



2350 W Marland Blvd Hobbs, NM 88240

## **Closure Report**

*January 30, 2020*

Re: WBDU 91  
API# 30-025-20311  
Case # NRM1936553967

On October 31, 2019 a release occurred due to freezing temperatures caused a line to plug resulting in the loss of fluid. An initial C-141 was submitted and approved by NMOCD on December 31, 2019. The release (GPS Coordinates: 32.4725342, -103.1647568) is located north of Eunice, New Mexico in unit letter O section 16 township 21S range 37E. A groundwater survey was conducted utilizing the USGS and NMOSE wells of record. Analysis of the data points and elevation associated with the wells and release area elevation suggest that groundwater is 61 feet below ground surface.

The release area was excavated to depths of 6 inches to 1 foot. On December 9 and 10, 2019 final 5 point bottom and wall composite samples were collected not to exceed 200 square feet. All samples were submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory results showed sample points B8, B9, B10 and W6 had TPH levels above table one standards for releases 51-100 feet to groundwater. On December 13, 2019 the sample areas for B8, B9, and B10 were further excavated to a depth of 1 foot and W6 was extend laterally and resampled not to exceed 200 square feet. All samples were submitted to a commercial laboratory for analysis of TPH and BTEX. Laboratory results were all below table one standards for releases 51-100 feet to groundwater. All excavated soil (84 cubic yards) was hauled to a NMOCD approved facility. The pad area was backfilled with clean imported caliche and the pasture area was backfilled with clean imported blow sand and contoured to the surrounding area. The pasture area will be reseeded with NMSLO approval of the Noxious Weed and Revegetation Plan attached in the document.

Apache Corporation has completed remediation activities in accordance with table one standards and reclamation requirements for the pasture area. Apache Corporation respectfully request that case # NRM1936553967 be closed.

*Enclosed: C-141, Groundwater Data, Maps, Sample Data, Laboratory Analysis, Photo, and Noxious and Revegetation Plan*

Submitted by;

*Bruce Baker*

**Environmental Technician**

*larry.baker@apachecorp.com*

**Cell# 432-631-6982**

**Off# 575-393-7106**

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: Bruce Baker	Contact Telephone: (432) 631-6982
Contact email: Larry.Baker@apachecorp.com	Incident # (assigned by OCD)
Contact Mailing Address: 2350 W. Marland Blvd, Hobbs, NM 88240	

### Location of Release Source

Latitude: W 32.4725342 Longitude: N -103.1647568

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: WBDU 91	Site Type: Well
Date Release Discovered: October 31, 2019	API # 30-025-20311

Unit Letter	Section	Township	Range	County
O	16	21S	37E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: Not Applicable)

### 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 (.50 Barrel)	Volume Recovered (0 Barrels)
<input checked="" type="checkbox"/> Produced Water	Volume Released (10.5 Barrels)	Volume Recovered (0 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

Freezing temperatures possibly caused a line to plug.

Form C-141

State of New Mexico  
Oil Conservation Division


Page 2

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Via email given to NM OCD on 10/30/2019 by Bruce Baker, Senior Environmental Technician, Apache Corporation	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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: <u>Jeff Broom</u>	Title: <u>Environmental Technician</u>
Signature: <u></u>	Date: <u>11/4/2019</u>
Email: <u>Jeffrey.Broom@apachecorp.com</u>	Telephone: <u>(432) 664-4677</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	

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>61</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 not 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.

<input checked="" type="checkbox"/>	Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
<input type="checkbox"/>	Field data
<input checked="" type="checkbox"/>	Data table of soil contaminant concentration data
<input checked="" type="checkbox"/>	Depth to water determination
<input checked="" type="checkbox"/>	Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
<input checked="" type="checkbox"/>	Boring or excavation logs
<input checked="" type="checkbox"/>	Photographs including date and GIS information
<input checked="" type="checkbox"/>	Topographic/Aerial maps
<input checked="" type="checkbox"/>	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: Bruce Baker Title: Environmental Tech. SR.

Signature: Bruce Baker Date: 1-30-20

email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

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

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Bruce Baker Title: Environmental Tech SR.  
Signature: Bruce Baker Date: 1-30-20  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

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

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:	Geographic Area:	
Groundwater	New Mexico	GO

Click to hideNews Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 322810103092001

Minimum number of levels = 1  
[Save file of selected sites](#) to local disk for future upload

USGS 322810103092001 21S.37E.15.33421

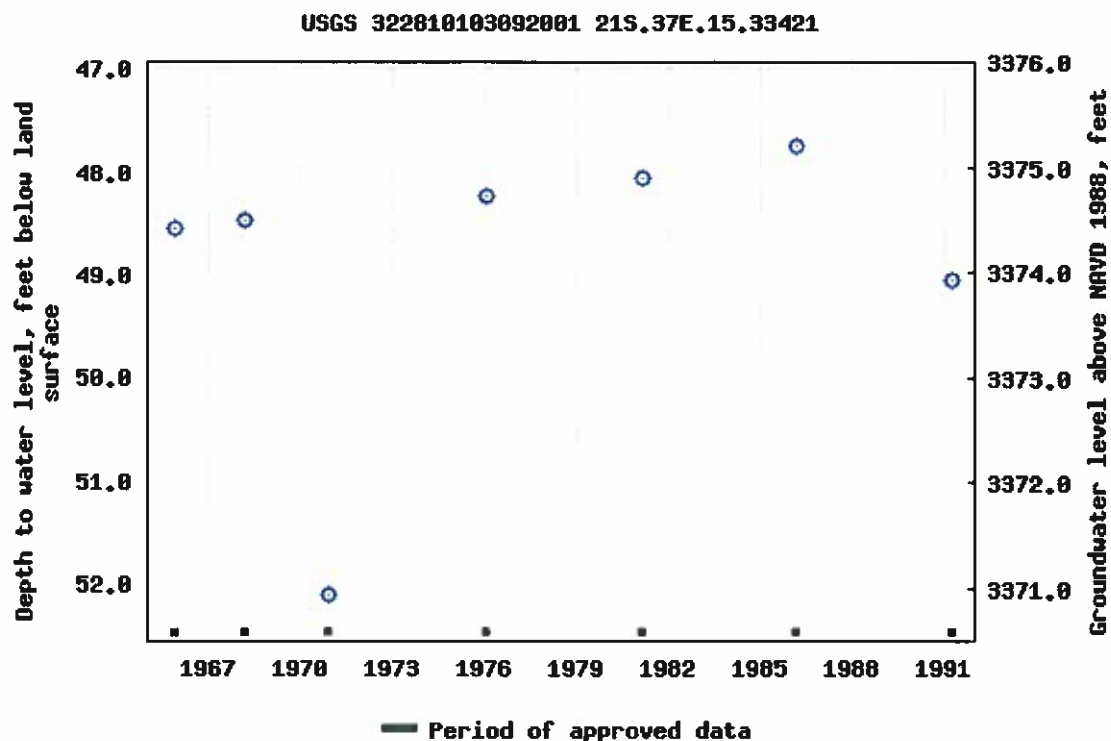
Available data for this site	Groundwater: Field measurements	GO
------------------------------	---------------------------------	----

Lea County, New Mexico  
Hydrologic Unit Code 13070007  
Latitude 32°28'10", Longitude 103°09'20" NAD27  
Land-surface elevation 3,423 feet above NAVD88  
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>





Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[Plug-Ins](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for New Mexico: Water Levels**

**URL: [https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?](https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?site_no=322810103092001&agency_c...)**



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2020-01-29 15:51:48 EST

0.64 0.51 nadww01



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

## National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:

Groundwater

Geographic Area:

New Mexico

GO

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

## Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 322814103102601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

## USGS 322814103102601 21S.37E.21.11121

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°28'14", Longitude 103°10'26" NAD27

Land-surface elevation 3,462 feet above NAVD88

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

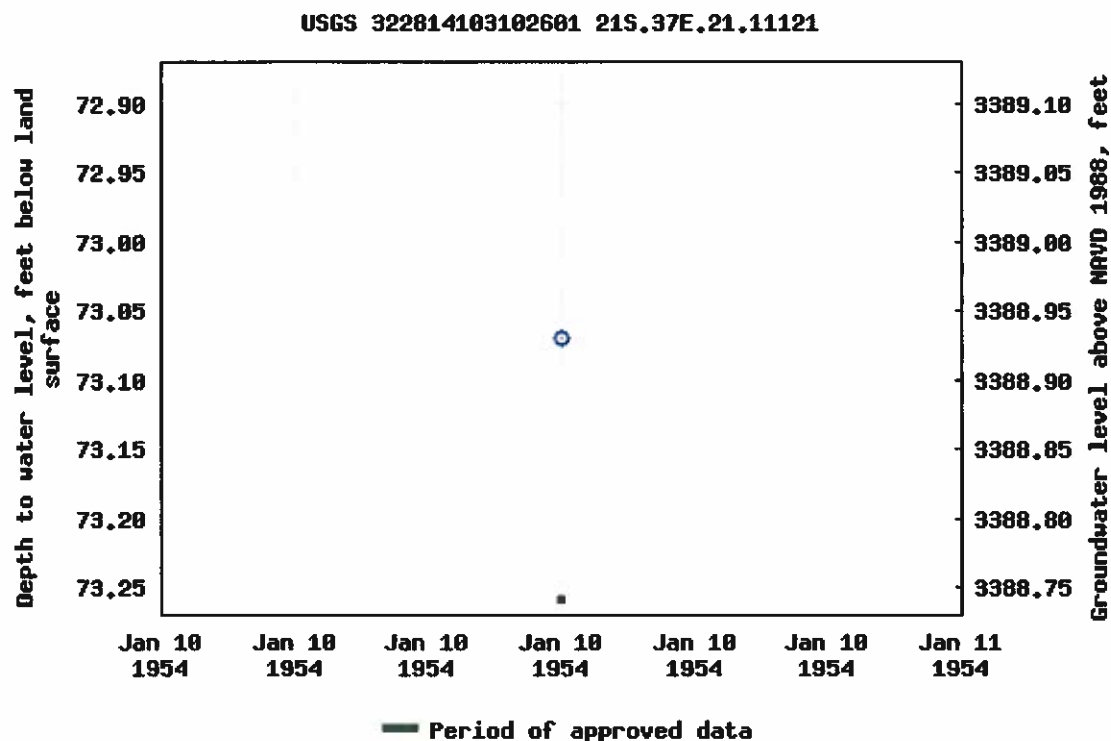
### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[Plug-Ins](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for New Mexico: Water Levels**

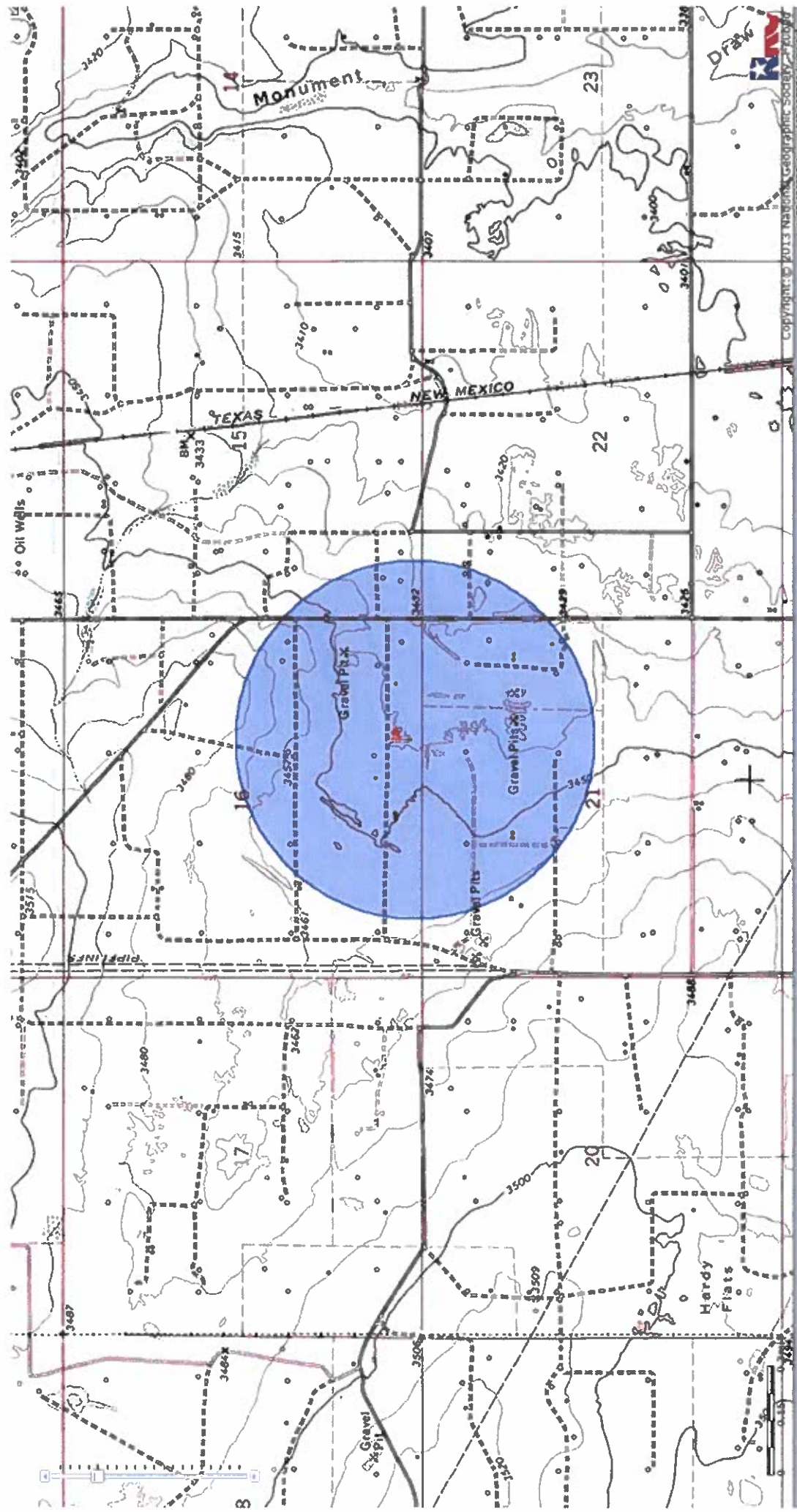
**URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>**



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2020-01-29 15:57:56 EST

0.54 0.48 nadww01



Copyright © 2013 National Geographic Society. All rights reserved. Lat: 32.480225, Long: -103.107759 (NAD83)

Sample Date	Sample ID	Depth	Chloride	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
Wall Composite Samples												
12/10/2019	W1		80	<0.050	0.12	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.4724240, - 103.1649490
12/10/2019	W2		336	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.4724037, - 103.1649366
12/10/2019	W3		16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.4724402, - 103.1649222
12/10/2019	W4		16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.4724577, - 103.1649742
12/10/2019	W5		288	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	117	15.9	32.4724885, - 103.1648528
12/10/2019	W6		256	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	1130	432	32.4725406, - 103.1648421
12/13/2019	W6			<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
12/10/2019	W7		32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.4724846, - 103.1648843
12/10/2019	W8		48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	173	80.4	32.4725242, - 103.1645812
12/10/2019	W9		32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.4725369, - 103.1646061
12/10/2019	W10		64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<11.8	<10.0	32.4724939, - 103.1646141

Bottom Composite Samples												
12/9/2019	B1	1'	368	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.4724718, - 103.1649507
12/9/2019	B2	6"	192	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.472531, - 103.1649906
12/9/2019	B3	6"	928	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	89.3	13.2	32.4725151, - 103.1648981
12/9/2019	B4	6"	240	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	218	28.3	32.4725389, - 103.1649102
12/9/2019	B5	6"	560	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	93.8	12.6	32.4725117, - 103.1648713
12/9/2019	B6	6"	272	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	387	44.9	32.4725346, - 103.1648679
12/9/2019	B7	6"	448	<0.050	<0.050	0.116	0.386	0.502	15.8	340	51.6	32.4725004, - 103.1648166
12/9/2019	B8	6"	336	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	1610	562	32.4725304, - 103.1648401
12/13/2019	B8	1'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
12/9/2019	B9	6"	816	<0.050	<0.050	0.083	0.315	0.398	25.8	3180	963	32.4725245, - 103.1647646
12/13/2019	B9	1'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
12/9/2019	B10	6"	896	<0.050	0.535	3.12	8.72	12.4	292	2460	435	32.4725001, - 103.1647482
12/13/2019	B10	1'		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
12/9/2019	B11	6"	912	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	288	57.8	32.4725041, - 103.1646694
12/9/2019	B12	6"	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	24.3	<10.0	32.4725205, - 103.1646694

Note: GPS points are taken at the middle composite sample













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

December 12, 2019

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #91

Enclosed are the results of analyses for samples received by the laboratory on 12/09/19 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/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,

Celely 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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B1 @ 1' 32.4724718 -103.1649507 (H904111-01)**

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	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.2 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 119 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/06/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B2 32.472531 -103.1649906 (H904111-02)**

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	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.4 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 113 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B3 32.4725151 -103.1648981 (H904111-03)**

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	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 97.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	928	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	89.3	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	13.2	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 107 % 41-142

Surrogate: 1-Chlorooctadecane 120 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B4 32.4725389 -103.1649102 (H904111-04)**

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	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 99.3 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	12/10/2019	ND	432	108	400	0.00	QM-07

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	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	218	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	28.3	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 124 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B5 32.4725117 -103.1648713 (H904111-05)**

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	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	93.8	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	12.6	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 118 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B6 32.4725346 -103.1648679 (H904111-06)**

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	387	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	44.9	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 103 % 41-142

Surrogate: 1-Chlorooctadecane 121 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B7 32.4725004 -103.1648166 (H904111-07)**

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	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	0.116	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	0.386	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTX	0.502	0.300	12/11/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	15.8	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	340	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	51.6	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 131 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B8 32.4725304 -103.1648401 (H904111-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 102 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	12/10/2019	ND	432	108	400	0.00	

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*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83		
DRO >C10-C28*	1610	10.0	12/11/2019	ND	180	90.1	200	12.2		
EXT DRO >C28-C36	562	10.0	12/11/2019	ND						

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 159 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B9 32.4725245 -103.1647646 (H904111-09)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	0.083	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	0.315	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	0.398	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	12/10/2019	ND	432	108	400	0.00	

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*	25.8	10.0	12/11/2019	ND	176	88.2	200	9.83		
DRO >C10-C28*	3180	10.0	12/11/2019	ND	180	90.1	200	12.2		
EXT DRO >C28-C36	963	10.0	12/11/2019	ND						

Surrogate: 1-Chlorooctane 114 % 41-142

Surrogate: 1-Chlorooctadecane 211 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B10 32.4725001 -103.1647482 (H904111-10)**

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	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	0.535	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	3.12	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	8.72	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTX	12.4	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 271 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	12/10/2019	ND	432	108	400	0.00	

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*	292	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	2460	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	435	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 163 % 41-142

Surrogate: 1-Chlorooctadecane 178 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B11 32.4725041 -103.1646694 (H904111-11)**

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	912	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	288	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	57.8	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 123 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/09/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/09/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: B12 @ 11 32.4725205 -103.1646694 (H904111-12)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.85	92.3	2.00	8.94	
Toluene*	<0.050	0.050	12/11/2019	ND	1.78	89.1	2.00	8.91	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.80	90.1	2.00	8.93	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.45	90.8	6.00	9.14	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/10/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	176	88.2	200	9.83	
DRO >C10-C28*	24.3	10.0	12/11/2019	ND	180	90.1	200	12.2	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 122 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO				ANALYSIS REQUEST														
Company Name: <u>Agrene</u>																		
Project Manager: <u>Jeffrey Broom</u>																		
Address: <u>City: Hobbs</u> State: <u>NM</u> Zip: <u>88240</u>																		
Phone #: _____ Fax #: _____																		
Project #: _____																		
Project Name: _____																		
Project Location: <u>WDDY #91</u>																		
Sampler Name: <u>Joe Quisenberry Jr.</u>																		
FOR LAB USE ONLY																		
Lab I.D.	Sample I.D.	(G) RAB OR (C) OVR	# CONTAINERS	MATRIX	PRESERV	SAMPLING												
				GROUNDWATER WASTEWATER SOIL SLUDGE OTHER	ACID/BASE (ICE) COOL OTHER	Time Date TIME												
1	8101 32.4724718	C	1	GROUNDWATER	ACID/BASE	3:52 12/19												
2	-103.1649507	C	1	GROUNDWATER	ACID/BASE	3:34												
3	32.472531	C	1	GROUNDWATER	ACID/BASE	3:36												
4	-103.1648981	C	1	GROUNDWATER	ACID/BASE	3:38												
5	32.4725117	C	1	GROUNDWATER	ACID/BASE	3:40												
	-103.1648713	C	1	GROUNDWATER	ACID/BASE													

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's liability 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 business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or resulting from 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: <u>Steve Land</u>	Date: <u>12/19/19</u>	Received By: <u>Joel Hanson</u>	Date: <u>12/30</u>	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #: _____
All Results are emailed. Please provide Email address: <u>Steve@Results</u>					
REMARKS: _____					
Delivered By: (Circle One)	Observed Temp. °C <u>4.5</u>	Sample Condition: <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact	Standard: <u>Rush</u>	Bacteria (only): <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact	Sample Condition: <input type="checkbox"/> Observed Temp. °C
Sampler: UPS - Bus - Other:	Corrected Temp. °C <u>4.9</u>	Cool: <input type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID #97	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Corrected Temp. °C

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



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO				ANALYSIS REQUEST												
P.O. #:																
Company:																
Attn:																
Address:																
City:																
State:																
Phone #:																
Fax #:																
Project Name:																
Project Location:																
Sampler Name:																
FOR LAB USE ONLY																
Lab I.D.	Sample I.D.	(G) RAB OR (C) OMP	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME								
H904111	B:6 32.4725346	C	1	GROUNDWATER	ACID/BASE	12/9	3:42									
7	-103.1648679	C	1	SLUDGE	OTHER	3:44										
8	B7 32.4725004	C	1	WASTEWATER	ICE COOL	3:46										
9	-103.1648160	C	1	SOIL	OTHER	3:48										
10	B8 32.4725304	C	1	WASTEWATER	ACID/BASE	3:50										
	-103.1647646	C	1	SLUDGE	OTHER											
	B9 32.4725245	C	1	WASTEWATER	ICE COOL											
	-103.1647646	C	1	SOIL	OTHER											
	B10 32.4725001	C	1	WASTEWATER	ACID/BASE											
	-103.1647682	C	1	SLUDGE	OTHER											

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless 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: <i>[Signature]</i>	Received By: <i>[Signature]</i>	DATE: 12/19/19	Time: 16:30	Delivered By: (Circle One)	Observed Temp. °C	Corrected Temp. °C	Sample Condition	Cool	Intact	Yes	No	Bacteria (only)	Cool	Intact	Yes	No	Sample Condition	Observed Temp. °C	Corrected Temp. °C
Relinquished By: <i>[Signature]</i>	Received By: <i>[Signature]</i>	DATE: 12/19/19	Time: 16:30	Delivered By: (Circle One)	Observed Temp. °C	Corrected Temp. °C	Sample Condition	Cool	Intact	Yes	No	Bacteria (only)	Cool	Intact	Yes	No	Sample Condition	Observed Temp. °C	Corrected Temp. °C
REMARKS: <i>Emmi Results</i>																			

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

FORM-006 R3.0





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO				ANALYSIS REQUEST																																																																																	
<b>Company Name:</b> <i>Agache</i> <b>Project Manager:</b> <i>Jeffrey Broom</i> <b>Address:</b> <b>City:</b> <i>Hobbs</i> <b>State:</b> <i>NM</i> <b>Zip:</b> <i>88240</i> <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Owner:</b> <b>Project Name:</b> <b>Project Location:</b> <i>WBDU #91</i> <b>Sampler Name:</b> <i>Don Quisenberry</i>				<b>P.O. #:</b> <b>Company:</b> <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Phone #:</b> <b>Fax #:</b>				<table border="1"> <thead> <tr> <th colspan="2">MATRIX</th> <th>PRESERV</th> <th>SAMPLING</th> <th colspan="12">DATE TIME</th> </tr> </thead> <tbody> <tr> <td>GROUNDWATER</td> <td>WASTEWATER</td> <td>SOIL</td> <td>SLUDGE</td> <td>OTHER</td> <td>ACID/BASE</td> <td>ICE COOL</td> <td>OTHER</td> <td colspan="12"></td> </tr> <tr> <td># CONTAINERS</td> <td>(G) RAB OR (COM)</td> <td colspan="12"></td> </tr> <tr> <td colspan="4"> <b>Lab I.D.</b>  <i>1904111</i>  <i>11</i>  <i>12</i> </td> <td colspan="4"> <b>Sample I.D.</b>  <i>B11 32.4725041</i>  <i>-103.1646694</i>  <i>12 32.4725041</i>  <i>-103.1646694</i> </td> <td colspan="4"> <i>12/9 3:52</i>  <i>3:54</i> </td> <td colspan="4"> <i>BTX</i>  <i>MTPL</i>  <i>CI</i> </td> </tr> </tbody> </table>												MATRIX		PRESERV	SAMPLING	DATE TIME												GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER	ACID/BASE	ICE COOL	OTHER													# CONTAINERS	(G) RAB OR (COM)													<b>Lab I.D.</b> <i>1904111</i> <i>11</i> <i>12</i>				<b>Sample I.D.</b> <i>B11 32.4725041</i> <i>-103.1646694</i> <i>12 32.4725041</i> <i>-103.1646694</i>				<i>12/9 3:52</i> <i>3:54</i>				<i>BTX</i> <i>MTPL</i> <i>CI</i>			
MATRIX		PRESERV	SAMPLING	DATE TIME																																																																																	
GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER	ACID/BASE	ICE COOL	OTHER																																																																														
# CONTAINERS	(G) RAB OR (COM)																																																																																				
<b>Lab I.D.</b> <i>1904111</i> <i>11</i> <i>12</i>				<b>Sample I.D.</b> <i>B11 32.4725041</i> <i>-103.1646694</i> <i>12 32.4725041</i> <i>-103.1646694</i>				<i>12/9 3:52</i> <i>3:54</i>				<i>BTX</i> <i>MTPL</i> <i>CI</i>																																																																									
<b>Relinquished By:</b> <i>Jeffrey Broom</i> <b>Relinquished By:</b> <i>Don Quisenberry</i> <b>Observed Temp. °C:</b> <i>4.5</i> <b>Corrected Temp. °C:</b> <i>4.9</i>				<b>Received By:</b> <i>Don Quisenberry</i> <b>Time:</b> <i>10:30</i> <b>Date:</b> <i>12/9/19</i> <b>Observed Temp. °C:</b> <i>4.5</i> <b>Corrected Temp. °C:</b> <i>4.9</i>				<b>Verbal Result:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Add'l Phone #:</b> <b>REMARKS:</b> <i>Envi Results</i> <b>Turnaround Time:</b> <b>Standard</b> <input checked="" type="checkbox"/> <b>Rush</b> <input type="checkbox"/> <b>Thermometer ID:</b> <i>997</i> <b>Correction Factor:</b> <i>+0.4 °C</i>				<b>Bacteria (only) Sample Condition</b> <b>Cool Intact</b> <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> <b>Observed Temp. °C</b> <b>Corrected Temp. °C</b>																																																																									

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



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

December 12, 2019

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #91

Enclosed are the results of analyses for samples received by the laboratory on 12/10/19 12:57.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 1 32.4724240 -103.1649490 (H904123-01)**

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	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	0.120	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	12/11/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 110 % 41-142

Surrogate: 1-Chlorooctadecane 118 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 2 32.4724037 -103.1649366 (H904123-02)**

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.9 % 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	336	16.0	12/11/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 110 % 41-142

Surrogate: 1-Chlorooctadecane 117 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 3 32.4724402 -103.1649222 (H904123-03)**

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	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.8 % 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	12/11/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 115 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 4 32.4724577 -103.1649742 (H904123-04)**

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	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 99.9 % 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	12/11/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 114 % 41-142

Surrogate: 1-Chlorooctadecane 121 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 5 32.4724885 -103.1648528 (H904123-05)**

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	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	12/11/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	117	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	15.9	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 118 % 41-142

Surrogate: 1-Chlorooctadecane 130 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 6 32.4725406 -103.1648421 (H904123-06)**

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	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	12/11/2019	ND	416	104	400	0.00	

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*	<10.0	10.0	12/11/2019	ND	177	88.5	200	9.44		
DRO >C10-C28*	1130	10.0	12/11/2019	ND	181	90.4	200	9.81		
EXT DRO >C28-C36	432	10.0	12/11/2019	ND						

Surrogate: 1-Chlorooctane 118 % 41-142

Surrogate: 1-Chlorooctadecane 156 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 7 32.4724846 -103.1648843 (H904123-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/11/2019	ND	416	104	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	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 86.2 % 41-142

Surrogate: 1-Chlorooctadecane 92.0 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 8 32.4725242 -103.1645812 (H904123-08)**

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PFC) 99.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/11/2019	ND	416	104	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	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	173	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	80.4	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 133 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 9 32.4725369 -103.1646061 (H904123-09)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 97.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/11/2019	ND	416	104	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	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	<10.0	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 115 % 41-142

Surrogate: 1-Chlorooctadecane 122 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/10/2019  
Reported: 12/12/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/10/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W 10 32.4724939 -103.1646141 (H904123-10)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2019	ND	1.92	95.9	2.00	1.51	
Toluene*	<0.050	0.050	12/11/2019	ND	1.87	93.7	2.00	1.50	
Ethylbenzene*	<0.050	0.050	12/11/2019	ND	1.91	95.6	2.00	1.10	
Total Xylenes*	<0.150	0.150	12/11/2019	ND	5.80	96.7	6.00	0.950	
Total BTEX	<0.300	0.300	12/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 97.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/11/2019	ND	416	104	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	12/11/2019	ND	177	88.5	200	9.44	
DRO >C10-C28*	11.8	10.0	12/11/2019	ND	181	90.4	200	9.81	
EXT DRO >C28-C36	<10.0	10.0	12/11/2019	ND					

Surrogate: 1-Chlorooctane 116 % 41-142

Surrogate: 1-Chlorooctadecane 124 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

### Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 5°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

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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







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

December 18, 2019

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #91

Enclosed are the results of analyses for samples received by the laboratory on 12/13/19 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager





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: 12/13/2019  
 Reported: 12/18/2019  
 Project Name: WBDU #91  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 12/13/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B8 32.4725304 -103.1648401 (H904177-01)**

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	12/17/2019	ND	1.99	99.3	2.00	7.30	
Toluene*	<0.050	0.050	12/17/2019	ND	1.98	98.9	2.00	6.84	
Ethylbenzene*	<0.050	0.050	12/17/2019	ND	2.00	100	2.00	7.58	
Total Xylenes*	<0.150	0.150	12/17/2019	ND	5.84	97.3	6.00	7.66	
Total BTEX	<0.300	0.300	12/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 97.8 % 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	12/13/2019	ND	218	109	200	0.138	
DRO >C10-C28*	<10.0	10.0	12/13/2019	ND	221	110	200	1.03	
EXT DRO >C28-C36	<10.0	10.0	12/13/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 119 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/13/2019  
Reported: 12/18/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/13/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B9 32.4725245 -103.1647646 (H904177-02)**

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	12/17/2019	ND	1.99	99.3	2.00	7.30	
Toluene*	<0.050	0.050	12/17/2019	ND	1.98	98.9	2.00	6.84	
Ethylbenzene*	<0.050	0.050	12/17/2019	ND	2.00	100	2.00	7.58	
Total Xylenes*	<0.150	0.150	12/17/2019	ND	5.84	97.3	6.00	7.66	
Total BTEX	<0.300	0.300	12/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.3 % 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	12/13/2019	ND	218	109	200	0.138	
DRO >C10-C28*	<10.0	10.0	12/13/2019	ND	221	110	200	1.03	
EXT DRO >C28-C36	<10.0	10.0	12/13/2019	ND					

Surrogate: 1-Chlorooctane 117 % 41-142

Surrogate: 1-Chlorooctadecane 123 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/13/2019  
Reported: 12/18/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/13/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B10 32.4725001 -103.1647482 (H904177-03)**

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	12/17/2019	ND	1.99	99.3	2.00	7.30	
Toluene*	<0.050	0.050	12/17/2019	ND	1.98	98.9	2.00	6.84	
Ethylbenzene*	<0.050	0.050	12/17/2019	ND	2.00	100	2.00	7.58	
Total Xylenes*	<0.150	0.150	12/17/2019	ND	5.84	97.3	6.00	7.66	
Total BTEX	<0.300	0.300	12/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.1 % 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	12/14/2019	ND	218	109	200	0.138	
DRO >C10-C28*	<10.0	10.0	12/14/2019	ND	221	110	200	1.03	
EXT DRO >C28-C36	<10.0	10.0	12/14/2019	ND					

Surrogate: 1-Chlorooctane 119 % 41-142

Surrogate: 1-Chlorooctadecane 124 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 12/13/2019  
Reported: 12/18/2019  
Project Name: WBDU #91  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/13/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: W 6 32.4725406 -103.1648421 (H904177-04)**

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	12/17/2019	ND	1.83	91.4	2.00	9.80	
Toluene*	<0.050	0.050	12/17/2019	ND	1.79	89.7	2.00	10.8	
Ethylbenzene*	<0.050	0.050	12/17/2019	ND	1.82	91.2	2.00	10.3	
Total Xylenes*	<0.150	0.150	12/17/2019	ND	5.29	88.2	6.00	10.4	
Total BTEX	<0.300	0.300	12/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 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	12/14/2019	ND	218	109	200	0.138	
DRO >C10-C28*	<10.0	10.0	12/14/2019	ND	221	110	200	1.03	
EXT DRO >C28-C36	<10.0	10.0	12/14/2019	ND					

Surrogate: 1-Chlorooctane 117 % 41-142

Surrogate: 1-Chlorooctadecane 123 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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

Cardinal Laboratories \* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> Apache <b>Project Manager:</b> Jeffery Brown <b>Address:</b> <b>City:</b> Wobles <b>State:</b> NM <b>Zip:</b> 88340 <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Owner:</b> <b>Project Name:</b> <b>Project Location:</b> WBOU #91 <b>Sampler Name:</b> J. C.		<b>P.O. #:</b> <b>Company:</b> <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>	
<b>FOR LAB USE ONLY</b> <b>Lab I.D.</b> Sample I.D. H904177 1 B8 32.4725304 2 B9 32.4725345 3 B10 32.4725001 4 B6 32.4725406 -103.1647646 -103.1647482 -103.1648421		<b>MATRIX</b> (G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER ACID/BASE ICE/COOL OTHER	
<b>DATE</b> <b>TIME</b> 12/13/10 10:10 AM 10:18 AM 10:20 10:22		<b>SAMPLING</b> EXT TPH BTEX	
<b>PLEASE NOTE:</b> Liability and Damages Cardholder'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 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.		<b>REMARKS:</b> Error! Results	
<b>Relinquished By:</b> [Signature] <b>Date:</b> 12/13 <b>Received By:</b> [Signature] <b>Date:</b> 12/05/10 <b>Received By:</b> [Signature]		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Add'l Phone #:</b> <b>All Results are emailed. Please provide Email address:</b>	
<b>Delivered By:</b> (Circle One) Sample - UPS - Bus - Other:		<b>Turnaround Time:</b> <b>Standard</b> <input checked="" type="checkbox"/> <b>Rush</b> <input type="checkbox"/> <b>Bacteria (only) Sample Condition</b> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C	

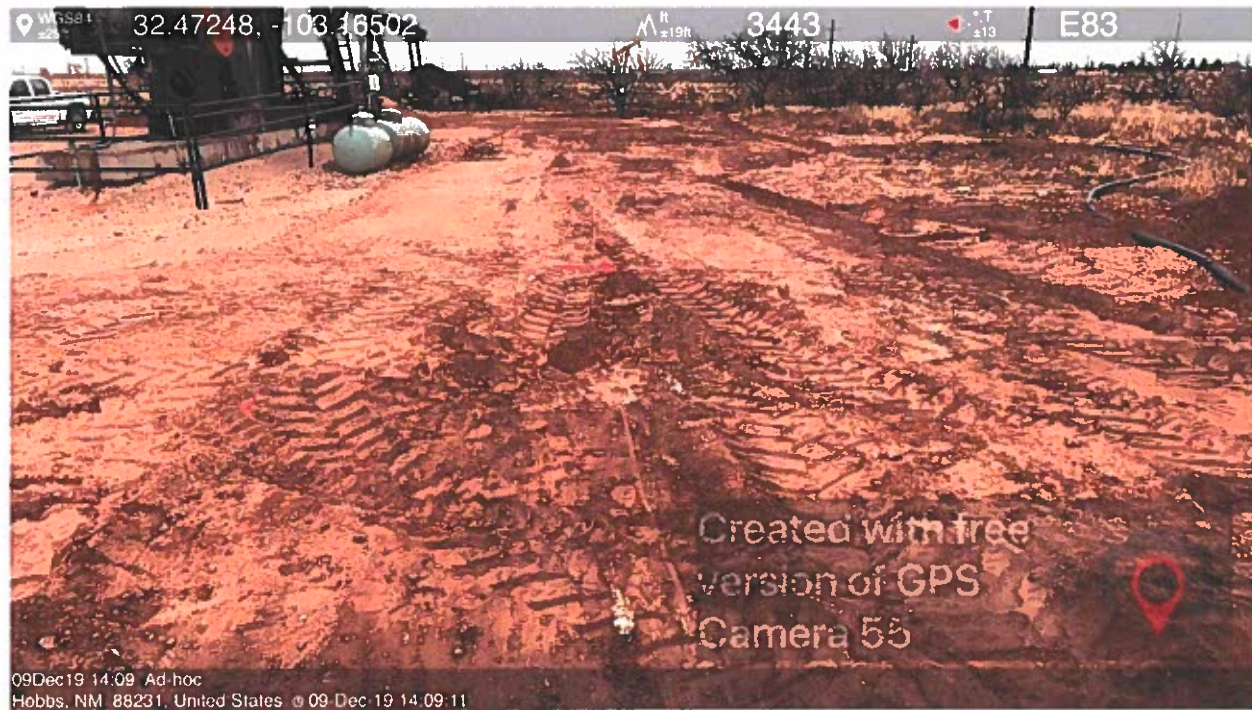


WBDU Excavation Photos





## WBDU Excavation Photos







**WBDU 91  
NRM1936553967  
Revegetation  
And  
Noxious Weed Plan**

**Revegetation Plan:**

All the disturbed area in the pasture will be properly prepared and seeded with SLO blow sand seed mixture. The disturbed area will be monitored to ensure successful revegetation is achieved. If revegetation is not successful after a couple of growing seasons the site will be reseeded.

**Noxious Weed Plan:**

Apache Corporation will treat noxious weeds if they become established within the area of remediation. Weed control will be maintained on the disturbed land where noxious weeds exist both prior to remediation and restoration. Apache Corporation will consult with the Authorized Officer for acceptable weed control methods.