



303 Veterans Airpark Lane Midland, TX 79705

## **Remediation Plan**

March 1, 2021

Re: WP Byrd Tank Battery  
Case# NRM2035052334

### **Background:**

On 11/29/2020 a release occurred due a failure on a 1 inch circulating line resulting in the loss of fluid. The release (GPS: 32.59134, -103.30750) is located south of Monument, New Mexico in unit letters B&G section 12 township 20S range 36E. A groundwater survey was conducted utilizing USGS wells of record. The nearest well of record suggest the groundwater depth below the release to be 33 feet below ground surface. The release is in an area of known groundwater impact see AP-30 for details.

On 2/4/2021 vertical delineation samples were conducted utilizing a hand auger to a depth of 5 feet. All samples collected were submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory analysis were above table one standards for TPH. On 2/22/2021 SP 1 and SP 2 were advanced to a depth of 9 feet utilizing a hand auger. All samples collected were submitted to a commercial laboratory for analysis of TPH and BTEX. Laboratory analysis were above table one standards for TPH. On 2/24/2021 SP 1 and SP 2 were advanced utilizing a hand auger to a refusal depth due to hardness of soil to 10 feet. All samples were collected and submitted to a commercial laboratory for analysis of TPH and BTEX. Laboratory results were above table one standards for TPH.

### **Variance Request:**

Due to limited access caused by pipeline infrastructure at the release site Apache Corporation would like to request a variance to continue delineation during remediation activities. At the time of remediation pipelines will be rerouted to gain access to excavate the release area.

### **Remediation Plan:**

Apache Corporation proposes that the release area around SP 1 nearest the heater treaters to be excavated to a depth of 1 foot. The area around SP 2 between the two berms will be excavated to table one standards for release less than 50 feet to groundwater to the extent that can be safely achieved. All excavated material (640 yards) will be hauled to an OCD approved disposal facility. Final 5 point and bottom samples will be collected not to exceed 200 square feet and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. The excavation will be backfill with clean imported caliche. The remediation will be completed within 90 days of OCD approval of the plan.

Enclosed: C-141, Groundwater Data, Maps, Sample Data, and Laboratory Results,

Submitted by;

*Bruce Baker*

**Environmental Technician**

*larry.baker@apachecorp.com*

**Cell# 432-631-6982**

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?	<u>33</u> (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 checked="" type="checkbox"/> Yes <input 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 plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 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

Page 4

Incident ID	NRM2035052334
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: Larry Baker Title: Environmental Tech SR.  
Signature: *Larry Baker* Date: 3/1/2021  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

Received by: Cristina Eads Date: 04/04/2021

Incident ID	NRM2035052334
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Larry Baker Title: Environmental Tech SR.  
Signature: Larry Baker Date: 3/1/2021  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

Received by: Cristina Eads Date: 04/04/2021

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Cristina Eads Date: 06/29/2021



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# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
L	13524 POD1	1	3	2	12	20S	36E	658948	3607082 
Driller License:	1456	Driller Company:				WHITE DRILLING COMPANY			
Driller Name:	WHITE, JOHN W								
Drill Start Date:	03/25/2014	Drill Finish Date:				03/25/2014		Plug Date:	
Log File Date:	04/16/2014	PCW Rcv Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	
Casing Size:	2.00	Depth Well:				42 feet		Depth Water:	33 feet
Water Bearing Stratifications:					Top	Bottom	Description		
					19	35	Other/Unknown		
					35	42	Sandstone/Gravel/Conglomerate		
Casing Perforations:					Top	Bottom			
					26	41			

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.

3/1/21 8:33 AM

POINT OF DIVERSION SUMMARY



Show





Maddox Rd

SP1

H1

H4

SP2

H2

H3

Google Earth

53 ft



Sample Date	Sample ID	Depth	Chloride	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
2/4/2021	SP1	S	<16.0	<0.200	3.62	4.37	25.000	33	3110	32700	5690	32.591397 -103.307590
2/4/2021		1'	16	<0.453	4.9	3.19	15.40	24.00	2230	11400	2440	
2/4/2021		2'	48	<0.050	<0.050	<0.050	<0.150	<0.300	10.2	226	41.9	
2/4/2021		3'	176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	151	28.8	
2/4/2021		4'	112	<0.050	0.242	0.246	1.310	1.80	163	1390	288	
2/4/2021		5'	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	187	47.9	
2/22/2021		7'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	138	22.4	
2/22/2021		9'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	247	45.3	
2/24/2021		10'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	341	89.5	
	SP2	S	32	0.219	5.93	5.06	25.800	37	2750	23600	4980	32.591332 -103.307474
2/4/2021		1'	16	1.07	8.85	4.11	17.10	31.20	4160	12300	3090	
2/4/2021		2'	32	1.88	14.3	6.28	27.300	49.8	5130	13500	2860	
2/4/2021		3'	<16.0	0.711	6.67	2.21	15.100	24.7	2730	7590	1610	
2/4/2021		4'	<16.0	<0.500	5.24	2.45	18.600	26.3	5770	15500	3140	
2/4/2021		5'	32	<0.050	0.893	0.987	5.210	7.09	531	2330	503	
2/22/2021		7'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	52.9	<10.0	
2/22/2021		9'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	189	23.8	
2/24/2021		10'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	731	208	
2/4/2021	H1	S	<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	512	315	
2/22/2011		S		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.591389 -103.307522
2/4/2021	H2	S	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.591331 -103.307419
2/4/2021	H3	S	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.591271 -103.307499
2/4/2021	H4	S	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.591349 -103.307586





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

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February 08, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WP BYRD #2

Enclosed are the results of analyses for samples received by the laboratory on 02/04/21 16:35.

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 style with a large, stylized 'C' and 'K'.

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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ SURFACE (H210291-01)**

BTX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	02/08/2021	ND	2.07	104	2.00	1.15	GC-NC1
<b>Toluene*</b>	<b>3.62</b>	0.200	02/08/2021	ND	2.18	109	2.00	2.27	GC-NC1
<b>Ethylbenzene*</b>	<b>4.37</b>	0.200	02/08/2021	ND	2.18	109	2.00	2.96	GC-NC1
<b>Total Xylenes*</b>	<b>25.0</b>	0.600	02/08/2021	ND	6.93	116	6.00	3.78	
<b>Total BTX</b>	<b>33.0</b>	1.20	02/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 311 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>3110</b>	100	02/05/2021	ND	215	108	200	7.12	
<b>DRO &gt;C10-C28*</b>	<b>32700</b>	100	02/05/2021	ND	214	107	200	3.53	
<b>EXT DRO &gt;C28-C36</b>	<b>5690</b>	100	02/05/2021	ND					

Surrogate: 1-Chlorooctane 754 % 44.3-144

Surrogate: 1-Chlorooctadecane 1320 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 1' (H210291-02)**

BTEX 8021B		mg/kg	Analyzed By: ms					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.453</b>	0.200	02/08/2021	ND	2.07	104	2.00	1.15	GC-NC1
<b>Toluene*</b>	<b>4.90</b>	0.200	02/08/2021	ND	2.18	109	2.00	2.27	GC-NC1
<b>Ethylbenzene*</b>	<b>3.19</b>	0.200	02/08/2021	ND	2.18	109	2.00	2.96	GC-NC1
<b>Total Xylenes*</b>	<b>15.4</b>	0.600	02/08/2021	ND	6.93	116	6.00	3.78	
<b>Total BTEX</b>	<b>24.0</b>	1.20	02/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 198 % 73.3-129

Chloride, SM4500CI-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>2230</b>	100	02/05/2021	ND	215	108	200	7.12	
<b>DRO &gt;C10-C28*</b>	<b>11400</b>	100	02/05/2021	ND	214	107	200	3.53	
<b>EXT DRO &gt;C28-C36</b>	<b>2440</b>	100	02/05/2021	ND					

Surrogate: 1-Chlorooctane 356 % 44.3-144

Surrogate: 1-Chlorooctadecane 472 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 2' (H210291-03)**

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	02/05/2021	ND	2.07	104	2.00	1.15	
Toluene*	<0.050	0.050	02/05/2021	ND	2.18	109	2.00	2.27	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	2.18	109	2.00	2.96	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	6.93	116	6.00	3.78	
Total BTX	<0.300	0.300	02/05/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/05/2021	ND	400	100	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*	10.2	10.0	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	226	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	41.9	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 80.6 % 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





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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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 3' (H210291-04)**

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	02/05/2021	ND	2.07	104	2.00	1.15	
Toluene*	<0.050	0.050	02/05/2021	ND	2.18	109	2.00	2.27	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	2.18	109	2.00	2.96	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	6.93	116	6.00	3.78	
Total BTX	<0.300	0.300	02/05/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	02/05/2021	ND	400	100	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	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	151	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	28.8	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 78.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.5 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 4' (H210291-05)**

BTX 8021B		mg/kg	Analyzed By: ms					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2021	ND	2.07	104	2.00	1.15	
Toluene*	<b>0.242</b>	0.050	02/08/2021	ND	2.18	109	2.00	2.27	GC-NC1
Ethylbenzene*	<b>0.246</b>	0.050	02/08/2021	ND	2.18	109	2.00	2.96	GC-NC1
Total Xylenes*	<b>1.31</b>	0.150	02/08/2021	ND	6.93	116	6.00	3.78	
Total BTX	<b>1.80</b>	0.300	02/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 178 % 73.3-129

Chloride, SM4500CI-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>112</b>	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<b>163</b>	10.0	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	<b>1390</b>	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	<b>288</b>	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 164 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 5' (H210291-06)**

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	02/05/2021	ND	2.07	104	2.00	1.15	
Toluene*	<0.050	0.050	02/05/2021	ND	2.18	109	2.00	2.27	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	2.18	109	2.00	2.96	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	6.93	116	6.00	3.78	
Total BTX	<0.300	0.300	02/05/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/05/2021	ND	400	100	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	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	187	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	47.9	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 81.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.8 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ SURFACE (H210291-07)**

BTX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.219</b>	0.100	02/06/2021	ND	2.07	104	2.00	1.15	GC-NC1
<b>Toluene*</b>	<b>5.93</b>	0.100	02/06/2021	ND	2.18	109	2.00	2.27	GC-NC1
<b>Ethylbenzene*</b>	<b>5.06</b>	0.100	02/06/2021	ND	2.18	109	2.00	2.96	GC-NC1
<b>Total Xylenes*</b>	<b>25.8</b>	0.300	02/06/2021	ND	6.93	116	6.00	3.78	
<b>Total BTX</b>	<b>37.0</b>	0.600	02/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 189 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>2750</b>	100	02/05/2021	ND	216	108	200	6.41	QM-07
<b>DRO &gt;C10-C28*</b>	<b>23600</b>	100	02/05/2021	ND	231	116	200	3.31	QM-07
<b>EXT DRO &gt;C28-C36</b>	<b>4980</b>	100	02/05/2021	ND					

Surrogate: 1-Chlorooctane 349 % 44.3-144

Surrogate: 1-Chlorooctadecane 383 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 1' (H210291-08)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>1.07</b>	0.100	02/06/2021	ND	2.07	104	2.00	1.15	GC-NC1
<b>Toluene*</b>	<b>8.85</b>	0.100	02/06/2021	ND	2.18	109	2.00	2.27	GC-NC1
<b>Ethylbenzene*</b>	<b>4.11</b>	0.100	02/06/2021	ND	2.18	109	2.00	2.96	GC-NC1
<b>Total Xylenes*</b>	<b>17.1</b>	0.300	02/06/2021	ND	6.93	116	6.00	3.78	
<b>Total BTEX</b>	<b>31.2</b>	0.600	02/06/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>4160</b>	100	02/05/2021	ND	216	108	200	6.41		
<b>DRO &gt;C10-C28*</b>	<b>12300</b>	100	02/05/2021	ND	231	116	200	3.31		
<b>EXT DRO &gt;C28-C36</b>	<b>3090</b>	100	02/05/2021	ND						

Surrogate: 1-Chlorooctane 272 % 44.3-144

Surrogate: 1-Chlorooctadecane 242 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 2' (H210291-09)**

BTEx 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>1.88</b>	0.200	02/08/2021	ND	2.07	104	2.00	1.15	GC-NC1
<b>Toluene*</b>	<b>14.3</b>	0.200	02/08/2021	ND	2.18	109	2.00	2.27	GC-NC1
<b>Ethylbenzene*</b>	<b>6.28</b>	0.200	02/08/2021	ND	2.18	109	2.00	2.96	GC-NC1
<b>Total Xylenes*</b>	<b>27.3</b>	0.600	02/08/2021	ND	6.93	116	6.00	3.78	
<b>Total BTEX</b>	<b>49.8</b>	1.20	02/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 207 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>5130</b>	50.0	02/05/2021	ND	216	108	200	6.41	
<b>DRO &gt;C10-C28*</b>	<b>13500</b>	50.0	02/05/2021	ND	231	116	200	3.31	
<b>EXT DRO &gt;C28-C36</b>	<b>2860</b>	50.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 287 % 44.3-144

Surrogate: 1-Chlorooctadecane 239 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 3' (H210291-10)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.711</b>	0.100	02/06/2021	ND	2.07	104	2.00	1.15	GC-NC1
<b>Toluene*</b>	<b>6.67</b>	0.100	02/06/2021	ND	2.18	109	2.00	2.27	GC-NC1
<b>Ethylbenzene*</b>	<b>2.21</b>	0.100	02/06/2021	ND	2.18	109	2.00	2.96	GC-NC1
<b>Total Xylenes*</b>	<b>15.1</b>	0.300	02/06/2021	ND	6.93	116	6.00	3.78	
<b>Total BTX</b>	<b>24.7</b>	0.600	02/06/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>2730</b>	50.0	02/05/2021	ND	216	108	200	6.41		
<b>DRO &gt;C10-C28*</b>	<b>7590</b>	50.0	02/05/2021	ND	231	116	200	3.31		
<b>EXT DRO &gt;C28-C36</b>	<b>1610</b>	50.0	02/05/2021	ND						

Surrogate: 1-Chlorooctane 187 % 44.3-144

Surrogate: 1-Chlorooctadecane 161 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 4' (H210291-11)**

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/08/2021	ND	2.13	107	2.00	0.822	GC-NC1
Toluene*	5.24	0.500	02/08/2021	ND	2.09	104	2.00	1.10	GC-NC1
Ethylbenzene*	2.45	0.500	02/08/2021	ND	2.03	102	2.00	1.55	GC-NC1
Total Xylenes*	18.6	1.50	02/08/2021	ND	5.95	99.2	6.00	1.52	
Total BTEX	26.3	3.00	02/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 136 % 73.3-129

Chloride, SM4500CI-B			mg/kg					Analyzed By: GM	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/05/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	5770	50.0	02/05/2021	ND	216	108	200	6.41	
DRO >C10-C28*	15500	50.0	02/05/2021	ND	231	116	200	3.31	
EXT DRO >C28-C36	3140	50.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 311 % 44.3-144

Surrogate: 1-Chlorooctadecane 254 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 5' (H210291-12)**

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/08/2021	ND	2.13	107	2.00	0.822	
Toluene*	0.893	0.050	02/08/2021	ND	2.09	104	2.00	1.10	GC-NC1
Ethylbenzene*	0.987	0.050	02/08/2021	ND	2.03	102	2.00	1.55	GC-NC1
Total Xylenes*	5.21	0.150	02/08/2021	ND	5.95	99.2	6.00	1.52	
Total BTEX	7.09	0.300	02/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 315 % 73.3-129

Chloride, SM4500CI-B			mg/kg					Analyzed By: GM	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/05/2021	ND	400	100	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*	531	10.0	02/05/2021	ND	216	108	200	6.41	
DRO >C10-C28*	2330	10.0	02/05/2021	ND	231	116	200	3.31	
EXT DRO >C28-C36	503	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 122 % 44.3-144

Surrogate: 1-Chlorooctadecane 127 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: H 1 (H210291-13)**

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	02/05/2021	ND	2.13	107	2.00	0.822	
Toluene*	<0.050	0.050	02/05/2021	ND	2.09	104	2.00	1.10	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	2.03	102	2.00	1.55	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.95	99.2	6.00	1.52	
Total BTEx	<0.300	0.300	02/05/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/05/2021	ND	400	100	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	02/05/2021	ND	216	108	200	6.41	
DRO >C10-C28*	512	10.0	02/05/2021	ND	231	116	200	3.31	
EXT DRO >C28-C36	315	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 87.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 117 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: H 2 (H210291-14)**

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	02/05/2021	ND	2.13	107	2.00	0.822		
Toluene*	<0.050	0.050	02/05/2021	ND	2.09	104	2.00	1.10		
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	2.03	102	2.00	1.55		
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.95	99.2	6.00	1.52		
Total BTEx	<0.300	0.300	02/05/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/05/2021	ND	400	100	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	02/05/2021	ND	216	108	200	6.41	
DRO >C10-C28*	<10.0	10.0	02/05/2021	ND	231	116	200	3.31	
EXT DRO >C28-C36	<10.0	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 82.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.3 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: H 3 (H210291-15)**

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	02/05/2021	ND	2.13	107	2.00	0.822	
Toluene*	<0.050	0.050	02/05/2021	ND	2.09	104	2.00	1.10	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	2.03	102	2.00	1.55	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.95	99.2	6.00	1.52	
Total BTEx	<0.300	0.300	02/05/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/05/2021	ND	400	100	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	02/05/2021	ND	216	108	200	6.41	
DRO >C10-C28*	<10.0	10.0	02/05/2021	ND	231	116	200	3.31	
EXT DRO >C28-C36	<10.0	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 74.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 76.3 % 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: 02/04/2021  
 Reported: 02/08/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: H 4 (H210291-16)**

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	02/05/2021	ND	2.13	107	2.00	0.822	
Toluene*	<0.050	0.050	02/05/2021	ND	2.09	104	2.00	1.10	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	2.03	102	2.00	1.55	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.95	99.2	6.00	1.52	
Total BTEX	<0.300	0.300	02/05/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/05/2021	ND	400	100	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	02/05/2021	ND	216	108	200	6.41	
DRO >C10-C28*	<10.0	10.0	02/05/2021	ND	231	116	200	3.31	
EXT DRO >C28-C36	<10.0	10.0	02/05/2021	ND					

Surrogate: 1-Chlorooctane 82.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.5 % 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

### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
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>Cardinal Corporation</u>		P.O. #:		BILL TO												ANALYSIS REQUEST																			
Project Manager: <u>Gene Baker</u>		Company:																																	
Address:		Attn:																																	
City:		Address:																																	
Phone #:		City:																																	
Project #:		State:																																	
Project Name: <u>WP BPO #2</u>		Zip:																																	
Project Location: <u>WP BPO #2</u>		Phone #:																																	
Sample Name: <u>Jeff Brown</u>		Fax #:																																	
FOR LAB USE ONLY																																			
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME		CL		BTEX		EXT. TPH	
H210291		SP1 @ Surface		4																						8/7/21		1440							
1		SP1 @ 1'		6																						1442									
2		SP1 @ 2'		6																						1444									
3		SP1 @ 3'		6																						1446									
4		SP1 @ 4'		6																						1448									
5		SP1 @ 5'		6																						1450									
6		SP1 @ Surface		6																						1452									
7		SP1 @ 1'		6																						1454									
8		SP1 @ 2'		6																						1456									
9		SP1 @ 3'		6																						1458									
10		SP1 @ 3'		6																						1458									

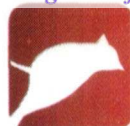
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Relinquished By: <u>Jeff Brown</u>		Date: <u>8/7/21</u>		Received By: <u>Debi Henderson</u>		Date: <u>8/7/21</u>		Time: <u>1435</u>		Sample Condition		CHECKED BY: <u>Debi Henderson</u>	
Relinquished By:		Time:		Received By:		Time:				Cool Intact		CHECKED BY:	
Delivered By: (Circle One)		Time:		Received By:		Time:				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		(Initials)	
Sampler - UPS - Bus - Other:		Time:		Received By:		Time:				Yes <input type="checkbox"/> No <input type="checkbox"/>		2.7e / #113	

REMARKS: Standard

Phone Result: ☐ Yes ☐ No ☐ Add'l Phone #:   
 Fax Result: ☐ Yes ☐ No ☐ Add'l Fax #:   
 REMARKS:   
 Standard





**CARDINAL**  
Laboratories

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(575) 393-2326 FAX (575) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

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February 23, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WP BYRD #2

Enclosed are the results of analyses for samples received by the laboratory on 02/22/21 11:53.

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: 02/22/2021  
 Reported: 02/23/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/22/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 7' (H210406-01)**

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	02/22/2021	ND	2.06	103	2.00	2.82	QR-03
Toluene*	<0.050	0.050	02/22/2021	ND	2.06	103	2.00	2.36	
Ethylbenzene*	<0.050	0.050	02/22/2021	ND	1.99	99.5	2.00	2.95	
Total Xylenes*	<0.150	0.150	02/22/2021	ND	5.78	96.3	6.00	2.49	
Total BTEX	<0.300	0.300	02/22/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

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	02/22/2021	ND	218	109	200	4.26	
<b>DRO &gt;C10-C28*</b>	<b>138</b>	10.0	02/22/2021	ND	216	108	200	7.52	
<b>EXT DRO &gt;C28-C36</b>	<b>22.4</b>	10.0	02/22/2021	ND					

Surrogate: 1-Chlorooctane 106 % 44.3-144

Surrogate: 1-Chlorooctadecane 109 % 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: 02/22/2021  
 Reported: 02/23/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/22/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 9' (H210406-02)**

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	02/22/2021	ND	2.06	103	2.00	2.82		
Toluene*	<0.050	0.050	02/22/2021	ND	2.06	103	2.00	2.36		
Ethylbenzene*	<0.050	0.050	02/22/2021	ND	1.99	99.5	2.00	2.95		
Total Xylenes*	<0.150	0.150	02/22/2021	ND	5.78	96.3	6.00	2.49		
Total BTEX	<0.300	0.300	02/22/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

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	02/22/2021	ND	218	109	200	4.26	
DRO >C10-C28*	247	10.0	02/22/2021	ND	216	108	200	7.52	
EXT DRO >C28-C36	45.3	10.0	02/22/2021	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 126 % 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: 02/22/2021  
 Reported: 02/23/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/22/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 2 @ 7' (H210406-03)**

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	02/22/2021	ND	2.06	103	2.00	2.82		
Toluene*	<0.050	0.050	02/22/2021	ND	2.06	103	2.00	2.36		
Ethylbenzene*	<0.050	0.050	02/22/2021	ND	1.99	99.5	2.00	2.95		
Total Xylenes*	<0.150	0.150	02/22/2021	ND	5.78	96.3	6.00	2.49		
Total BTEx	<0.300	0.300	02/22/2021	ND						

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

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	02/22/2021	ND	218	109	200	4.26	
<b>DRO &gt;C10-C28*</b>	<b>52.9</b>	10.0	02/22/2021	ND	216	108	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/22/2021	ND					

Surrogate: 1-Chlorooctane 106 % 44.3-144

Surrogate: 1-Chlorooctadecane 108 % 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: 02/22/2021  
 Reported: 02/23/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/22/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 2 @ 9' (H210406-04)**

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	02/22/2021	ND	2.06	103	2.00	2.82		
Toluene*	<0.050	0.050	02/22/2021	ND	2.06	103	2.00	2.36		
Ethylbenzene*	<0.050	0.050	02/22/2021	ND	1.99	99.5	2.00	2.95		
Total Xylenes*	<0.150	0.150	02/22/2021	ND	5.78	96.3	6.00	2.49		
Total BTEX	<0.300	0.300	02/22/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

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	02/22/2021	ND	218	109	200	4.26	
DRO >C10-C28*	189	10.0	02/22/2021	ND	216	108	200	7.52	
EXT DRO >C28-C36	23.8	10.0	02/22/2021	ND					

Surrogate: 1-Chlorooctane 107 % 44.3-144

Surrogate: 1-Chlorooctadecane 112 % 42.2-156

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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: 02/22/2021  
 Reported: 02/23/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/22/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: H 1 (H210406-05)**

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	02/22/2021	ND	2.06	103	2.00	2.82	
Toluene*	<0.050	0.050	02/22/2021	ND	2.06	103	2.00	2.36	
Ethylbenzene*	<0.050	0.050	02/22/2021	ND	1.99	99.5	2.00	2.95	
Total Xylenes*	<0.150	0.150	02/22/2021	ND	5.78	96.3	6.00	2.49	
Total BTEx	<0.300	0.300	02/22/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	16.0	16.0	02/22/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/22/2021	ND	218	109	200	4.26	
DRO >C10-C28*	<10.0	10.0	02/22/2021	ND	216	108	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/22/2021	ND					

Surrogate: 1-Chlorooctane 107 % 44.3-144

Surrogate: 1-Chlorooctadecane 109 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager

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---

### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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>Apex Corp</u>		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: <u>Grace Baker</u>		Company:					
Address:		Attn:					
City:		Address:					
State:		City:					
Zip:		State:					
Phone #:		Fax #:					
Project #:		Project Owner:					
Project Name: <u>WP Byrd #2</u>		City:					
Project Location: <u>WP Byrd #2</u>		State:					
Sample Name: <u>Left Burn</u>		Phone #:					
FOR LAB USE ONLY		Fax #:					

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	BTEX	EXT. TPH	CL-
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :							
<u>H210446</u>	<u>SP107'</u>			<input checked="" type="checkbox"/>								<u>8/23/21</u>	<u>0835</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<u>2 SP207'</u>			<input checked="" type="checkbox"/>								<u>8/23/21</u>	<u>0900</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<u>3 SP207'</u>			<input checked="" type="checkbox"/>								<u>8/23/21</u>	<u>1024</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<u>4 SP209'</u>			<input checked="" type="checkbox"/>								<u>8/23/21</u>	<u>1228</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<u>5 H1</u>			<input checked="" type="checkbox"/>								<u>8/23/21</u>	<u>0758</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Relinquished By: <u>Jeff Brown</u>	Date: <u>8/23/21</u>	Received By: <u>Shirley Black</u>	Date: <u>8/23/21</u>
Relinquished By:	Date:	Received By:	Date:

Delivered By: (Circle One)	Observed Temp. °C	Sample Condition	CHECKED BY: (Initials)	Turnaround Time:	Standard	Bacteria (only)	Sample Condition
Sampler - UPS - Bus - Other:	Corrected Temp. °C	Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	<u>JD.</u>		<input checked="" type="checkbox"/> Rush	<input checked="" type="checkbox"/>	Observed Temp. °C
		Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>					Corrected Temp. °C

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

REMARKS:

All Results are emailed. Please provide Email address:

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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

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February 25, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WP BYRD #2

Enclosed are the results of analyses for samples received by the laboratory on 02/24/21 14:32.

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 fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

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: 02/24/2021  
 Reported: 02/25/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/24/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 10' (H210453-01)**

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	02/24/2021	ND	2.17	108	2.00	5.57	
Toluene*	<0.050	0.050	02/24/2021	ND	2.14	107	2.00	5.94	
Ethylbenzene*	<0.050	0.050	02/24/2021	ND	2.08	104	2.00	6.13	
Total Xylenes*	<0.150	0.150	02/24/2021	ND	6.06	101	6.00	5.53	
Total BTEX	<0.300	0.300	02/24/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 73.3-129

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	02/24/2021	ND	209	104	200	3.29	
<b>DRO &gt;C10-C28*</b>	<b>341</b>	10.0	02/24/2021	ND	215	107	200	2.37	
<b>EXT DRO &gt;C28-C36</b>	<b>89.5</b>	10.0	02/24/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-144

Surrogate: 1-Chlorooctadecane 119 % 42.2-156

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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: 02/24/2021  
 Reported: 02/25/2021  
 Project Name: WP BYRD #2  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/24/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 10' (H210453-02)**

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	02/24/2021	ND	2.17	108	2.00	5.57		
Toluene*	<0.050	0.050	02/24/2021	ND	2.14	107	2.00	5.94		
Ethylbenzene*	<0.050	0.050	02/24/2021	ND	2.08	104	2.00	6.13		
Total Xylenes*	<0.150	0.150	02/24/2021	ND	6.06	101	6.00	5.53		
Total BTX	<0.300	0.300	02/24/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

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	02/24/2021	ND	209	104	200	3.29	
DRO >C10-C28*	731	10.0	02/24/2021	ND	215	107	200	2.37	
EXT DRO >C28-C36	208	10.0	02/24/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-144

Surrogate: 1-Chlorooctadecane 116 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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



# RILL TO

Page 5 of 5

**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 19291

CONDITIONS

Operator:  APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID:  873
	Action Number:  19291
	Action Type:  [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
ceads	If groundwater is encountered during delineation, a monitor well will be installed and groundwater sample collected for analysis.	6/29/2021
ceads	Additional remediation will be required to meet Table I Closure Criteria in 19.15.29.12 NMAC fot this incident.	6/29/2021