



EXPLORING WHAT'S POSSIBLE

HOBBS OCD

JAN 31 2014

RECEIVED

# APACHE CORPORATION

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

*approved*  
*Jeffrey Sekins*  
Environmental Specialist  
NMOC-DIST  
2/5/14

## WBDU #12

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## Corrective Action Plan

API 30-025-36340

Discovery Date: January 7<sup>th</sup>, 2014

Unit Letter B, Section 9, Township 21S, Range 37E

1131

FEB 06 2014

## Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241  
Phone 575.393.2967

**January 31<sup>st</sup>, 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 – WBDU #12  
UL/B sec. 9 T21S R37E  
API No. 30-025-36340**

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 3.7 miles north of Eunice, New Mexico at UL/B sec. 9 T21S R37E. NM OSE and BLM records indicate that groundwater will likely be encountered at a depth of approximately 67 +/- feet.

On January 7<sup>th</sup>, 2014, Apache discovered a release on the well pad from a poly flow line. The poly line released a total of 3 barrels of oil and 5 barrels of produced water over 1,959 square feet of lease pad. The well was shut in and a vacuum truck was called to the site and recovered 3 barrels of oil and 4 barrels of produced water. Apache sent an initial C-141 to NMOCDD on January 29<sup>th</sup>, 2014, for their approval (Appendix A).

RECS personnel were on site beginning on January 7<sup>th</sup>, 2014 to assess the release. The release was GPS mapped and photographed. On January 10<sup>th</sup>, 2014, a vertical was installed in the release area to a depth of 4 ft bgs (Figure 1). Samples were taken every 6 inches and field tested for chlorides and organic vapors. Representative samples from the vertical were taken to a commercial laboratory for analysis (Appendix B). Laboratory chloride values dropped to below 250 mg/kg starting at 3.5 ft bgs with a reading of 112 mg/kg at 3.5 ft bgs and a reading of 192 mg/kg at 4 ft bgs. Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) were below regulatory standards at all depths.

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

### **Corrective Action Plan**

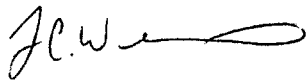
Based on the vertical laboratory readings, the site will be excavated to a depth of 3.5 ft bgs. The excavation will remain away from the wellhead for safety reasons. The

excavated soil will be taken to a NMOCD approved facility for disposal. Clean soil will be imported to the site to serve as backfill and the site will be contoured to the surrounding location.

Once these actions are completed, a Termination Request will be submitted to NMOCD for their approval.

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,

A handwritten signature in black ink, appearing to read 'J.C.W.' followed by a long, horizontal, wavy line.

Lara Weinheimer  
Project Scientist  
RECS  
(575) 441-0431

Attachments:

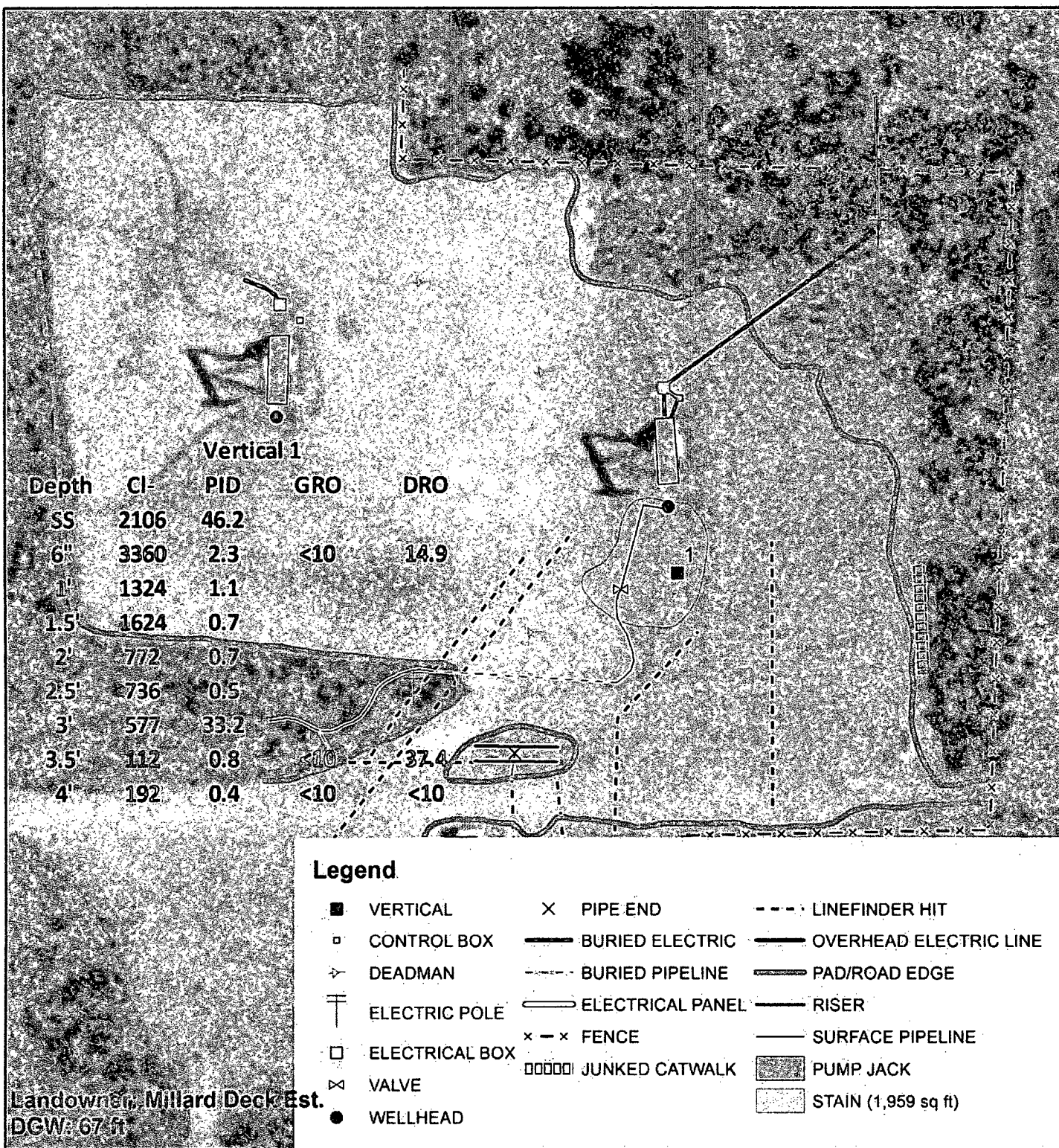
- Figure 1 – Vertical Data
- Appendix A – Initial C-141
- Appendix B – Initial Sampling Lab
- Appendix C – Photo Documentation



# Figures

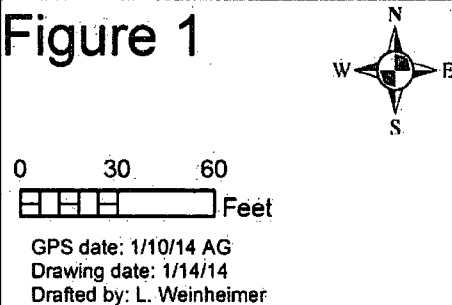
**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948, Hobbs, NM 88241  
Phone 575.393.2967

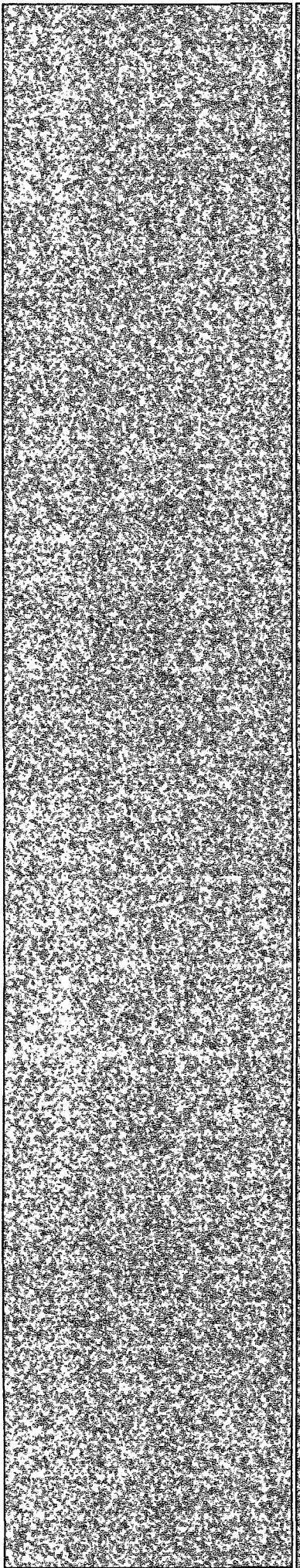
# Vertical Data



**APACHE**  
**WBDU #12**  
 LEGALS: UL/B sec. 9  
 T-21-S R-37-E  
 LEA COUNTY, NM

**Figure 1**





# Appendix A

Initial C-141

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate DISTRICT OFFICE in  
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Apache Corporation	Contact Bruce Baker	
Address 8 Ellison Lane Eunice, NM 88231	Telephone No. (432) 631-6982	
Facility Name WBDU # 12	Facility Type Oil Well	
Surface Owner Millard Deck Estates	Mineral Owner	API No. 30-025-36340

LOCATION OF RELEASE

Unit Letter B	Section 9	Township 21S	Range 37E	Feet from the 1210'	North/South Line FNL	Feet from the 1470'	East/West Line FEL	County Lea
---------------	-----------	--------------	-----------	---------------------	----------------------	---------------------	--------------------	------------

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

NATURE OF RELEASE

Type of Release Oil and Produced Water	Volume of Release 3 barrels of oil and 5 barrels of water.	Volume Recovered 3 barrels of oil and 4 barrels of produced water
Source of Release Flow Line	Date and Hour of Occurrence	Date and Hour of Discovery 1-7-14 @ 9:00 a.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
Due to inclement weather the poly flow line ruptured on the well pad. The well was shut in and a vacuum truck was dispatched to recover fluid. The line was repaired.

Describe Area Affected and Cleanup Action Taken.\*  
A vacuum truck recovered 7 barrels of total fluid. The site was mapped and surface samples collected. On 1/10/2014 a vertical was excavated to 4 ft. below ground surface and samples collect and taken to a commercial laboratory for analysis for chloride and TPH. 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	
Printed Name: Bruce Baker		Approved by Environmental Specialist:	
Title: Environmental Technician		Approval Date:	Expiration Date:
E-mail Address: larry.baker@apachecorp.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 1/29/14	Phone: (432) 631-6982		

\* Attach Additional Sheets If Necessary





# Appendix B

Initial Sampling Lab

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967



January 21, 2014

BRUCE BAKER  
APACHE - EUNICE  
P. O. BOX 1849  
EUNICE, NM 88231

RE: WBDU #12

Enclosed are the results of analyses for samples received by the laboratory on 01/10/14 16:10.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

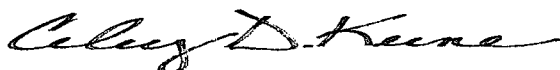
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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,



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: 01/10/2014  
Reported: 01/21/2014  
Project Name: WBDU #12  
Project Number: NOT GIVEN  
Project Location: T21S R37E

Sampling Date: 01/10/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: VERTICAL 1 @ 6" (H400097-01)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3360</b>	16.0	01/17/2014	ND	432	108	400	7.14	
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	01/14/2014	ND	209	105	200	6.89	
<b>DRO &gt;C10-C28</b>	<b>14.9</b>	10.0	01/14/2014	ND	233	116	200	1.72	

Surrogate: 1-Chlorooctane 68.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 84.1 % 63.6-154

**Sample ID: VERTICAL 1 @ 3.5' (H400097-02)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>112</b>	16.0	01/17/2014	ND	432	108	400	7.14	
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	01/14/2014	ND	209	105	200	6.89	
<b>DRO &gt;C10-C28</b>	<b>37.4</b>	10.0	01/14/2014	ND	233	116	200	1.72	

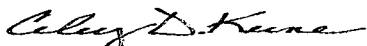
Surrogate: 1-Chlorooctane 89.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 116 % 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

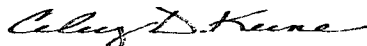
**Analytical Results For:**APACHE - EUNICE  
BRUCE BAKER  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425Received: 01/10/2014  
Reported: 01/21/2014  
Project Name: WBDU #12  
Project Number: NOT GIVEN  
Project Location: T21S R37ESampling Date: 01/10/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson**Sample ID: VERTICAL 1 @ 4' (H400097-03)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	01/17/2014	ND	432	108	400	7.14	
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	01/14/2014	ND	209	105	200	6.89	
DRO >C10-C28	<10.0	10.0	01/14/2014	ND	233	116	200	1.72	
Surrogate: 1-Chlorooctane	101 %	65.2-140							
Surrogate: 1-Chlorooctadecane	112 %	63.6-154							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

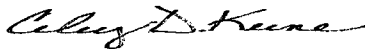
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received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

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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Apache				BILL TO				ANALYSIS REQUEST													
Project Manager: Bruce Baker				P.O. #:				<div>Chlorides</div> <div>TPH 8015 M</div> <div>BTEX</div> <div>Texas TPH</div> <div>Complete Cations/Anions</div> <div>TDS</div>													
Address:				Company:																	
City: Hobbs State: NM Zip: 88240				Attn:																	
Phone #: Fax #:				Address:																	
Project #: Project Owner:				City:																	
Project Name: WBDU #12				State: Zip:																	
Project Location: T215 R37E				Phone #:																	
Sampler Name: Amber Groves				Fax #:																	
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING		<div>Chlorides</div> <div>TPH 8015 M</div> <div>BTEX</div> <div>Texas TPH</div> <div>Complete Cations/Anions</div> <div>TDS</div>											
Lab I.D.		Sample I.D. *																			
H400097																					
1 Vert 1 @ 6"		G 1		GROUNDWATER				DATE TIME													
2 Vert 1 @ 35' ft		G 1		WASTEWATER				1-10-13 2:15													
3 Vert 1 @ 4' ft		G 1		SOIL				1-10-13 2:45													
				OIL				1-10-13 3:00													
				SLUDGE																	
				OTHER:																	
				ACID/BASE:																	
				ICE / COOL																	
				OTHER:																	

**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 claim is written 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 and/or any 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>Amber Grove</i>		Date: <i>1-10-13</i>	Received By: <i>Jodi Henson</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:
		Time: <i>4:10</i>		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:
		Time:		email results
Delivered By: (Circle One)		Sample Condition		knorman@rice-ecs.com hconder@rice-ecs.com;
Sampler - UPS - Bus - Other:		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	CHECKED BY: <i>[Signature]</i>	Lweinheimer@rice-ecs.com; kjones@riceswd.com;
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Lpena@riceswd.com; sedwards@rice-ecs.com
				agroves@rice-ecs.com



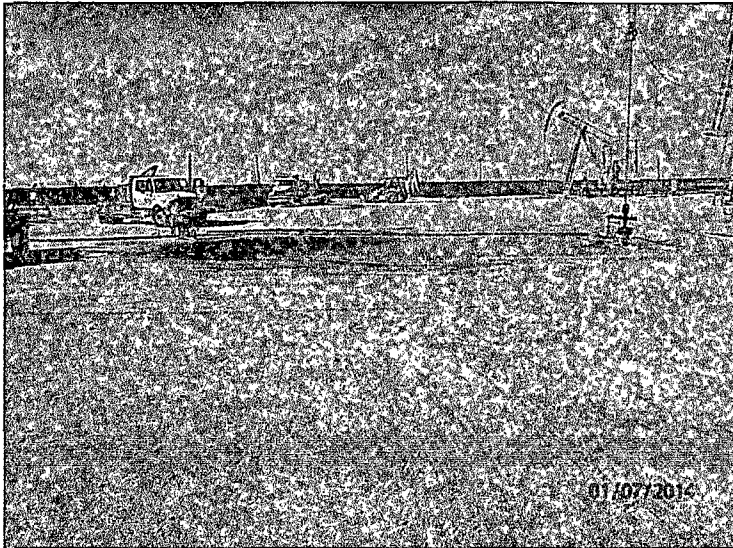
# Appendix C

Photo Documentation

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

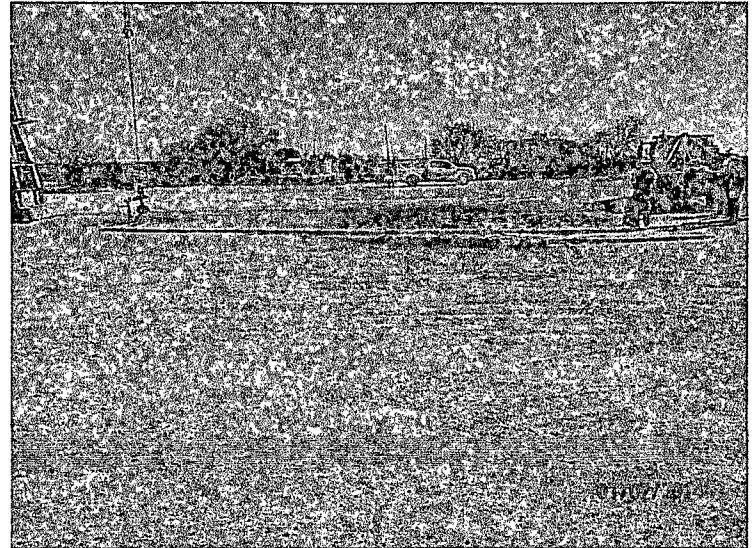
# Apache WBDU #12

Unit Letter B, Section 9, T21S, R37E



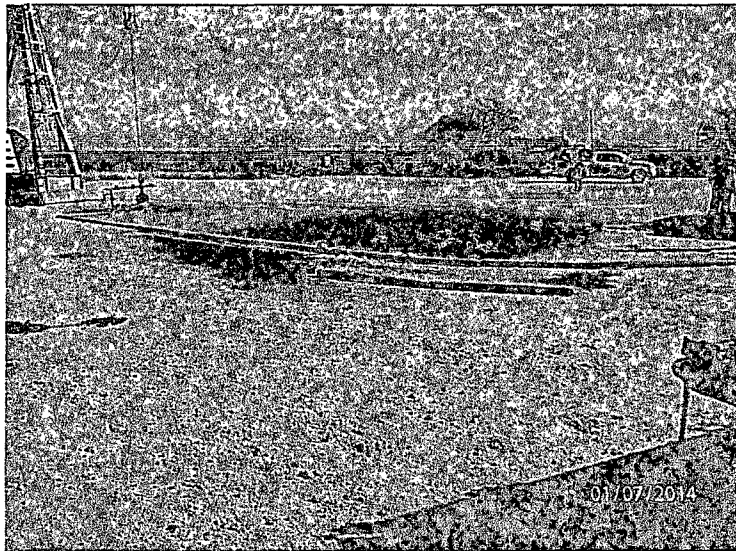
Initial release photo, facing west

1/7/14



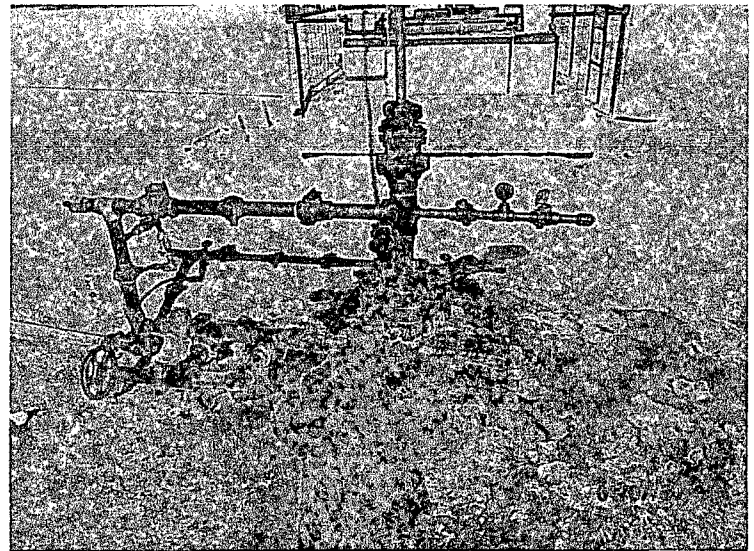
Initial release photo, facing east

1/7/14



Initial release area, facing northeast

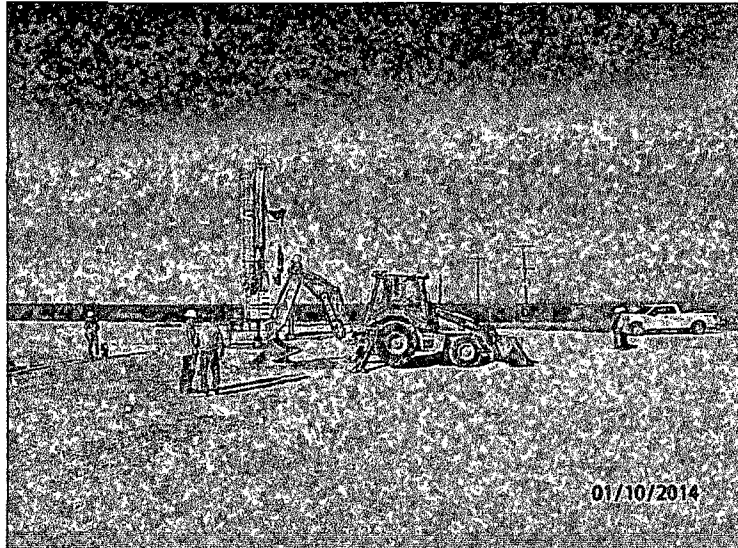
1/7/14



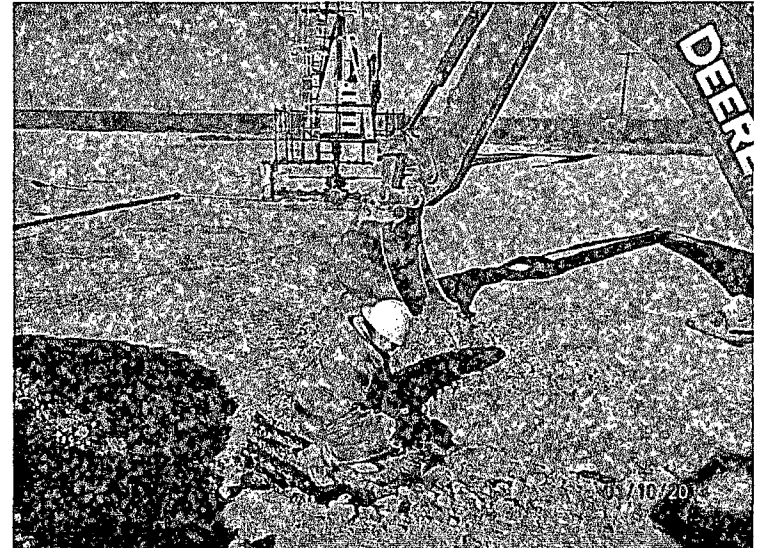
Source of release, facing north

1/7/14





Installing vertical at the site, facing north 1/10/14



Sampling the vertical, facing north 1/10/14