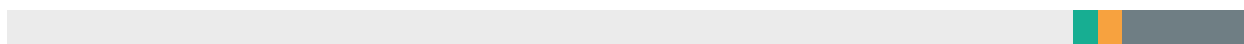


**Apache Corporation  
WBDU #46  
NRM1934740110**

**Final Remediation Report**



**Introduction**

This report presents the results of remediation activities at the WBDU #46. On behalf of Apache Corporation (Apache), Diamondback Disposal Services, Inc (Diamondback) was tasked with the cleanup and remediation of release 1RP-5793 (NRM134740110). The release occurred in Unit Letter J, Section 8, Township 21S, Range 37E at coordinates 32.489932, -103.181248. The remediation was performed in general accordance with the New Mexico Oil Conservation Division (NMOCD) rules and regulations for releases dated July 24, 2018 and approved NMOCD work plan dated August 31, 2020.

**Overview**

The spill site is located mostly on private land consisting of grass, prairie, or range lands, and active Apache production pad. Approximately 40 bbls of produced water was lost with 13 bbls being recovered and approximately 3 bbls of crude oil with 1 bbl being recovered, due to a failed back pressure valve.

**Regulatory Guidelines**

Upon review of the site characteristics, depth to ground water being 70' according to USGS and NMOSE, and Table 1 Closure Criteria, The Recommended Remediation Action Levels (RRAL), determined by the latest NMOCD guidelines (19.15.29 NMAC) are as follows: 10,000mg/kg Chloride, 2,500 mg/kg TPH, 2,500 mg/kg GRO/DRO/MRO, 50 mg/kg BTEX, 10mg/kg Benzene.

**Remediation Activities**

Between the dates of January 6, 2021 and January 14, 2021, Diamondback excavated approximately 1,160 cubic yards (cy) of impacted material, loaded, and transported to Sundance Services Parabo Facility for disposal. Depth of excavation from approximately 5 feet to six inches below ground surface. On January 14, 2021, the site was sampled to determine if RRAL's had been met. Five point composite samples were collected, every 500 square feet for both wall and floor sections, packaged and delivered to a third-party lab, with chain of custody, for testing as per regulatory standards. (see attached analytical). Upon review of analytical, all floor samples in the pasture area prove to be below RRAL's for site closure. Being that the spill area was excavated to a depth of 4 feet bgs all restoration and reclamation standards have been met. On the Active production area all floor samples prove to be below Table 1 closure standards All wall samples were also below Table 1 requirements as well as restoration and reclamation standards. On January 27, 2021 backfilling began and ran thru February 8, 2021. A total of 1,320 cy of clean caliche, similar to surrounding area. was imported and placed in excavated pasture area and on production pad to background standards. A layer of topsoil matching surrounding area consisting of 420 cy was placed in pasture area. Material was placed in a manner to promote compaction, crowned and sloped to promote storm water runoff and erosion prevention. Excavated pasture area, including un-excavated disturbed areas., will be seeded during the next optimal growing season with State of NM Sandy Seed Mix at a rate of 30 Lbs/ acre.

### Conclusions

Upon review all analytical and data provide by the third-party independent lab, it is our belief that all recommended remediation action levels have been met. Diamondback feels the migration of any remaining contaminants through the vadose zone, has been greatly reduced. Therefore, leaving this site in a manner that will pose very little if any future environmental threat.

	3			
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SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX mg/Kg	TPH mg/Kg
Sec 1 B. Floor H210105-1--01	1-14-21	5	48.0	<0.300	<10
Sec 2 B. Floor H210105-1--02	1-14-21	5	32.0	<0.300	<10
Sec 3 B. Floor H210105-1--03	1-14-21	4	80.0	<0.300	<10
Sec 4 B. Floor H210105-1--04	1-14-21	4	48.0	<0.300	<10
Sec 5 B. Floor H210105-1--05	1-14-21	4	32.0	<0.300	<10
Sec 6 B. Floor H210105-1--06	1-14-21	4	80.0	<0.300	<10
Sec 7 B. Floor H210105-1--07	1-14-21	4	80.0	<0.300	<10
Sec 8 B. Floor H210105-1--08	1-14-21	4	256	<0.300	<10
Sec 1 W. Wall H210105-1--09	1-14-21	1-5	64.0	<0.300	<10
Sec 2 W. Wall H210105-1-10	1-14-21	.5-4	48.0	<0.300	<10
Sec 3 W. Wall H210105-1--11	1-14-21	.5-4	32.0	<0.300	<10
Sec 9 B. Floor H210167-12	1-14-21	.5	112	<0.300	<10
Sec 10 B. Floor H210105--13	1-14-21	.5	784	<0.300	14.7
Sec 11 B. Floor H210105-14	1-14-21	.5	144	<0.300	<10
Sec 12 B. Floor H210105-15	1-14-21	.5	608	<0.300	<10
Sec 13 B. Floor H210105--16	1-14-21	.5	384	<0.300	<10
Sec 14 B. Floor H210105--17	1-14-21	.5	1580	<0.300	<10
Sec 15 B. Floor H210105--18	1-14-21	.5-2	192	<0.300	<10
Sec 4 W. Wall H210105-19	1-14-21	.5	32.0	<0.300	<10
Sec 6 W. Wall H210105-20	1-14-21	.5	80.0	<0.300	<10

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX mg/Kg	TPH mg/Kg
Sec 7 W. Wall H210105-21	1-14-21	.5-2	96.0	<.0300	<10

	5			
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Incident ID	NRM1934740110
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: Larry Baker

Title: Environmental Tech SR.

Signature: Larry Baker

Date: 2/11/2021

email: larry.baker@apachecorp.com

Telephone: 432-631-6982

**OCD Only**

Received by: Cristina Eads

Date: 02-11-2021

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: Cristina Eads

Date: 06-23-2021

Printed Name: Cristina Eads

Title: Environmental Specialist



**WBDU #46**

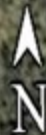
Sample Sections

**Legend**

- Excavation
- Floor Sections
- Sample Sections
- Wall Section Line



Google Earth

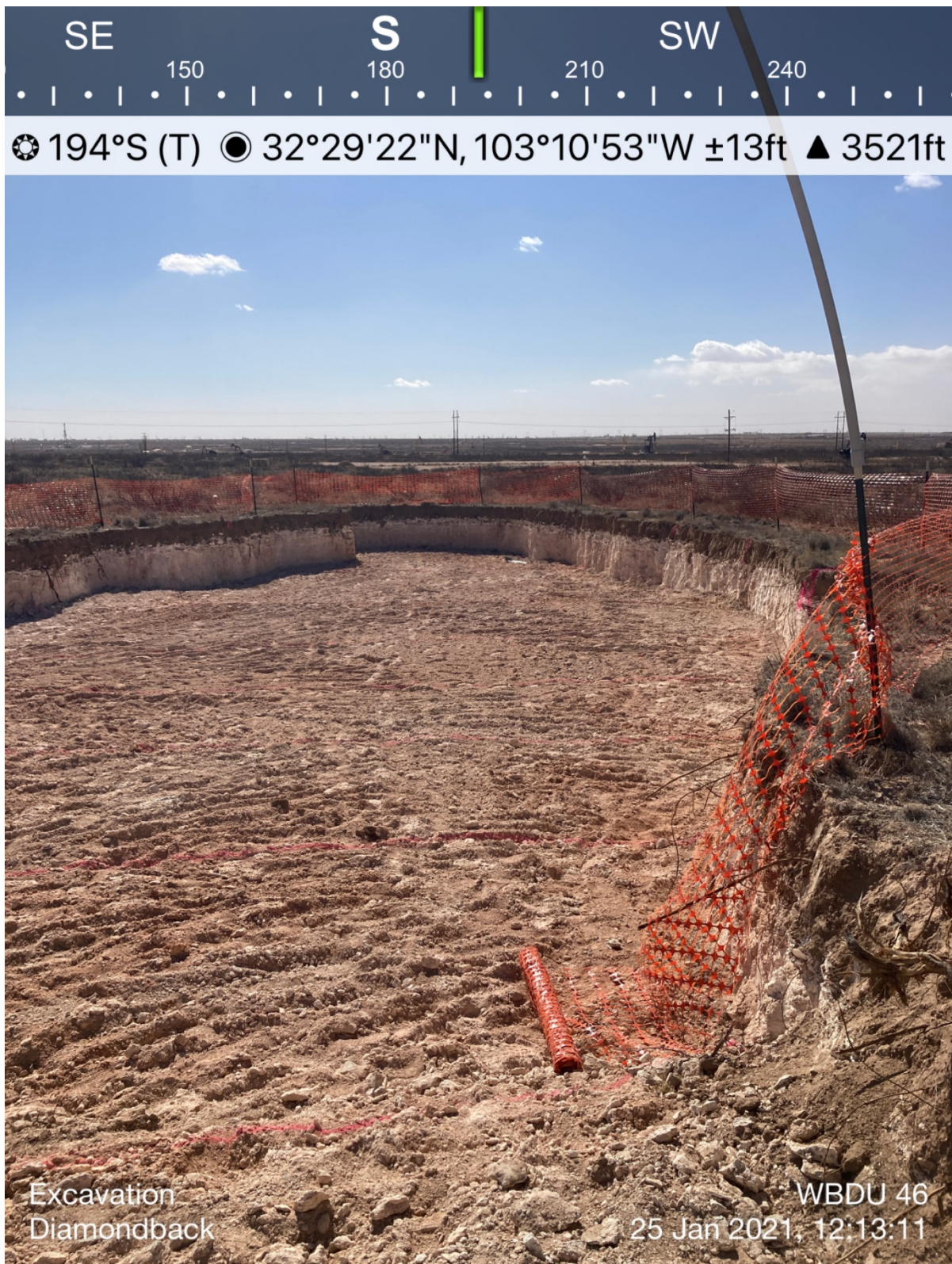


100 ft













8			
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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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January 21, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #46

Enclosed are the results of analyses for samples received by the laboratory on 01/18/21 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 1 (H210105-01)**

BTX 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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	48.0	16.0	01/19/2021	ND	416	104	400	3.92		

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 97.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.4 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 2 (H210105-02)**

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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTEX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 93.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.6 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 3 (H210105-03)**

BTX 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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	80.0	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 96.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.5 % 42.2-156

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\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 4 (H210105-04)**

BTX 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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	48.0	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 82.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.9 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 5 (H210105-05)**

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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTEX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	01/19/2021	ND	416	104	400	3.92		

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 96.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.8 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 6 (H210105-06)**

BTX 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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	80.0	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 91.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.3 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 7 (H210105-07)**

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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTEx	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	80.0	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 96.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.4 % 42.2-156

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\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 8 (H210105-08)**

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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTEx	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	256	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 96.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.8 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 1 (H210105-09)**

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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTEX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 2 (H210105-10)**

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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTEx	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	48.0	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 94.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.3 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 3 (H210105-11)**

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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTEX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	32.0	16.0	01/19/2021	ND	416	104	400	3.92		

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	01/19/2021	ND	228	114	200	0.116	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	123	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 87.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.6 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 9 (H210105-12)**

BTX 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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	112	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/19/2021	ND	237	119	200	9.58	
DRO >C10-C28*	<10.0	10.0	01/19/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/19/2021	ND					

Surrogate: 1-Chlorooctane 98.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.7 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 10 (H210105-13)**

BTX 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	01/19/2021	ND	2.03	102	2.00	3.08	
Toluene*	<0.050	0.050	01/19/2021	ND	2.08	104	2.00	3.39	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	3.18	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.32	105	6.00	3.05	
Total BTX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	784	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/20/2021	ND	237	119	200	9.58	
DRO >C10-C28*	14.7	10.0	01/20/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 108 % 44.3-144

Surrogate: 1-Chlorooctadecane 106 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 11 (H210105-14)**

BTX 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	01/20/2021	ND	2.09	104	2.00	2.10	
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	01/19/2021	ND	416	104	400	3.92		

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	01/20/2021	ND	237	119	200	9.58	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 99.4 % 42.2-156

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\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 12 (H210105-15)**

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	01/20/2021	ND	2.09	104	2.00	2.10		
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382		
Total BTEx	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	608	16.0	01/19/2021	ND	416	104	400	3.92		

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	01/20/2021	ND	237	119	200	9.58	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 99.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 96.4 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 13 (H210105-16)**

BTX 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	01/20/2021	ND	2.09	104	2.00	2.10	
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	384	16.0	01/19/2021	ND	416	104	400	3.92		

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	01/20/2021	ND	237	119	200	9.58	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 96.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.1 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 14 (H210105-17)**

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	01/20/2021	ND	2.09	104	2.00	2.10	
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	1580	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/20/2021	ND	237	119	200	9.58	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 98.3 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 15 (H210105-18)**

BTX 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	01/20/2021	ND	2.09	104	2.00	2.10		
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382		
Total BTX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	192	16.0	01/19/2021	ND	416	104	400	3.92		

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	01/20/2021	ND	237	119	200	9.58	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 101 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 4 (H210105-19)**

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	01/20/2021	ND	2.09	104	2.00	2.10	
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	01/19/2021	ND	416	104	400	3.92	

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	01/20/2021	ND	237	119	200	9.58	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	245	122	200	7.06	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 92.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.6 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 6 (H210105-20)**

BTX 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	01/20/2021	ND	2.09	104	2.00	2.10	
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	80.0	16.0	01/19/2021	ND	416	104	400	3.92	

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	01/20/2021	ND	242	121	200	3.14	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	246	123	200	2.05	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 77.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 73.6 % 42.2-156

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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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: WBDU #46  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/14/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 7 (H210105-21)**

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	01/20/2021	ND	2.09	104	2.00	2.10	
Toluene*	<0.050	0.050	01/20/2021	ND	2.12	106	2.00	0.228	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.343	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.41	107	6.00	0.382	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	01/19/2021	ND	416	104	400	3.92		

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	01/20/2021	ND	242	121	200	3.14	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	246	123	200	2.05	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 79.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 74.4 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

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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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Aschke</u>		P.O. #:		ANALYSIS REQUEST	
Project Manager: <u>Bruce Baker</u>		Company:			
Address:		Attn:			
City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88240</u>		Address:			
Phone #: _____ Fax #: _____		City:			
Project #: _____ Project Owner:		State:			
Project Name:		Zip:			
Project Location: <u>WBDU #41</u>		Phone #:			
Sampler Name: <u>Joe Aschke</u>		Fax #:			
FOR LAB USE ONLY		PRESERV.		SAMPLING	
		(G)RAB OR (C)OMP.			
		# CONTAINERS			
		GROUNDWATER			
		WASTEWATER			
		MATRIX			
		SOIL			
		OIL			
		SLUDGE			
		OTHER :			
		ACID/BASE:			
		ICE / COOL			
		OTHER :			
		DATE		TIME	
		11/14		10:17:00 AM	
				10:17:20 AM	
				10:17:40 AM	
				10:18:00 AM	
				10:18:20 AM	
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				10:28:20 AM	
				10:28:40 AM	
				10:29:00 AM	
				10:29:20 AM	
				10:29:40 AM	
				10:30:00 AM	
				10:30:20 AM	
				10:30:40 AM	
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> Apache						<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>															
<b>Project Manager:</b> Bruce Baker						<b>P.O. #:</b>																	
<b>Address:</b> E						<b>Company:</b>																	
<b>City:</b> Hobbs						<b>Attn:</b>																	
<b>State:</b> NM <b>Zip:</b> 88240						<b>Address:</b>																	
<b>Phone #:</b>						<b>City:</b>																	
<b>Project #:</b>						<b>State:</b>																	
<b>Project Location:</b> I-30 Dy #46						<b>Phone #:</b>																	
<b>Sample Name:</b> S&S Alameda						<b>Fax #:</b>																	
<small>FOR LAB USE ONLY</small>																							
<b>Lab I.D.</b>	<b>Sample I.D.</b>	(G)RAB OR (C)OME	# CONTAINERS	MATRIX		PRESERV.	SAMPLING																
H210105				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	COB / COOL	OTHER :	DATE	TIME	C1	BTEX	EXT TPH						
11	33	C	1			1							1/19	1:34 pm	/	/	/						
12	39	C	1			1								1:36 pm	/	/	/						
13	310	C	1			1								1:38 pm	/	/	/						
14	311	C	1			1								1:40 pm	/	/	/						
15	312	C	1			1								1:41 pm	/	/	/						
16	313	C	1			1								2:10 pm	/	/	/						
17	314	C	1			1								3:48 pm	/	/	/						
18	315	C	1			1								3:50 pm	/	/	/						
19	316	C	1			1								3:52 pm	/	/	/						
<small>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.</small>																							
<b>Relinquished By:</b> [Signature]						<b>Date:</b> 1-18-21		<b>Received By:</b> [Signature]		<b>Date:</b> 1-18-21		<b>Time:</b> 12:00		<b>Remarks:</b>									
<b>Relinquish By:</b>						<b>Date:</b>		<b>Received By:</b>		<b>Date:</b>		<b>Time:</b>		<b>Remarks:</b>									
<b>Delivered By:</b> (Circle One)						<b>Observed Temp. °C</b>		<b>Corrected Temp. °C</b>		<b>Sample Condition</b>		<b>CHECKED BY:</b> (Initials)		<b>Turnaround Time:</b>		<b>Standard</b>		<b>Rush</b>		<b>Bacteria (only)</b>		<b>Sample Condition</b>	
Sampler - UPS - Bus - Other:						5.4		Corrected Temp. °C		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		✓		1-18-21		1-18-21		1-18-21		<input type="checkbox"/> Yes <input type="checkbox"/> No		Corrected Temp. °C	





**CARDINAL**  
Laboratories

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



**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 17774

CONDITIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 17774
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
ceads	None	6/23/2021