



DAVID FEATHER  
ENVIRONMENTAL SUPERVISOR  
DIRECT (432) 818 1615  
E-MAIL: DAVID.FEATHER@APACHECORP.COM

October 29, 2019

Mr. Bradford Billings  
State of New Mexico Oil Conservation Division  
1220 South St Francis Drive  
Santa Fe, NM 87505

RE: IRP-1786 EBDU 48

Mr. Billings,

In compliance with 19.15.29.15(B) NMAC and the agreement submitted by Apache Corporation on November 8, 2018, Apache Corporation is submitting information related to closure for the release occurring February 8, 2008. Apache is respectfully submitting the closure report based on studies occurring in 2019 that demonstrate the site meeting the requirements of the agency. Unless further information is requested by NMOCD, Apache Corporation considers this release closed.

If there are any questions, please feel free to contact me by telephone at 432-818-1615 or by e-mail at David.Feather@ApacheCorp.com.

Sincerely,

A handwritten signature in black ink, appearing to read "David Feather".

David Feather  
Environmental Supervisor  
Apache Corporation - Permian Basin Region

Attachment: Closure Report Dated October 28, 2019

# Trinity Oilfield Services & Rentals, LLC

## Environmental Site Summary & Closure Request



Company: Apache Corporation Address: 2530 W. Marland St., Hobbs, NM 88240 Telephone #: (575) 393-7106

Site Name: EBDU #48 NMOCD Reference#: 1RP-1786

Surface Owner: WFM Ranch, Ltd. Mineral Owner: State of New Mexico

Unit Letter: M (SW/SW) Section: 12 Township: 21S Range: 37E County: Lea GPS Coordinates: 32.48800 N -103.12310 W

Date/Time of Release: 2/8/2008 Type of Release: ☒ Crude Oil ☒ Produced Water

Volume(s) Released: 10 bbls (total fluid) Volume(s) Recovered: 8 bbls

Closure Criteria for Impacted Soil (mg/kg; See Appendix B, "Closure Criteria Justification"):

Benzene: 10 BTEX: 50 GRO+DRO: 1,000 TPH: ☐ 100 Chloride: ☐ 600  
☒ 2,500 ☒ 10,000  
☐ 20,000

### Background Information:

On February 8, 2008, Apache Corporation (Apache) discovered a release at the East Blinbry Drinkard Unit (EBDU) #48 well site. A bull nudged open a valve on the injection well, resulting in the release of approximately 10 barrels (bbls) of a mixture of crude oil and produced water. During initial response activities, a vacuum truck was utilized to recover approximately 8 bbls of free-standing liquid, and heavily saturated, visibly stained soil was excavated and stockpiled on-site, pending final disposition.

The release was reported to the New Mexico Oil Conservation Division's (NMOCD) Hobbs District Office on February 14, 2008. The NMOCD "Release Notification & Corrective Action" form (C-141) is provided as Appendix A. A "Site Location Map" is provided as Figure 1.

At some point following the release, additional remediation of the affected area took place. However, no extant documentation or work records of such activities could be located. In addition, no records or analytical results from soil sampling could be obtained from Cardinal Laboratories in Hobbs, New Mexico, as the Environmental Protection Agency's (EPA) mandated time period for record retention has elapsed.

On July 25, 2019, Apache requested Trinity Oilfield Services & Rentals, LLC (Trinity), assume remediation activities at the release site.

### Summary of Field Activities:

On August 2, 2019, representatives of Trinity conducted a sampling event to assess the current state of the site. A hand auger was utilized to advance a series of 4 boreholes (SP-1 through SP-4) in the inferred impacted area around the wellhead to investigate the extent of impacted soil. The boreholes were advanced to total depths of 2 feet below ground surface (bgs). Soil samples were collected at ground surface and 1-foot vertical intervals from each location, and confirmation samples were submitted to Cardinal Laboratories for analysis of chloride, total petroleum hydrocarbons (TPH), and/or benzene, toluene, ethylbenzene, and total xylene (BTEX) concentrations using EPA Methods 4500-Cl B, SW 846-8015 Mod, and SW 846-8021B, respectively.

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory method detection limit (MDL) in all submitted soil samples. TPH concentrations ranged from less than the laboratory MDL in samples SP-1 @ Surface, SP-1 @ 1', SP-1 @ 2', SP-2 @ 1', SP-3 @ 1', SP-3 @ 2', SP-4 @ 1', and SP-4 @ 2' to 113 mg/kg in sample SP-3 @ Surface. Chloride concentrations ranged from less than the laboratory MDL in samples SP-1 @ Surface and SP-4 @ 2' to 144 mg/kg in sample SP-1 @ 2'.

Locations of the auger holes are depicted in Figure 2, "Sample Location Map", and Figure 3, "Sample Location Map (Historical Aerial)". Laboratory analytical results are summarized in Table 1, and an analytical report is provided in Appendix C.

# Trinity Oilfield Services & Rentals, LLC

## Environmental Site Summary & Closure Request



### Site Closure Request:

Soil samples collected from the inferred impacted area were analyzed by an NMOC approved laboratory, and concentrations of chloride, TPH, and BTEX were below the Closure Criteria listed in Table I of Section 19.15.29.12 of the New Mexico Administrative Code (NMAC) for a site where depth to groundwater is 51 to 100 feet bgs (see Appendix B, "Closure Criteria Justification", for more information). Based on these laboratory analytical results, the initial response and subsequent activities conducted at the site in 2008 were effective in remediating the release. Trinity, on behalf of Apache, hereby requests the NMOC grant closure to the EBDU #48 release site.

### Enclosures:

Figure 1: Site Location Map

Figure 2: Sample Location Map

Figure 3: Sample Location Map (Historical Aerial)

Table 1: Concentrations of Benzene, BTEX, TPH & Chloride in Soil

Appendix A: Release Notification & Corrective Action (Form C-141)

Appendix B: Closure Criteria Justification

Appendix C: Laboratory Analytical Reports

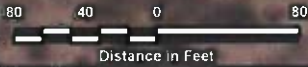
 10/28/2019  
Ben J. Arguijo  
Project Manager

# Figures









**Legend**  
● Auger Hole

**Figure 3**  
**Sample Location Map (Historical Aerial)**  
**Apache Corporation**  
**EBDU #48**  
**Lea County, New Mexico**  
**NMOCD Reference #: 1RP-1786**



Trinity Oilfield Services & Rentals, LLC  
P.O. Box 2587  
Hobbs, NM 88241

Drawn By: BJA	Checked By: JEH
October 28, 2019	Scale: 1" = 80'

# Tables



TABLE 1  
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

APACHE CORPORATION  
EBDU #48  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE #: 1RP-1786



SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	EPA SW-846 Method 8021B					EPA SW-846 Method 8015M					4500-Cl B
				BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	TOTAL BTEX (mg/kg)	GRO C6-C12 (mg/kg)	DRO C12-C28 (mg/kg)	GRO+ DRO (mg/kg)	MRO C28-C35 (mg/kg)	TPH C6-C35 (mg/kg)	CHLORIDE (mg/kg)
NMOCD Closure Limits (mg/kg)				10	NE	NE	NE	50	NE	NE	1,000	NE	2,500	10,000
SP-1 @ Surface	Surface	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SP-1 @ 1'	1'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SP-1 @ 2'	2'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
SP-2 @ Surface	Surface	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	38.2	38.2	64.5	103	16.0
SP-2 @ 1'	1'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SP-2 @ 2'	2'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	33.7	33.7	38.7	70.4	32.0
SP-3 @ Surface	Surface	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	51.9	51.9	61.2	113	112
SP-3 @ 1'	1'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SP-3 @ 2'	2'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SP-4 @ Surface	Surface	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	15.5	15.5	32.0
SP-4 @ 1'	1'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SP-4 @ 2'	2'	8/2/2019	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0

NE = Not Established

- = Not Analyzed

Concentrations in BOLD exceed the NMOCD Closure Limit

Page 1 of 1

# Appendices

# **Appendix A**

## **Release Notification & Corrective Action (Form C-141)**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Apache Corporation	Contact Natalie Gladden
Address P.O. Box 1849, Eunice NM 88231	Telephone No. 505-390-4186
Facility Name EBDU #48	Facility Type

Surface Owner	Mineral Owner	Lease No. 30-025-06550
---------------	---------------	------------------------

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	12	21S	37E	660	South Line	660	East Line	Lea

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

#### NATURE OF RELEASE

Type of Release Oil/Wtr	Volume of Release 10	Volume Recovered 8
Source of Release Bull opened valve	2/8/08	2/8/08
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Bull opened valve on injection well, causing water to run 30-40' from wellhead. Vac truck picked up fluid, backhoes dug up contaminated soil.


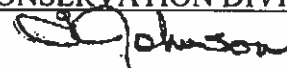
Describe Area Affected and Cleanup Action Taken.\*

Apache will clean contaminated area and follow NMOCD guidelines for remediation.

FEB 14 2008

HOBBS OCD

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Natalie Gladden	Approved by District  ENVIRONMENTAL ENGINEER	
Title: EH&S Environmental Tech	Approval Date: 2.14.08	Expiration Date: 4.14.08
E-mail Address: Natalie.gladden@apachecorp.com	Conditions of Approval:	Attached <input type="checkbox"/> 1 RP. 1786
Date: 02/14/08 Phone: 505-390-4186		

\* Attach Additional Sheets If Necessary



State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	65-70 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling procedures and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Bruce BAKER Title: Environmental Tech SR.  
Signature: Bruce Baker Date: 10-29-19  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Bruce Baker Title: Environmental Tech SR  
 Signature: Bruce Baker Date: 10-29-19  
 email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Bradford Billings Date: 06/22/2022  
 Printed Name: Bradford Billings Title: Envi.Spec.A

# **Appendix B**

## **Closure Criteria Justification**



**TABLE 3  
CLOSURE CRITERIA JUSTIFICATION**

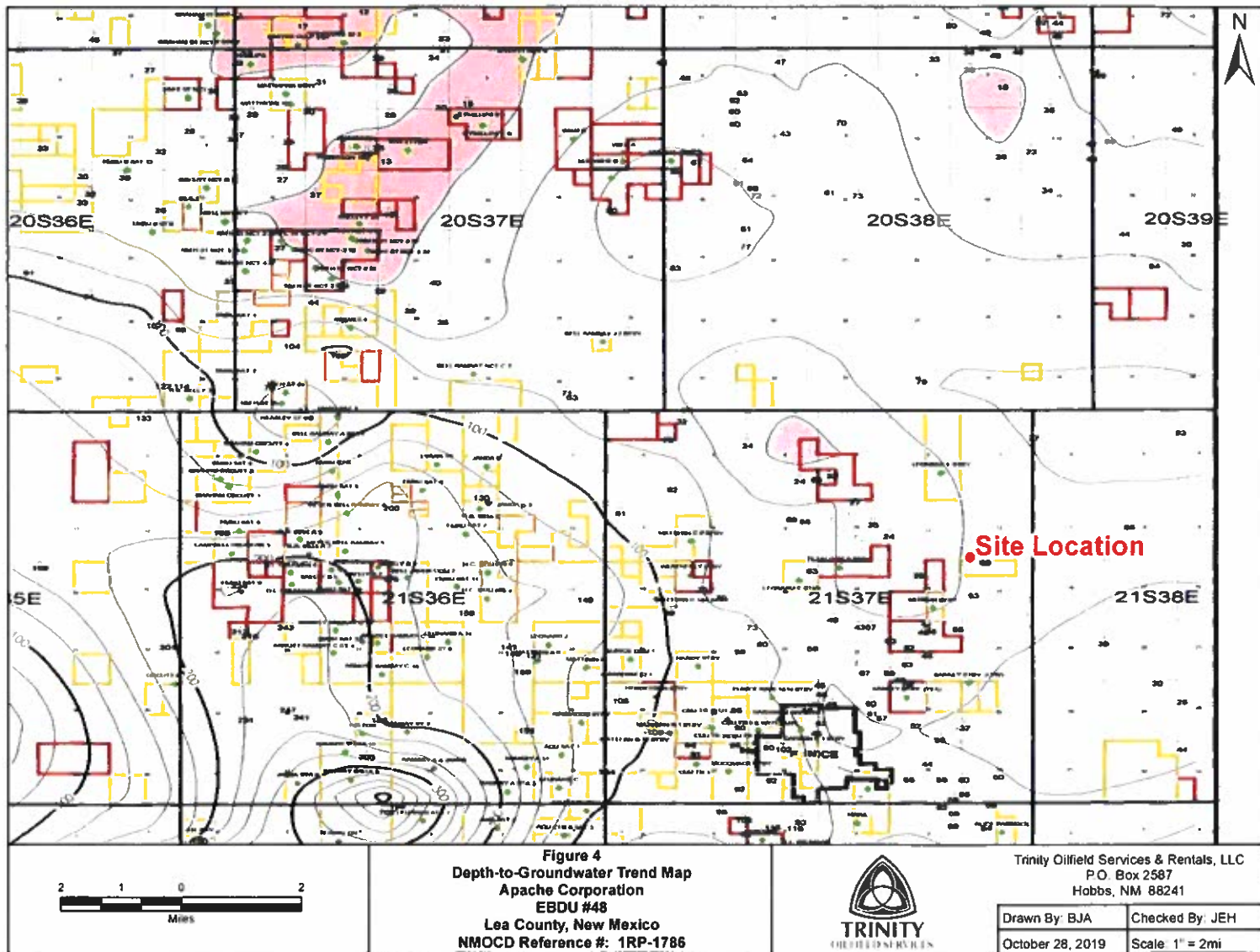
**APACHE CORPORATION  
EBDU #48  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE #: 1RP-1786**

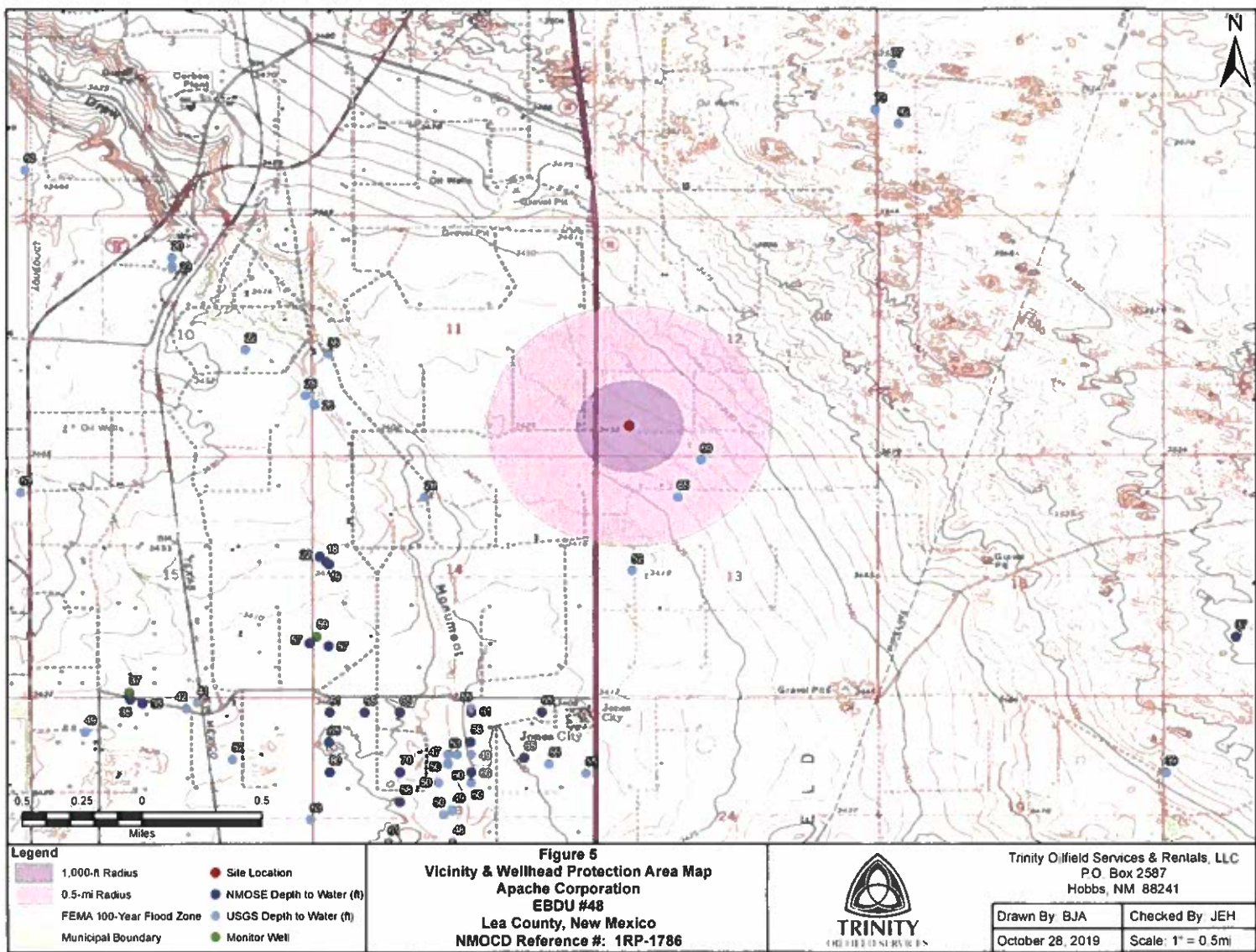


<b>Groundwater, Water Wells &amp; Other Water Sources</b>	
Depth to groundwater (ft)?	65 - 70
Horizontal distance (ft) from all water sources within 0.5 miles?	1,520 - 1,795
Within 500' of a spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No
Within 1000' of any fresh water well or spring?	No
<b>Surface Water</b>	
Horizontal distance (ft) to nearest significant watercourse?	>1,000
Within 300' of any continuously flowing watercourse or any other significant watercourse?	No
Within 200' of any lakebed, sinkhole or playa lake?	No
<b>Human-Occupied, Environmental &amp; Other Areas</b>	
Within incorporated municipal boundaries or within a defined municipal fresh water well field?	No
Within 300' of an occupied permanent residence, school, hospital, institution or church?	No
Within 300' of a wetland?	No
Within the area overlying a subsurface mine?	No
Within an unstable area?	No
Within a 100-year floodplain?	No

<b>Closure Criteria (mg/kg)*</b>				
<b>Benzene</b>	<b>BTEX</b>	<b>GRO + DRO</b>	<b>TPH</b>	<b>Chloride</b>
10	50	1,000	2,500	10,000

\*Numerical limits or natural background level, whichever is greater









# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00137 POD1	CP	LE		2	2	1	13	21S	37E	676862	3595783*	591	65		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 676351.28

Northing (Y): 3596080.7

Radius: 804.67

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/28/19 12:17 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# **Appendix C**

## **Laboratory Analytical Reports**



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

August 08, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EBDU #48

Enclosed are the results of analyses for samples received by the laboratory on 08/02/19 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 1 SURFACE 32.488033 (H902664-01)**

BTEX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTEX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 115 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 90.8 % 41-142

Surrogate: 1-Chlorooctadecane 88.7 % 37.6-147

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.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 1 @ 1 - 103.123164 (H902664-02)**

BTX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 88.0 % 41-142

Surrogate: 1-Chlorooctadecane 88.8 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 1 @ 2 (H902664-03)**

BTX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 91.4 % 41-142

Surrogate: 1-Chlorooctadecane 90.1 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 2 SURFACE 32.488094 (H902664-04)**

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTEX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 106 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	38.2	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	64.5	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 87.5 % 41-142

Surrogate: 1-Chlorooctadecane 91.6 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 2 @ 1 -103.123100 (H902664-05)**

BTEX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTEX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 117 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 87.9 % 41-142

Surrogate: 1-Chlorooctadecane 88.0 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 2 @ 2 (H902664-06)**

BTEX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTEX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 113 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	33.7	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	36.7	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 94.9 % 41-142

Surrogate: 1-Chlorooctadecane 96.2 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 3 SURFACE 32.487938 (H902664-07)**

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTEX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 118 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	51.9	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	61.2	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 87.0 % 41-142

Surrogate: 1-Chlorooctadecane 90.1 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 3 @ 1 -103.123016 (H902664-08)**

BTEx 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTEX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 115 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 80.6 % 41-142

Surrogate: 1-Chlorooctadecane 79.5 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 3 @ 2 (H902664-09)**

BTEX 80218			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41	
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98	
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31	
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32	
Total BTEX	<0.300	0.300	08/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 87.7 % 41-142

Surrogate: 1-Chlorooctadecane 86.4 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 4 @ SURFACE (H902664-10)**

BTEX 80218			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Benzene*	<0.050	0.050	08/06/2019	ND	1.79	89.3	2.00	3.41			
Toluene*	<0.050	0.050	08/06/2019	ND	1.86	93.0	2.00	1.98			
Ethylbenzene*	<0.050	0.050	08/06/2019	ND	1.76	88.0	2.00	2.31			
Total Xylenes*	<0.150	0.150	08/06/2019	ND	5.34	88.9	6.00	2.32			
Total BTEX	<0.300	0.300	08/06/2019	ND							

Surrogate: 4-Bromofluorobenzene (PIL) 122 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/07/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: M5					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	15.5	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 85.0 % 41-142

Surrogate: 1-Chlorooctadecane 83.2 % 37.6-147

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 4 @ 1 32.440853 (H902664-11)**

BTEX 80218			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2019	ND	1.95	97.3	2.00	4.45	
Toluene*	<0.050	0.050	08/07/2019	ND	1.95	97.5	2.00	2.91	
Ethylbenzene*	<0.050	0.050	08/07/2019	ND	2.07	104	2.00	7.85	
Total Xylenes*	<0.150	0.150	08/07/2019	ND	6.43	107	6.00	8.88	
Total BTEX	<0.300	0.300	08/07/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/07/2019	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	08/06/2019	ND	210	105	200	0.746	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	202	101	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 81.8 % 41-142

Surrogate: 1-Chlorooctadecane 80.5 % 37.6-147

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\* = Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 08/02/2019  
 Reported: 08/08/2019  
 Project Name: EBDU #48  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY

Sampling Date: 08/02/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP - 4 @ 2 -103.45807 (H902664-12)****BTEX 8021B**

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2019	ND	1.95	97.3	2.00	4.45	
Toluene*	<0.050	0.050	08/07/2019	ND	1.95	97.5	2.00	2.91	
Ethylbenzene*	<0.050	0.050	08/07/2019	ND	2.07	104	2.00	7.85	
Total Xylenes*	<0.150	0.150	08/07/2019	ND	6.43	107	6.00	8.88	
Total BTEX	<0.300	0.300	08/07/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIB) 105 % 73.3-129

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/07/2019	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	08/06/2019	ND	213	107	200	0.553	
DRO >C10-C28*	<10.0	10.0	08/06/2019	ND	208	104	200	0.767	
EXT DRO >C28-C36	<10.0	10.0	08/06/2019	ND					

Surrogate: 1-Chlorooctane 62.6 % 41-142

Surrogate: 1-Chlorooctadecane 59.3 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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### 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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101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

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Relinquished By:		Date: 8.2.19	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
<i>[Signature]</i>		Time: 7:30	<i>[Signature]</i>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:	
		Time:			
Delivered By: (Circle One) 5.4°		#97	Sample Condition	CHECKED BY:	
Sampler - UPS - Bus - Other: Corrected 5.8°			Cool Intact	(Initials)	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	TO	
			<input type="checkbox"/> Yes <input type="checkbox"/> No		



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: <u>Acrylic Corporation</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																
Project Manager: <u>Bruce Baker</u>				P.O. #:																				
Address:				Company:																				
City: State: Zip:				Attn:																				
Phone #: Fax #:				Address:																				
Project #: Project Owner:				City:																				
Project Name: <u>EBDU #48</u>				State: Zip:																				
Project Location: <u>EBDU #48</u>				Phone #:																				
Sampler Name: <u>David Baker</u>				Fax #:																				
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																
Lab I.D.	Sample I.D.	GRAB OR (COMP.)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME										
<u>H902664</u>	<u>11 SP-4 @ 1 32-446 853</u>												<u>8-2-19</u>		<u>CL</u>	<u>EXT TYP</u>	<u>EXT EX</u>							
	<u>12 SP-4 @ 2 -103-4587</u>												<u>8-2-19</u>		<u>✓</u>	<u>✓</u>	<u>✓</u>							

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Relinquished By:	Date: <u>8-2-19</u>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
<u>David Baker</u>	Time: <u>16:30</u>	<u>Benjamin Alder</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			
Delivered By: (Circle One) <u>5.4°C</u> <u>#97</u>	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other: <u>Corrected 5.8°C</u>	Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	(Initials) <u>T.O.</u>		

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 2166

**CONDITIONS**

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 2166
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
bbillings	None	6/22/2022