



303 Veterans Airpark Lane Midland, TX 79705

## **Closure Report**

July 13, 2021

Re: J R Phillips #006

Case # nAPP21111342465

On 4/16/2021 a release occurred due to well pressure leading to the release of wellbore fluids to the surface. The release (GPS: 32.60748, -103.30545) is located south of Monument, NM in unit letter B section 1 township 20S range 36E. A groundwater survey was conducted utilizing NMOSE wells of record. The nearest well suggest that groundwater beneath the release is 38 feet.

On 5/4/2021 area was delineated to a depth of 1 foot utilizing a hand auger. All samples were collected and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. On 5/7/2021 sample point 1 (SP1) was taken to a depth of 2 feet utilizing a hand auger. SP1 was collected and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX.

On 6/21/2021 the release area was excavated to a depth of 2 feet. On 6/23/2021 final 5-point bottom and wall samples were collected not to exceed 200 square feet. All samples collected were submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory results showed sample B3 was above table one standards with the remainder of the samples showing to be below table one standards for releases 50 feet or less to groundwater. On 7/2/2021 the area was excavated to a depth of 2 ½ feet. All samples were collected and taken to a commercial laboratory for analysis of TPH and BTEX. Laboratory results were below table one standards for releases 50 feet or less to groundwater. All excavated material (250 yards) was hauled to an OCD approved disposal facility. The excavation was backfilled with clean imported caliche and the pad was restored.

Apache Corporation has completed remediation to below table one standards and respectfully request event # nAPP21111342465 be closed.

Enclosed: C-141, Maps, Sample Data, Laboratory Results, Photos, and Field Data.

Submitted by;

A handwritten signature in black ink that reads "Jeff Broom".

**Environmental Technician**

jeffrey.broom@apachecorp.com

**Cell# 432-448-5789**

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

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Apache Corporation	OGRID 873
Contact Name Larry Baker	Contact Telephone 432-631-6982
Contact email larry.baker@apachecorp.com	Incident # (assigned by OCD)
Contact mailing address 303 Veterans Airpark Lane Midland TX 79705	

Location of Release Source

Latitude 32.60748 Longitude -103.30545  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name JR. Phillips # 6	Site Type Oil Well
Date Release Discovered 4/16/2021	API# (if applicable) 30-025-04135

Unit Letter	Section	Township	Range	County
B	1	20S	36E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: James R Byrd )

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 40 barrels	Volume Recovered (bbls) 35 barrels
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 5 barrels	Volume Recovered (bbls) 2 barrels
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release A pulling unit crew prepared a well to and ESP removal when they encountered un-expected well pressure leading to the release of wellbore fluids to surface.



### Volume Calculation

524.79 cubic feet of soil contamination X 7.48 gallons per cubic foot = 3925 gallons/42 gallons to a barrel= 93.46 barrels X .05 soil porosity= 4.67 + 37 recovered = 41.67 barrels + 4 barrels of over spray = 45.67 barrels lost



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>38'</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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input 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 1/2-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

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Jeffrey Broom

Title: Environmental Technician III

Signature: 

Date: 7/13/2021

Email: Jeffrey.Broom@apachecorp.com

Telephone: 432.448.5789

**OCD Only**

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

Date: \_\_\_\_\_

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jeffrey Broom

Title: Environmental Technician III

Signature: 

Date: 7/13/2021

Email: Jeffrey.Broom@apachecorp.com


Telephone: 432.448.5789

**OCD Only**

Received by: Chad Hensley

Date: 08/19/2021

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:  Date: 08/19/2021

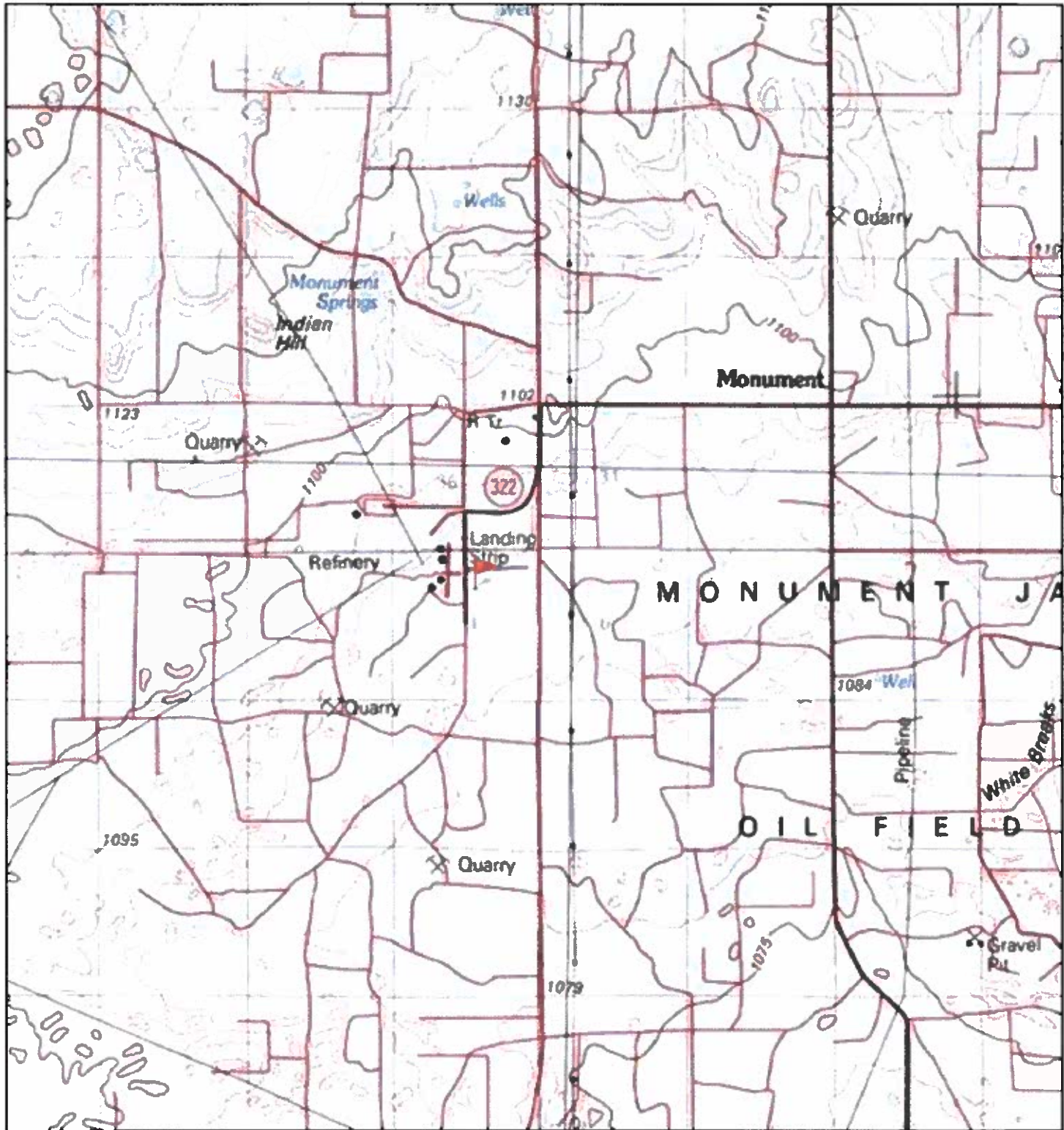
Printed Name: Chad Hensley

Title: Environmental Specialist Advanced

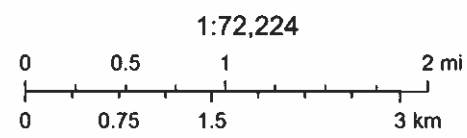








July 13, 2021



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## Delineation Samples

Sample Date	Sample ID	Depth	Chloride Field	Chloride Lab	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
5/4/2021	SP1 @ Surface	S	457	448	<0.500	3.05	6.46	107	116	3,630	23,600	3,470	32.6075280 -103.305440
5/4/2021	SP1 @ 1'	1'	215	16	<0.050	<0.050	<0.050	0.225	<0.300	<10.0	165	50.7	
5/7/2021	SP1 @ 2'	2'	N/A	N/A	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	67.6	<10.0	
5/4/2021	SP2 @ Surface	S	163	<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	18	<10.0	32.6073405 -103.3053463
5/4/2021	SP2 @ 1'	1'	53	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	74.9	<10.0	
5/4/2021	SP3 @ Surface	S	80	16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	36.2	<10.0	32.6073159 -103.3055354
5/4/2021	SP3 @ 1'	1'	26	32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	14.7	<10.0	

## Remediation Samples

Sample Date	Sample ID	Depth	Chloride Field	Chloride Lab	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
6/23/2021	W1	2'	172	<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
6/23/2021	W2	2'	88	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
7/2/2021	W3	2.5'	N/A	N/A	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
7/2/2021	W4	2.5'	N/A	N/A	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
7/2/2021	W5	2.5'	N/A	N/A	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
7/2/2021	W6	2.5'	N/A	N/A	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
6/23/2021	B1 @ 2'	2'	115	<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	32.4	<10.0	
6/23/2021	B2 @ 2'	2'	147	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	68.3	<10.0	
6/23/2021	B3 @ 2'	2'	118	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	138	16.7	
7/2/2021	B3 @ 2.5'	2.5'	N/A	N/A	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
6/23/2021	B4 @ 2'	2'	119	32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	95.4	<10.0	
6/23/2021	B5 @ 2'	2'	89	16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	37.1	<10.0	
6/23/2021	B6 @ 2'	2'	297	176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
6/23/2021	B7 @ 2'	2'	203	128	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	31.1	<10.0	
6/23/2021	B8 @ 2'	2'	238	96	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
6/23/2021	B9 @ 2'	2'	149	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
6/23/2021	B10 @ 2'	2'	149	96	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	28.2	<10.0	
6/23/2021	B11 @ 2'	2'	205	96	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	





SP1

SP2

SP3

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

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May 12, 2021

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: J R PHILLIPS #6

Enclosed are the results of analyses for samples received by the laboratory on 05/07/21 15:35.

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, 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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 05/07/2021  
 Reported: 05/12/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 05/07/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 2' (H211184-01)**

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	05/10/2021	ND	2.07	104	2.00	1.52	
Toluene*	<0.050	0.050	05/10/2021	ND	2.02	101	2.00	0.192	
Ethylbenzene*	<0.050	0.050	05/10/2021	ND	1.97	98.3	2.00	1.17	
Total Xylenes*	<0.150	0.150	05/10/2021	ND	5.89	98.2	6.00	0.780	
Total BTEX	<0.300	0.300	05/10/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 69.9-140

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	05/10/2021	ND	207	103	200	0.414	
<b>DRO &gt;C10-C28*</b>	<b>67.6</b>	10.0	05/10/2021	ND	222	111	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	05/10/2021	ND					

Surrogate: 1-Chlorooctane 89.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 93.1 % 38.9-142

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

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Cardinal Laboratories

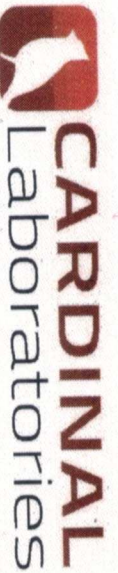
\*=Accredited Analyte

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

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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</u>		P.O. #:		BILL TO												ANALYSIS REQUEST											
Project Manager: <u>Jeff Brown</u>		Company:																									
Address:		Attn:																									
City: <u>Hobbs</u>		State: <u>NM</u>		Zip: <u>88240</u>																							
Phone #:		Fax #:		Address:																							
Project #:		Project Owner:		City:																							
Project Name:		State:		Zip:																							
Project Location: <u>DR Phillips Hq</u>		Phone #:		Fax #:																							
Sampler Name:		PRESERV.		SAMPLING																							
FOR LAB USE ONLY																											
Lab I.D.		Sample I.D.																									
<u>H211184</u>		<u>SP1 @ 2'</u>																									
		(G)RAB (R) (C)OMP.																									
		# CONTAINERS																									
		GROUNDWATER																									
		WASTEWATER																									
		SOIL																									
		OIL																									
		SLUDGE																									
		OTHER:																									
		ACID/BASE:																									
		(ICE) COOL																									
		OTHER:																									
		DATE		TIME																							
		<u>5/7</u>		<u>1:48</u>																							
		<u>X</u>		<u>EXT TPH</u>																							
		<u>X</u>		<u>BTX</u>																							

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

Relinquished By: Lee Dussault Date: 5/8/21 Time: 1535 Received By: Amara delgado

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_

Delivered By: (Circle One) Observed Temp. °C 4.3 Sample Condition Cool ☒ Intact ☐ Yes ☐ No ☐ No

Sampler - UPS - Bus - Other: Corrected Temp. °C \_\_\_\_\_ CHECKED BY: (Initials) Y.C.

Turnaround Time: \_\_\_\_\_ Standard ☒ Rush ☐ Bacteria (only) Sample Condition Cool ☐ Intact ☐ Yes ☐ No ☐ No Observed Temp. °C \_\_\_\_\_ Corrected Temp. °C \_\_\_\_\_

Thermometer ID #113 Correction Factor None

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

All Results are emailed: Please provide Email address: \_\_\_\_\_

REMARKS: \_\_\_\_\_

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



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

May 06, 2021

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: J R PHILLIPS #6

Enclosed are the results of analyses for samples received by the laboratory on 05/04/21 16:38.

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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received:	05/04/2021	Sampling Date:	05/04/2021
Reported:	05/06/2021	Sampling Type:	Soil
Project Name:	J R PHILLIPS #6	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MONUMENT, NM		

**Sample ID: SP 1 @ SURFACE (H211139-01)**

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	05/06/2021	ND	2.00	100	2.00	3.30	GC-NC
Toluene*	3.05	0.500	05/06/2021	ND	2.09	104	2.00	2.23	GC-NC1
Ethylbenzene*	6.46	0.500	05/06/2021	ND	2.06	103	2.00	2.06	
Total Xylenes*	107	1.50	05/06/2021	ND	5.95	99.2	6.00	0.827	
Total BTX	116	3.00	05/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 236 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	05/06/2021	ND	432	108	400	7.69	

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*	3630	100	05/05/2021	ND	185	92.3	200	0.472	
DRO >C10-C28*	23600	100	05/05/2021	ND	188	93.9	200	0.848	
EXT DRO >C28-C36	3470	100	05/05/2021	ND					

Surrogate: 1-Chlorooctane 379 % 44.3-133

Surrogate: 1-Chlorooctadecane 587 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 05/04/2021  
 Reported: 05/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 05/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 1' (H211139-02)**

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	05/05/2021	ND	2.00	100	2.00	3.30	
Toluene*	<0.050	0.050	05/05/2021	ND	2.09	104	2.00	2.23	
Ethylbenzene*	<0.050	0.050	05/05/2021	ND	2.06	103	2.00	2.06	
<b>Total Xylenes*</b>	<b>0.225</b>	0.150	05/05/2021	ND	5.95	99.2	6.00	0.827	
Total BTEX	<0.300	0.300	05/05/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

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	05/06/2021	ND	432	108	400	7.69	

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	05/05/2021	ND	185	92.3	200	0.472	
<b>DRO &gt;C10-C28*</b>	<b>165</b>	10.0	05/05/2021	ND	188	93.9	200	0.848	
<b>EXT DRO &gt;C28-C36</b>	<b>50.7</b>	10.0	05/05/2021	ND					

Surrogate: 1-Chlorooctane 95.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 109 % 38.9-142

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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 05/04/2021  
 Reported: 05/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 05/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 2 @ SURFACE (H211139-03)**

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	05/06/2021	ND	2.00	100	2.00	3.30		
Toluene*	<0.050	0.050	05/06/2021	ND	2.09	104	2.00	2.23		
Ethylbenzene*	<0.050	0.050	05/06/2021	ND	2.06	103	2.00	2.06		
Total Xylenes*	<0.150	0.150	05/06/2021	ND	5.95	99.2	6.00	0.827		
Total BTX	<0.300	0.300	05/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 69.9-140

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	05/06/2021	ND	432	108	400	7.69		

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	05/05/2021	ND	185	92.3	200	0.472	
<b>DRO &gt;C10-C28*</b>	<b>18.0</b>	10.0	05/05/2021	ND	188	93.9	200	0.848	
EXT DRO >C28-C36	<10.0	10.0	05/05/2021	ND					

Surrogate: 1-Chlorooctane 93.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 97.9 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 05/04/2021  
 Reported: 05/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 05/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 2 @ 1' (H211139-04)**

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	05/06/2021	ND	2.00	100	2.00	3.30	
Toluene*	<0.050	0.050	05/06/2021	ND	2.09	104	2.00	2.23	
Ethylbenzene*	<0.050	0.050	05/06/2021	ND	2.06	103	2.00	2.06	
Total Xylenes*	<0.150	0.150	05/06/2021	ND	5.95	99.2	6.00	0.827	
Total BTX	<0.300	0.300	05/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 69.9-140

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	05/06/2021	ND	432	108	400	7.69	

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	05/05/2021	ND	185	92.3	200	0.472	
DRO >C10-C28*	74.9	10.0	05/05/2021	ND	188	93.9	200	0.848	
EXT DRO >C28-C36	<10.0	10.0	05/05/2021	ND					

Surrogate: 1-Chlorooctane 86.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 95.9 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 05/04/2021  
 Reported: 05/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 05/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 3 @ SURFACE (H211139-05)**

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	05/06/2021	ND	2.00	100	2.00	3.30	
Toluene*	<0.050	0.050	05/06/2021	ND	2.09	104	2.00	2.23	
Ethylbenzene*	<0.050	0.050	05/06/2021	ND	2.06	103	2.00	2.06	
Total Xylenes*	<0.150	0.150	05/06/2021	ND	5.95	99.2	6.00	0.827	
Total BTX	<0.300	0.300	05/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 69.9-140

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	05/06/2021	ND	432	108	400	7.69	

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	05/05/2021	ND	185	92.3	200	0.472	
DRO >C10-C28*	36.2	10.0	05/05/2021	ND	188	93.9	200	0.848	
EXT DRO >C28-C36	<10.0	10.0	05/05/2021	ND					

Surrogate: 1-Chlorooctane 90.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 96.2 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 05/04/2021  
 Reported: 05/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 05/04/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 3 @ 1' (H211139-06)**

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	05/06/2021	ND	2.00	100	2.00	3.30		
Toluene*	<0.050	0.050	05/06/2021	ND	2.09	104	2.00	2.23		
Ethylbenzene*	<0.050	0.050	05/06/2021	ND	2.06	103	2.00	2.06		
Total Xylenes*	<0.150	0.150	05/06/2021	ND	5.95	99.2	6.00	0.827		
Total BTX	<0.300	0.300	05/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

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	05/06/2021	ND	432	108	400	7.69		

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	05/05/2021	ND	185	92.3	200	0.472	
DRO >C10-C28*	14.7	10.0	05/05/2021	ND	188	93.9	200	0.848	
EXT DRO >C28-C36	<10.0	10.0	05/05/2021	ND					

Surrogate: 1-Chlorooctane 85.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 91.8 % 38.9-142

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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

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### 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.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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





**BILL TO**

## ANALYSIS REQUEST

[illegible]

**PLEASE NOTE:** Lawyers, Cardinals' lawyers and clients exclusive remedy for any claim arising under this contract, 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.

† Cardinal cannot accept verbal changes. Please email changes to [celeyn.keene@cardinallabsnm.com](mailto:celeyn.keene@cardinallabsnm.com)



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

---

June 28, 2021

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: J R PHILLIPS #6

Enclosed are the results of analyses for samples received by the laboratory on 06/23/21 15:14.

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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 1 (H211635-01)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51	
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29	
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14	
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68	
Total BTX	<0.300	0.300	06/25/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	<10.0	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 82.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 88.4 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 2 (H211635-02)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51	
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29	
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14	
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68	
Total BTX	<0.300	0.300	06/25/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	<10.0	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 80.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 89.4 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 1 @ 2' (H211635-03)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	32.4	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 73.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 81.1 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 2 @ 2' (H211635-04)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>68.3</b>	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 70.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 80.6 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 3 @ 2' (H211635-05)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTEx	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 69.9-140

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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	138	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	16.7	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 77.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 90.0 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 4 @ 2' (H211635-06)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	95.4	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 77.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 90.0 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 5 @ 2' (H211635-07)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	37.1	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 83.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 90.2 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 6 @ 2' (H211635-08)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	<10.0	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 78.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 84.8 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 7 @ 2' (H211635-09)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	31.1	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 71.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 81.8 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 8 @ 2' (H211635-10)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	<10.0	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 79.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 87.2 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 9 @ 2' (H211635-11)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51		
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29		
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14		
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68		
Total BTX	<0.300	0.300	06/25/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 69.9-140

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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	<10.0	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 73.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 82.3 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 10 @ 2' (H211635-12)**

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	06/25/2021	ND	1.99	99.3	2.00	4.51	
Toluene*	<0.050	0.050	06/25/2021	ND	1.90	95.1	2.00	5.29	
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	1.83	91.7	2.00	4.14	
Total Xylenes*	<0.150	0.150	06/25/2021	ND	5.57	92.8	6.00	3.68	
Total BTX	<0.300	0.300	06/25/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-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	06/25/2021	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	06/25/2021	ND	201	101	200	1.20	
DRO >C10-C28*	28.2	10.0	06/25/2021	ND	214	107	200	0.552	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 79.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 92.1 % 38.9-142

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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  
 JEFFREY BROOM  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 06/23/2021  
 Reported: 06/28/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 06/23/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 11 @ 2' (H211635-13)**

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	06/25/2021	ND	2.08	104	2.00	0.949	
Toluene*	<0.050	0.050	06/25/2021	ND	2.14	107	2.00	2.17	
Ethylbenzene*	<0.050	0.050	06/25/2021	ND	2.05	103	2.00	1.65	
Total Xylenes*	<0.150	0.150	06/25/2021	ND	6.13	102	6.00	1.92	
Total BTX	<0.300	0.300	06/25/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 69.9-140

Chloride, SM4500CI-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	06/25/2021	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/25/2021	ND	227	113	200	1.50	
DRO >C10-C28*	<10.0	10.0	06/25/2021	ND	237	119	200	0.495	
EXT DRO >C28-C36	<10.0	10.0	06/25/2021	ND					

Surrogate: 1-Chlorooctane 74.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.1 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

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

---

Celey D. Keene, Lab Director/Quality Manager



## BILL TO

## ANALYSIS REQUEST

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	
PERSONNEL	SAMPLING

DATE	6/23/21
TIME	
OTHER :	
ACID/BASE:	
ICE / COOL	
OTHER :	

Contract or tort, shall be limited to the amount paid by the client and received by Cardinal within 30 days after completion of the project, less any loss of use, or loss of profits incurred by client, its subsidiaries, or affiliates. No fee shall be payable by client, its subsidiaries, or affiliates, based upon any of the above stated reasons or other causes.

Verbal R	REMARK	Tumaron	Checked BY: (Initials) T.O.	Division es No
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101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Alaska Corporation</u>		P.O. #:		<b>BILL TO</b>													
Project Manager: <u>Blair Baker</u>		Company:		<b>ANALYSIS REQUEST</b>													
Address:		City:		State:		Zip:		Attn:		Address:		City:		State:		Zip:	
Phone #:		Fax #:		Project Owner:		City:		State:		Zip:		Phone #:		Fax #:			
Project #: <u>JK Phillips #6</u>		Project Location: <u>JK Phillips #6</u>		Sample Name: <u>lett grow</u>		FOR LAB USE ONLY											
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE	
11 B9 @ 2'		C		C		C		✓		✓		✓		✓		✓	
12 B10 @ 2'		C		C		C		✓		✓		✓		✓		✓	
13 B11 @ 2'		C		C		C		✓		✓		✓		✓		✓	
DATE: 6/21/21		DATE: 6/23/21		DATE: 6/23/21		DATE: 6/23/21		DATE: 6/23/21		DATE: 6/23/21		DATE: 6/23/21		DATE: 6/23/21		DATE: 6/23/21	
TIME: 3:14		TIME: 3:14		TIME: 3:14		TIME: 3:14		TIME: 3:14		TIME: 3:14		TIME: 3:14		TIME: 3:14		TIME: 3:14	
Relinquished By: <u>Jeff Ryan</u>		Received By: <u>Lawrence Clark</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:		Standard: <input checked="" type="checkbox"/> Rush		Bacteria (only) Sample Condition: <input checked="" type="checkbox"/> Cool Intact		Observed Temp. °C		Corrected Temp. °C			
Relinquished By: <u>Jeff Ryan</u>		Received By: <u>Lawrence Clark</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:		Standard: <input checked="" type="checkbox"/> Rush		Bacteria (only) Sample Condition: <input checked="" type="checkbox"/> Cool Intact		Observed Temp. °C		Corrected Temp. °C			
Delivered By: (Circle One)		Observed Temp. °C		Sample Condition: <input checked="" type="checkbox"/> Cool Intact		CHECKED BY: (Initials)		Turnaround Time:		Thermometer ID #113		Standard: <input checked="" type="checkbox"/> Rush		Bacteria (only) Sample Condition: <input checked="" type="checkbox"/> Cool Intact		Observed Temp. °C	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Sample Condition: <input type="checkbox"/> Cool Intact		CHECKED BY: (Initials)		Turnaround Time:		Thermometer ID #113		Standard: <input type="checkbox"/> Rush		Bacteria (only) Sample Condition: <input type="checkbox"/> Cool Intact		Observed Temp. °C	

† 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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July 06, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: J R PHILLIPS #6

Enclosed are the results of analyses for samples received by the laboratory on 07/02/21 10:50.

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:	07/02/2021	Sampling Date:	07/02/2021
Reported:	07/06/2021	Sampling Type:	Soil
Project Name:	J R PHILLIPS #6	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MONUMENT, NM		

**Sample ID: B 3 @ 2.5' (H211721-01)**

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	07/02/2021	ND	2.04	102	2.00	1.06	
Toluene*	<0.050	0.050	07/02/2021	ND	2.15	108	2.00	3.56	
Ethylbenzene*	<0.050	0.050	07/02/2021	ND	2.08	104	2.00	3.14	
Total Xylenes*	<0.150	0.150	07/02/2021	ND	6.12	102	6.00	4.40	
Total BTEX	<0.300	0.300	07/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

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	07/02/2021	ND	247	123	200	7.00	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	225	113	200	3.49	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 74.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 75.8 % 38.9-142

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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: 07/02/2021  
 Reported: 07/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 07/02/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 3 (H211721-02)**

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	07/02/2021	ND	2.04	102	2.00	1.06	
Toluene*	<0.050	0.050	07/02/2021	ND	2.15	108	2.00	3.56	
Ethylbenzene*	<0.050	0.050	07/02/2021	ND	2.08	104	2.00	3.14	
Total Xylenes*	<0.150	0.150	07/02/2021	ND	6.12	102	6.00	4.40	
Total BTEX	<0.300	0.300	07/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/02/2021	ND	247	123	200	7.00	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	225	113	200	3.49	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 82.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 84.7 % 38.9-142

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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: 07/02/2021  
 Reported: 07/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 07/02/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 4 (H211721-03)**

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	07/02/2021	ND	2.04	102	2.00	1.06	
Toluene*	<0.050	0.050	07/02/2021	ND	2.15	108	2.00	3.56	
Ethylbenzene*	<0.050	0.050	07/02/2021	ND	2.08	104	2.00	3.14	
Total Xylenes*	<0.150	0.150	07/02/2021	ND	6.12	102	6.00	4.40	
Total BTEX	<0.300	0.300	07/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 69.9-140

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	07/02/2021	ND	247	123	200	7.00	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	225	113	200	3.49	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 80.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 82.7 % 38.9-142

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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: 07/02/2021  
 Reported: 07/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 07/02/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 5 (H211721-04)**

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	07/02/2021	ND	2.04	102	2.00	1.06	
Toluene*	<0.050	0.050	07/02/2021	ND	2.15	108	2.00	3.56	
Ethylbenzene*	<0.050	0.050	07/02/2021	ND	2.08	104	2.00	3.14	
Total Xylenes*	<0.150	0.150	07/02/2021	ND	6.12	102	6.00	4.40	
Total BTEX	<0.300	0.300	07/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 69.9-140

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	07/02/2021	ND	247	123	200	7.00	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	225	113	200	3.49	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 81.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.4 % 38.9-142

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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: 07/02/2021  
 Reported: 07/06/2021  
 Project Name: J R PHILLIPS #6  
 Project Number: NONE GIVEN  
 Project Location: MONUMENT, NM

Sampling Date: 07/02/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 6 (H211721-05)**

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	07/02/2021	ND	2.04	102	2.00	1.06	
Toluene*	<0.050	0.050	07/02/2021	ND	2.15	108	2.00	3.56	
Ethylbenzene*	<0.050	0.050	07/02/2021	ND	2.08	104	2.00	3.14	
Total Xylenes*	<0.150	0.150	07/02/2021	ND	6.12	102	6.00	4.40	
Total BTEX	<0.300	0.300	07/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

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	07/02/2021	ND	247	123	200	7.00	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	225	113	200	3.49	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 81.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager

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### Notes and Definitions

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.
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".

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Celey D. Keene, Lab Director/Quality Manager





**CARDINAL**  
Laboratories

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

Apache water. 10 after 11.01.21

w5  
11.0/30.3 .03 2.75 = 82 ✓

w6  
11.1/30.1 .05 2.71 = 135 ✓

w7  
11.0/30.3 .07 2.71 = 189 ✓

---

May 4 2021 JR Phillips #6

SP1 surface 32.6075280 -103.305440

11.2/30.2 .17 2.69 = 457 ✓

SP1 @ 1'

11.2/30.3 .08 2.70 = 215 ✓

SP2 surface 32.6073405 -103.3053463

11.0/30.0 .06 2.72 = 143 ✓

SP2 @ 1'

11.2/30.0 .02 2.67 = 53 ✓

SP3 surface 32.6073159 -103.3055354

11.3/30.3 .03 2.68 = 80 ✓

SP3 @ 1'

11.2/30.1 .01 2.68 = 26 ✓



JR Phillips #6      6/23/21      Final Sample

W1 - 32.607607, -103.305376

$$10.4/30.0 = 2.88 = .06 = 172 \checkmark$$

W2 - 32.607567, -103.305415

$$10.2/30.1 = 2.95 = .03 = 88 \checkmark$$

B1 - 32.607582, -103.305562

$$10.4/30.1 = 2.89 = .04 = 115 \checkmark$$

B2 - 32.607573, -103.305518

$$10.2/30.1 = 2.95 = .05 = 147 \checkmark$$

B3 - 32.607553, -103.305469

$$10.2/30.2 = 2.96 = .04 = 118 \checkmark$$

B4 - 32.607551, -103.305423

$$10.1/30.1 = 2.98 = .04 = 119 \checkmark$$

B5 - 32.607526, -103.305417

$$10.1/30.0 = 2.97 = .03 = 89 \checkmark$$

B6 - 32.607525, -103.305374

$$10.1/30.7 = 2.98 = .10 = 297 \checkmark$$

B7 - 32.607548, -103.305382

$$10.3/30.0 = 2.91 = .07 = 203 \checkmark$$

B8 - 32.607556, -103.305355

$$10.1/30.1 = 2.98 = .08 = 238 \checkmark$$

B9 - 32.607586, -103.305345

$$10.0/30.0 = 3 = .05 = 149 \checkmark$$

B10 - 32.607611, -103.305334

$$10.0/30.0 = 3 = .05 = 149 \checkmark$$

B11 - 32.607634, -103.305329

$$10.3/30.3 = 2.94 = .07 = 205 \checkmark$$

GPS Coordinates      SAMPLES TAKEN ON      JR Phillips #006

W3 - 32.607551, -103.305451

7/2/21

W4 - 32.607540, -103.305474

W5 - 32.607561, -103.305489

W6 - 32.607571, -103.305466

B3 @ 2 1/2' - 32.607553, -103.305469









**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 36692

CONDITIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 36692
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	8/19/2021