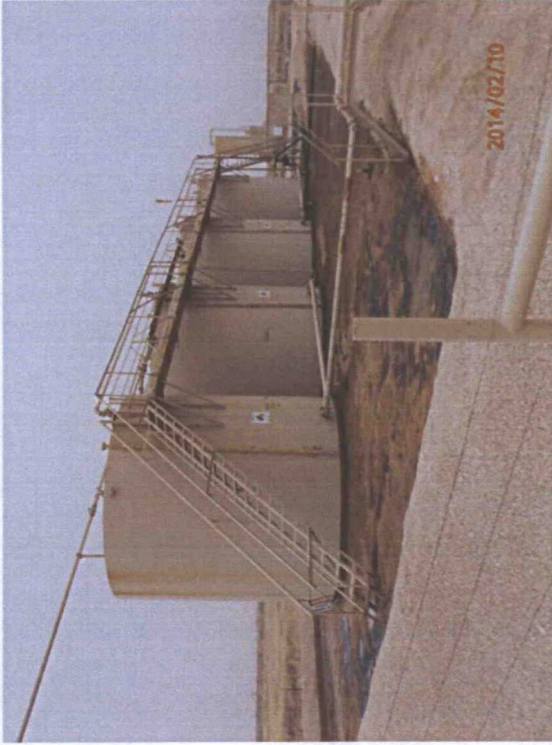
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>Amber Groves</u>	Date: <u>2-27-14</u>	Received By: <u>Jodi Benson</u>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Time: <u>4:40</u>	Received By:	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)			REMARKS:	
Sampler - UPS - Bus - Other:			email results	
			Knorman@rice-ecs.com	
			Kjones@riceswd.com; jkamlain@rice-ecs.com	
			hcondor@rice-ecs.com; Lweinheimer@rice-ecs.com;	
			sedwards@rice-ecs.com; lflores@rice-ecs.com; agroves@rice-ecs.com	
			<u>regan@rice-ecs.com</u>	

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

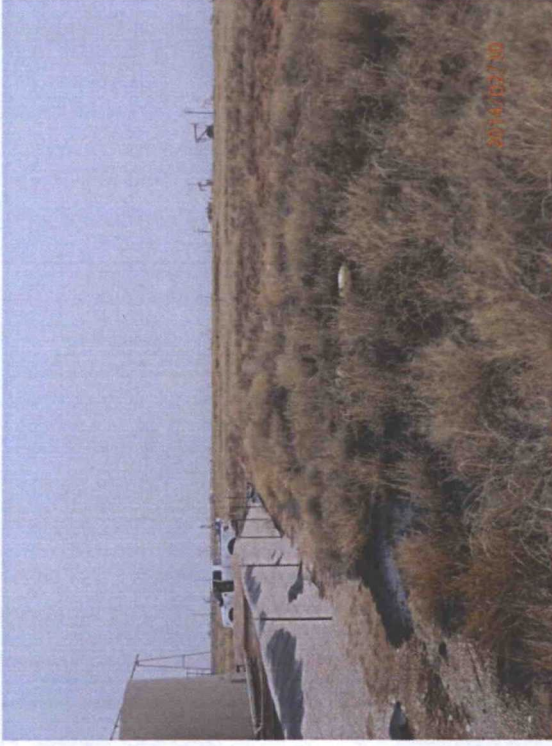
#54

Apache Lockhart A-17
Unit Letter I, Section 17, T21S, R37E



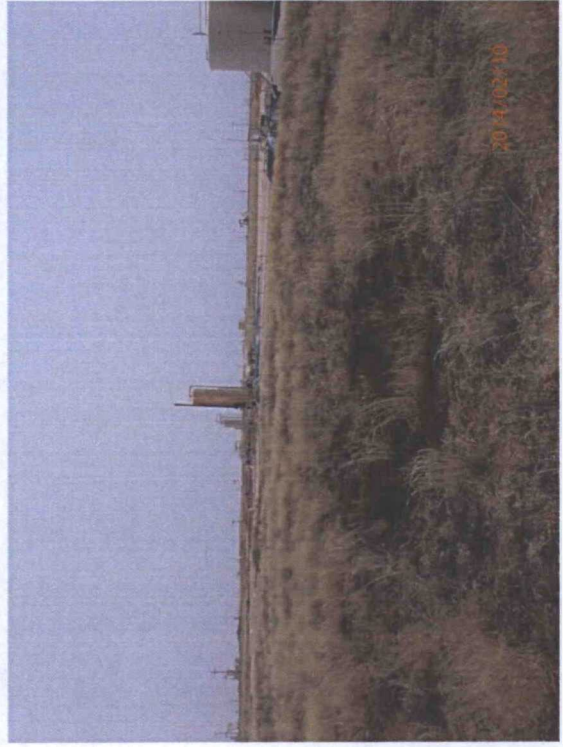
Initial release area, facing southwest

2/10/14



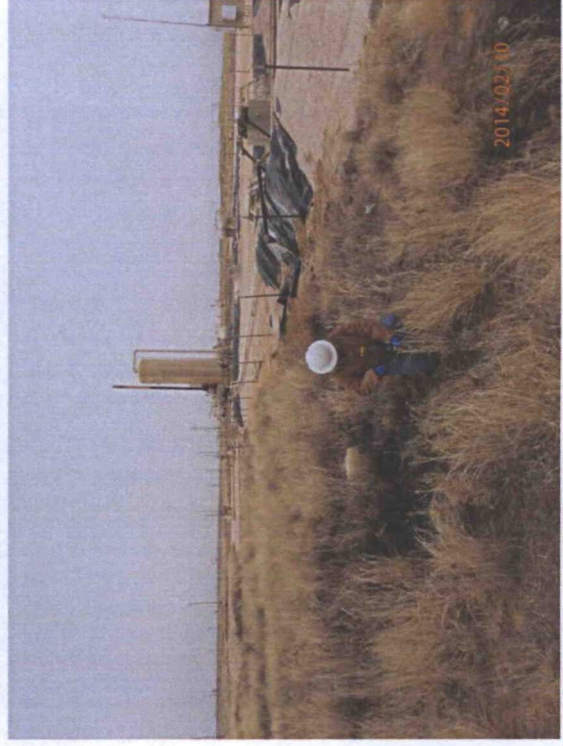
Initial release area, facing east

2/10/14



Initial release photo, facing northwest

2/10/14



Sampling release area, facing west

2/10/14



Installing vertical, facing east

2/25/14



Taking sample of vertical, facing northwest

2/25/14