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**APACHE CORPORATION  
NEDU #206  
CLOSURE REPORT**

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**RELEASE DATE: 4/4/2020  
INCIDENT #: NRM2010834974  
API No. 30-025-06522  
U/L K, SECTION 3, TOWNSHIP 21S, RANGE 37E  
LEA COUNTY, NEW MEXICO**

**February 10, 2021**

**PREPARED BY:**



**#7 COMPRESS ROAD  
ARTESIA, NM 88210**

February 10, 2021

State of New Mexico Energy Minerals and Natural Resources Department  
Oil Conservation Division  
C/O Mike Bratcher, Robert Hamlet, Cristina Eads  
1625 N. French Drive  
Hobbs, NM 88240

Apache Corporation  
C/O Bruce Baker  
2350 W. Marland Blvd  
Hobbs, NM 88240

**RE: Northeast Drinkard Unit #206 (NEDU #206)**  
**API No. 30-015-39406**  
**U/L K, Section 3, Township 21S, Range 37E**

To Whom it May Concern:

Apache Corporation has retained ESS (Energy Staffing and Service), Environmental & Regulatory Division to address the environmental compliance issues regarding the release detailed herein. Below you will find the site – specific information concerning the delineation and remediation that has taken place at the NEDU #206.

#### **SITE BACKGROUND**

This site is located in Lea County, New Mexico; 4.56 miles north of Eunice, New Mexico. The release occurred on April 7, 2020, when an isolation valve failed in the loss of produced water. The release occurred on the well pad, road and pasture area. 119bbls of produced water was released and 70bbls of produced water was recovered by use of a vacuum truck. The Initial C141 was submitted to the OCD on April 20, 2020.

#### **GENERAL SITE CHARACTERISTICS**

An extended ground water study was conducted and it has been determined that according to the New Mexico State Office of the Engineer and USGS indicated that water is greater than 50' bgs. The submitted workplan was then changed by the OCD that water was less than 50' bgs, therefore the OCD required that the Standard of Releases be used, utilizing the less than 50' bgs requirement. The closest well to the site with viable groundwater data is labelled CP 00553, which indicated that water is at 75' bgs.

On February 1, 2021 a boring rig was brought into bore a hole at the Hawk B #026 (API No. 30-025-35734, GPS: 32.5097 -103.1488) to determine ground water. The borehole was drilled to 57'bgs and the borehole charged for 48hours and no groundwater was found. Therefore, the groundwater depth for remediation of the NEDU #206 has been changed to the 51'-100'dgw closure criteria. Please see the chart below for the sampling criteria for this release, boring log and soil boring map that is attached:

DGW	Constituent	Method	Limit
51'-100'	Chloride	EPA 300.0 OR SM4500 CLB	10,000 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 METHOD 8015M	2,500 mg/kg
	GRO + DRO	EPA SW-846 METHOD 8015M	1,000 mg/kg
	BTEX	EPA SW-846 METHOD 8021B OR 8260B	50 mg/kg
	Benzene	EPA SW-846 METHOD 8021B OR 8260B	10 mg/kg

### KARST CHARACTERISTICS

Karst was evaluated from the NMOCD Share-Point for Karst Map Designations in reference to the NEDU #206. Based on the site observations with the extent of the release margins, the potential for Karst Formations is in the area of "low potential". With the information provided in this report, Karst is not a factor in determining the site characterization. Closure criteria will remain in the 51'-100' site ranking. Please see the Karst Map attached herein.

### RELEASE INVESTIGATION DATA EVALUATION

On April 8<sup>th</sup> of 2020, Apache Corporation collected surface samples of the impacted area, these five surface samples were taken into Cardinal Lab for confirmation. The samples that were collected were analyzed for chlorides, BTEX and TPH. Laboratory analysis indicated that hydrocarbons and chloride concentrations were greater the site characterization of <50'DGW. Thus, indicating that further delineation was required to meet site closure standards.

On July 13<sup>th</sup> of 2020, Apache Corporation then collected samples at 1'bgs, at this time samples were then obtained in the same area as the SP1-SP5 samples taken on April 8<sup>th</sup>. The 1' to 2'bgs samples were also sent into Cardinal Lab for confirmation. The samples were confirmed to pass the <50' closure standards.

On July 24<sup>th</sup> of 2020, Apache Corporation submitted a workplan to the OCD. This said workplan proposed that in the area around SP-SP4 that 2'bgs be excavated, estimating 248 cubic yards of impacted material would be hauled to an approved NMOCD Facility. After the excavation, 5-point composites will be collected not to exceed 500 sq. ft. and final 5-point wall composites will be collected not to exceed 200 sq. ft. The lease road associated with SP5 final surface

bottom composite samples will be collected not to exceed 500 sq. ft and horizontal surface composite will be collected not to exceed 200 sq. ft. All final samples will be submitted to a commercial laboratory for analysis of chloride, BTEX and TPH. Once analytical data confirms that the excavation meets the Table 1 Standards for released 51-100' to groundwater the excavation will be backfilled with clean imported caliche for the lease pad and road, then clean imported topsoil will be brought in for the pasture areas and contoured. The pasture area will be reseeded with guidance from the surface owner. The remediation will be completed within one year of the NMOCD approval of the plan. Please find the remediation workplan attached herein.

On August 24<sup>th</sup> of 2020, The NMOCD denied the workplan due to the following reasons:

- The depth to groundwater has been incorrectly assessed. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ a mile away from the site, and data should be no more than 25 years old and well construction information should be provided. If Apache chooses not to drill a borehole to confirm the depth to groundwater, the site must be remediated to meet the Closure Criteria in Table 1
- The alternative sampling plan is not approved, please provide a detailed demonstration that the variance will provide equal or better protection of fresh water, public health and the environment.
- Apache's request to "complete the remediation within one year of plan approval by NMOCD" is denied. Please proceed by NMAC 19.15.12.E.

Please find the email with the above denial stipulations attached to this report.

### **SCOPE OF WORK AND LIMITATIONS**

ESS began the remediation on January 4<sup>th</sup> of 2021. A total of 344 cubic yards of contaminated soil was excavated and hauled to Sundance Services in Eunice, New Mexico. On January 29<sup>th</sup> of 2021, ESS began to conduct composite closure sampling. A total of 52 bottom hole composite samples were obtained along with 4 horizontal composites. These samples were jarred and delivered to Cardinal Laboratories for confirmation. All final composite samples were under the closure requirements for this release. Once the confirmation samples were received, backfilling of the site began on February 8<sup>th</sup>, 2021 (please see composite closure sample map along with the attached spreadsheet for GPS Coordinates). 360 cubic yards of clean imported caliche was used to backfill and contour the pad and road excavations. A total of 60 cubic yards of imported topsoil was used to backfill and contour the pasture areas. Seeding of the pasture areas will take place at a later date.



On behalf of Apache Corporation and Energy Staffing Services, we respectfully request closure of the release that occurred at the NEDU #206. If you have any questions or concerns please feel free to contact me or Bruce Baker at any time.

Sincerely,

***Natalie Gladden***

Natalie Gladden  
Director of Environmental and Regulatory Services  
#7 Compress Road  
Artesia, NM 88210  
Cell: 575-390-6397  
Email: [natalie@energystaffingllc.com](mailto:natalie@energystaffingllc.com)

Attachments

- Initial C141
- Site Map
- Karst Map
- Remediation Plan
- Boring Log
- Closure Sample Data
- Closure Sample Map w/GPS attachment
- Closure Lab Analysis
- Site Photos (Remediation and Backfill)
- Final C141

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	NRM2010834974
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 32.51335 Longitude -103.15306  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	NEDU 206	Site Type	Injection Well
Date Release Discovered	4/7/2020	API# (if applicable)	30-025-06522

Unit Letter	Section	Township	Range	County
K	3	21S	37E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Taylor Gervis Elizabeth ETAL)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 119 barrels	Volume Recovered (bbls) 70 barrels
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input 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 An isolation valve failed resulting in the loss of produced water

Incident ID	NRM2010834974
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Release volume greater than 25 barrels
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Bruce Baker notified Jim Griswold via email on 4/8/2020	

## 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>Bruce Baker</u>	Title: <u>Environmental Tech SR.</u>
Signature: <u>Bruce Baker</u>	Date: <u>4/20/20</u>
email: <u>larry.baker@apachecorp.com</u>	Telephone: <u>432-631-6982</u>
<b><u>OCD Only</u></b>	
Received by: <u>Ramona Marcus</u>	Date: <u>4/20/2020</u>

NRM2010834974

Release Calculation


841 Cubic Feet X 7.48=6,290 gallons/42=149.76X.33=49 barrels +70=119




# APACHE CORPORATION

NEDU #206  
SITE MAP

## Legend

 NEDU #206

 NEDU #206

Earth Point

100 ft

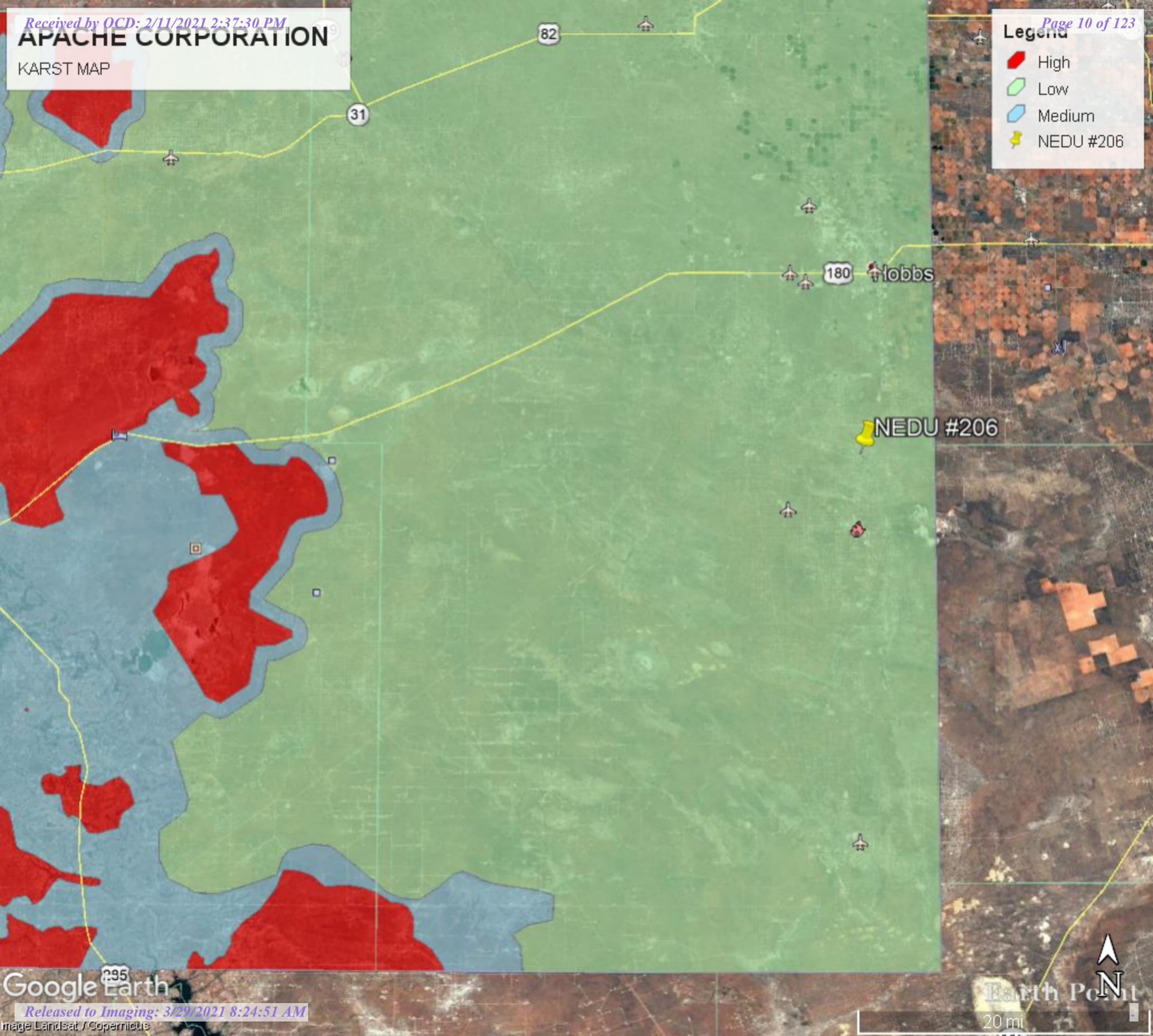


# APACHE CORPORATION

KARST MAP

**Legend**

- High
- Low
- Medium
- NEDU #206



Google Earth

20 mi



Sent: Monday, August 24, 2020 12:05 PM

To: Baker, Larry <[Larry.Baker@apachecorp.com](mailto:Larry.Baker@apachecorp.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>; Eads, Cristina, EMNRD <[Cristina.Eads@state.nm.us](mailto:Cristina.Eads@state.nm.us)>

Subject: [EXTERNAL] NRM2010834974 NEDU 206 @ 30-025-06522

NRM2010834974 NEDU 206 @ 30-025-06522

Mr. Baker,

The OCD has denied the submitted Site Characterization/Remediation Plan C-141 for incident # NRM2010834974 NEDU 206 @ 30-025-06522 for the following reasons:

- The Depth to groundwater has been incorrectly assessed. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If Apache believes that groundwater is > 50', a borehole will need to be drilled onsite and a copy of the driller's log must be provided. If Apache chooses not to drill a borehole to confirm the depth to groundwater, the site must be remediated to meet the Closure Criteria in Table 1 for groundwater at a depth of 50 feet or less.
- The alternative sampling plan is not approved. Please provide a detailed demonstration that the variance will provide equal or better protection of fresh water, public health and the environment.
- Apache's request to "complete the remediation within one year of plan approval by NMOCD" is denied. Please proceed by NMAC 19.15.12.E.(1).

The Denied C-141 can be found in the online image file. Please review and make the required correction prior to resubmitting through the fee portal.

Thank you,

Victoria Venegas  
State of New Mexico  
Energy, Minerals, and Natural Resources  
Oil Conservation Division  
811 S. First St., Artesia NM 88210  
(575) 748-1283  
[Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us)



303 Veterans Airpark Lane Midland, TX 79705

## **Remediation Plan**

July 24, 2020

Re: NEDU 206  
Case # NRM201084974

### **Background:**

On 4/7/2020 a release occurred due to an isolation valve failed resulting in the loss of produced water. The release is located (GPS: 32.51335, - 103.15306) north of Eunice in unit letter K section 3 township 21S range 37E. A groundwater survey was conducted utilizing NMOSE wells of record indicates water is greater than 50 feet. On 4/8/2020 surface samples were collected and submitted to a commercial laboratory for chloride, TPH, and BTEX. On 7/13/2020 samples were collected in 1 foot intervals utilizing a backhoe. All samples collected were submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX.

### **Remediation Plan:**

Apache Corporation proposes that the release area be excavated to a depth of 1 foot around SP 1, 2, 3, and 4. All excavated material (248 yards) will be hauled to an NMOCD approved facility. After the excavation is complete final 5 point bottom composite samples will be collected not to exceed 500 square feet. Final 5 point wall composite samples will be collected not to exceed 200 square feet. The lease road associated with SP 5 final surface bottom composite samples will be collected not to exceed 500 square feet. Horizontal surface composite samples will be collected not to exceed 200 square feet. All final samples will be submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Once analytical data confirms that the excavation meet table 1 standards for releases 51-100 feet to groundwater the excavation will be backfilled with clean imported caliche for the lease pad and clean imported topsoil for the pasture areas and countered to the surrounding area. The pasture area will be reseed with guidance from the surface owner. The remediation will be completed within one year of NMOCD approval of the plan.

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

Submitted by;

*Bruce Baker*

**Environmental Technician**  
larry.baker@apachecorp.com

**Cell# 432-631-6982**  
**Off# 575-393-7106**

NOTE: Plan rejected OCD wanted remediated to Table 1 Standards for releases less than 50 feet to groundwater New Yardage total is 380 yards and 200 square feet final Sampling not 500 square feet.



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>51-100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Larry Baker Title: Environmental Tech SR.  
Signature: Larry Baker Date: 7/27/2020  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: Larry Baker Title: Environmental Tech SR.  
Signature: Larry Baker Date: 7/27/2020  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

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

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

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



Show search results for 32.513...

GP-00712-POD1

GP-00716-POD1

GP-00715-POD1

CP-01743-POD1

GP-00172-POD1

GP-00553

GP-00717-POD1 GP-00719-POD1

GP-00720-POD1

GP-00714-POD1

GP-01741-POD1

GP-00718-POD1

GP-00721-POD1

GP-01037-POD1

1:18055



# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64 Q16 Q4 Sec Tws Rng	X	Y
	CP 00553	2 4 04 21S 37E	672700	3598022*

<b>Driller License:</b> 208	<b>Driller Company:</b> VAN NOY, W.L.
<b>Driller Name:</b> VAN NOY, W.L.	
<b>Drill Start Date:</b> 09/30/1976	<b>Drill Finish Date:</b> 09/30/1976
<b>Log File Date:</b> 01/10/1979	<b>PCW Rcv Date:</b>
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>
<b>Casing Size:</b> 6.63	<b>Depth Well:</b> 90 feet
	<b>Depth Water:</b> 75 feet

Water Bearing Stratifications:	Top	Bottom	Description
	75	85	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	75	89

\*UTM location was derived from PLSS - see Help

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

10/16/19 6:26 AM

Page 1 of 1

POD SUMMARY - CP 00553



# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 01486	POD1	4	2	1	05	21S	37E	670333	3599085

<b>Driller License:</b> 1044	<b>Driller Company:</b> EADES WELL DRILLING & PUMP SERVICE
<b>Driller Name:</b> ALAN G EADES	
<b>Drill Start Date:</b> 02/02/2016	<b>Drill Finish Date:</b> 02/02/2016
<b>Log File Date:</b> 02/05/2016	<b>PCW Rcv Date:</b>
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>
<b>Casing Size:</b> 5.14	<b>Depth Well:</b> 140 feet
	<b>Depth Water:</b> 52 feet

Water Bearing Stratifications:	Top	Bottom	Description
	52	105	Sandstone/Gravel/Conglomerate
	105	135	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	100	140

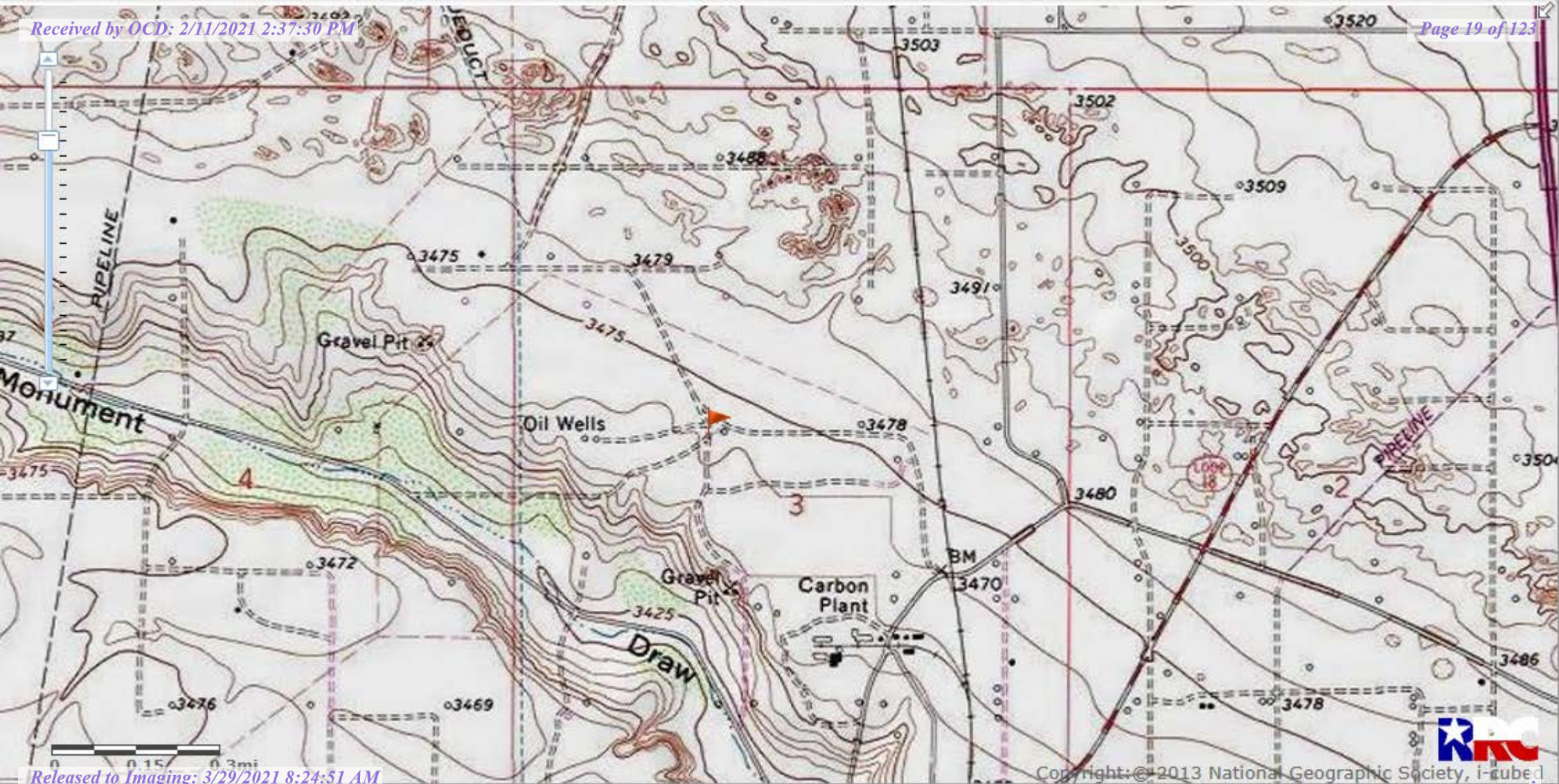
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/15/19 3:57 PM

Page 1 of 1

POD SUMMARY - CP 01486 POD1









SP3

SP2

SP1

NEDU 206

SP4

SP5

96 ft

© 2020 Google

Google earth



### NEDU Injection Line

### Complete List

[illegible]



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

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April 14, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NEDU #206

Enclosed are the results of analyses for samples received by the laboratory on 04/08/20 15:10.

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/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 04/08/2020  
 Reported: 04/14/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 04/08/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ SURFACE (H001046-01)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/09/2020	ND	1.91	95.3	2.00	0.0296	
Toluene*	<0.050	0.050	04/09/2020	ND	1.92	95.8	2.00	0.285	
Ethylbenzene*	<b>0.083</b>	0.050	04/09/2020	ND	1.93	96.5	2.00	0.467	
<b>Total Xylenes*</b>	<b>0.370</b>	0.150	04/09/2020	ND	5.66	94.3	6.00	0.263	
<b>Total BTX</b>	<b>0.453</b>	0.300	04/09/2020	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1560</b>	16.0	04/09/2020	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
<b>GRO C6-C10*</b>	<b>20.5</b>	10.0	04/09/2020	ND	197	98.4	200	0.0569	
<b>DRO &gt;C10-C28*</b>	<b>1000</b>	10.0	04/09/2020	ND	206	103	200	2.28	
<b>EXT DRO &gt;C28-C36</b>	<b>172</b>	10.0	04/09/2020	ND					

Surrogate: 1-Chlorooctane 112 % 44.3-144

Surrogate: 1-Chlorooctadecane 148 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 04/08/2020  
 Reported: 04/14/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 04/08/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 2 @ SURFACE (H001046-02)**

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.327</b>	0.050	04/09/2020	ND	1.91	95.3	2.00	0.0296	
<b>Toluene*</b>	<b>0.761</b>	0.050	04/09/2020	ND	1.92	95.8	2.00	0.285	
<b>Ethylbenzene*</b>	<b>1.02</b>	0.050	04/09/2020	ND	1.93	96.5	2.00	0.467	
<b>Total Xylenes*</b>	<b>2.83</b>	0.150	04/09/2020	ND	5.66	94.3	6.00	0.263	
<b>Total BTX</b>	<b>4.93</b>	0.300	04/09/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 139 % 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
<b>Chloride</b>	<b>3680</b>	16.0	04/09/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<200	200	04/09/2020	ND	197	98.4	200	0.0569	
<b>DRO &gt;C10-C28*</b>	<b>4030</b>	200	04/09/2020	ND	206	103	200	2.28	
<b>EXT DRO &gt;C28-C36</b>	<b>531</b>	200	04/09/2020	ND					

Surrogate: 1-Chlorooctane 143 % 44.3-144

Surrogate: 1-Chlorooctadecane 228 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 04/08/2020  
 Reported: 04/14/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 04/08/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 3 @ SURFACE (H001046-03)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.099</b>	0.050	04/09/2020	ND	1.91	95.3	2.00	0.0296	
<b>Toluene*</b>	<b>0.245</b>	0.050	04/09/2020	ND	1.92	95.8	2.00	0.285	
<b>Ethylbenzene*</b>	<b>0.250</b>	0.050	04/09/2020	ND	1.93	96.5	2.00	0.467	
<b>Total Xylenes*</b>	<b>0.716</b>	0.150	04/09/2020	ND	5.66	94.3	6.00	0.263	
<b>Total BTX</b>	<b>1.31</b>	0.300	04/09/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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
<b>Chloride</b>	<b>5120</b>	16.0	04/09/2020	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
<b>GRO C6-C10*</b>	<b>14.3</b>	10.0	04/09/2020	ND	197	98.4	200	0.0569	
<b>DRO &gt;C10-C28*</b>	<b>135</b>	10.0	04/09/2020	ND	206	103	200	2.28	
<b>EXT DRO &gt;C28-C36</b>	<b>14.5</b>	10.0	04/09/2020	ND					

Surrogate: 1-Chlorooctane 95.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 111 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 04/08/2020  
 Reported: 04/14/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 04/08/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 4 @ SURFACE (H001046-04)**

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.32	0.050	04/09/2020	ND	1.91	95.3	2.00	0.0296	
Toluene*	4.86	0.050	04/09/2020	ND	1.92	95.8	2.00	0.285	
Ethylbenzene*	5.85	0.050	04/09/2020	ND	1.93	96.5	2.00	0.467	
Total Xylenes*	15.2	0.150	04/09/2020	ND	5.66	94.3	6.00	0.263	
Total BTEx	27.2	0.300	04/09/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 256 % 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
<b>Chloride</b>	<b>8560</b>	16.0	04/09/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	809	200	04/09/2020	ND	197	98.4	200	0.0569	
DRO >C10-C28*	10700	200	04/09/2020	ND	206	103	200	2.28	
EXT DRO >C28-C36	1550	200	04/09/2020	ND					

Surrogate: 1-Chlorooctane 186 % 44.3-144

Surrogate: 1-Chlorooctadecane 373 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 04/08/2020  
 Reported: 04/14/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 04/08/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 5 @ SURFACE (H001046-05)**

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.40	0.050	04/09/2020	ND	1.91	95.3	2.00	0.0296	
Toluene*	8.06	0.050	04/09/2020	ND	1.92	95.8	2.00	0.285	
Ethylbenzene*	7.17	0.050	04/09/2020	ND	1.93	96.5	2.00	0.467	
Total Xylenes*	17.0	0.150	04/09/2020	ND	5.66	94.3	6.00	0.263	
Total BTEx	34.6	0.300	04/09/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 223 % 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
<b>Chloride</b>	<b>7680</b>	16.0	04/09/2020	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
<b>GRO C6-C10*</b>	<b>63.9</b>	10.0	04/09/2020	ND	197	98.4	200	0.0569	
<b>DRO &gt;C10-C28*</b>	<b>188</b>	10.0	04/09/2020	ND	206	103	200	2.28	
<b>EXT DRO &gt;C28-C36</b>	<b>19.1</b>	10.0	04/09/2020	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 116 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager

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### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



Page 8 of 8



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

July 15, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NEDU #206

Enclosed are the results of analyses for samples received by the laboratory on 07/13/20 15:28.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 07/13/2020  
 Reported: 07/15/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 07/13/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 1' (H001828-01)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/14/2020	ND	1.86	92.9	2.00	6.35		
Toluene*	<0.050	0.050	07/14/2020	ND	1.87	93.3	2.00	6.58		
Ethylbenzene*	<0.050	0.050	07/14/2020	ND	1.88	93.9	2.00	6.65		
Total Xylenes*	<0.150	0.150	07/14/2020	ND	5.41	90.2	6.00	6.73		
Total BTEX	<0.300	0.300	07/14/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	07/14/2020	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	07/14/2020	ND	198	98.9	200	1.72	
DRO >C10-C28*	<10.0	10.0	07/14/2020	ND	182	90.8	200	1.56	
EXT DRO >C28-C36	<10.0	10.0	07/14/2020	ND					

Surrogate: 1-Chlorooctane 84.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 07/13/2020  
 Reported: 07/15/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 07/13/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 2 @ 1' (H001828-02)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/14/2020	ND	1.86	92.9	2.00	6.35		
Toluene*	<0.050	0.050	07/14/2020	ND	1.87	93.3	2.00	6.58		
Ethylbenzene*	<0.050	0.050	07/14/2020	ND	1.88	93.9	2.00	6.65		
Total Xylenes*	<0.150	0.150	07/14/2020	ND	5.41	90.2	6.00	6.73		
Total BTX	<0.300	0.300	07/14/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.7 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/14/2020	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	07/14/2020	ND	198	98.9	200	1.72	
DRO >C10-C28*	<10.0	10.0	07/14/2020	ND	182	90.8	200	1.56	
EXT DRO >C28-C36	<10.0	10.0	07/14/2020	ND					

Surrogate: 1-Chlorooctane 98.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 101 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 07/13/2020  
 Reported: 07/15/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 07/13/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 3 @ 1' (H001828-03)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/14/2020	ND	1.86	92.9	2.00	6.35	
Toluene*	<0.050	0.050	07/14/2020	ND	1.87	93.3	2.00	6.58	
Ethylbenzene*	<0.050	0.050	07/14/2020	ND	1.88	93.9	2.00	6.65	
Total Xylenes*	<0.150	0.150	07/14/2020	ND	5.41	90.2	6.00	6.73	
Total BTEx	<0.300	0.300	07/14/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	07/14/2020	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	07/14/2020	ND	198	98.9	200	1.72	
DRO >C10-C28*	<10.0	10.0	07/14/2020	ND	182	90.8	200	1.56	
EXT DRO >C28-C36	<10.0	10.0	07/14/2020	ND					

Surrogate: 1-Chlorooctane 91.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.8 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 07/13/2020  
 Reported: 07/15/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 07/13/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 4 @ 1' (H001828-04)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/14/2020	ND	1.86	92.9	2.00	6.35		
Toluene*	<0.050	0.050	07/14/2020	ND	1.87	93.3	2.00	6.58		
Ethylbenzene*	<0.050	0.050	07/14/2020	ND	1.88	93.9	2.00	6.65		
Total Xylenes*	<0.150	0.150	07/14/2020	ND	5.41	90.2	6.00	6.73		
Total BTX	<0.300	0.300	07/14/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	07/14/2020	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	07/14/2020	ND	198	98.9	200	1.72	
DRO >C10-C28*	<10.0	10.0	07/14/2020	ND	182	90.8	200	1.56	
EXT DRO >C28-C36	<10.0	10.0	07/14/2020	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-144

Surrogate: 1-Chlorooctadecane 105 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 07/13/2020  
 Reported: 07/15/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 07/13/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 4 @ 2' (H001828-05)**

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	07/14/2020	ND	1.86	92.9	2.00	6.35		
Toluene*	<0.050	0.050	07/14/2020	ND	1.87	93.3	2.00	6.58		
Ethylbenzene*	<0.050	0.050	07/14/2020	ND	1.88	93.9	2.00	6.65		
Total Xylenes*	<0.150	0.150	07/14/2020	ND	5.41	90.2	6.00	6.73		
Total BTX	<0.300	0.300	07/14/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/14/2020	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	07/14/2020	ND	198	98.9	200	1.72	
DRO >C10-C28*	14.6	10.0	07/14/2020	ND	182	90.8	200	1.56	
EXT DRO >C28-C36	<10.0	10.0	07/14/2020	ND					

Surrogate: 1-Chlorooctane 88.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 07/13/2020  
 Reported: 07/15/2020  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: NONE GIVEN

Sampling Date: 07/13/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 5 @ 1' (H001828-06)**

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	07/14/2020	ND	1.86	92.9	2.00	6.35		
Toluene*	<0.050	0.050	07/14/2020	ND	1.87	93.3	2.00	6.58		
Ethylbenzene*	<0.050	0.050	07/14/2020	ND	1.88	93.9	2.00	6.65		
Total Xylenes*	<0.150	0.150	07/14/2020	ND	5.41	90.2	6.00	6.73		
Total BTEx	<0.300	0.300	07/14/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/14/2020	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	07/14/2020	ND	198	98.9	200	1.72	
DRO >C10-C28*	<10.0	10.0	07/14/2020	ND	182	90.8	200	1.56	
EXT DRO >C28-C36	<10.0	10.0	07/14/2020	ND					

Surrogate: 1-Chlorooctane 92.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 97.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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

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### Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

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Celey D. Keene, Lab Director/Quality Manager

Page 9 of 9



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	CL	BTEX	EXT. TPH
H001838	1 SP1 @ 1'		1			✓							7/13/20	1130	✓	✓	✓
	2 SP2 @ 1'		1			✓							7/13/20	1132	✓	✓	✓
	3 SP3 @ 1'		1			✓							7/13/20	1134	✓	✓	✓
	4 SP4 @ 1'		1			✓							7/13/20	1136	✓	✓	✓
	5 SP4 @ 2'		1			✓							7/13/20	1148	✓	✓	✓
	6 SP5 @ 1'		1			✓							7/13/20	1138	✓	✓	✓

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Qualities of Successors arising out of or related to the performance of services rendered by California Regional Office School District or other agency of the State of California					
Relinquished By:	Date:	Received By:	Verbal Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
<i>Jeff Brown</i>	7/13/00 Time: 1528	<i>Juanita L. Black</i>	All Results are emailed. Please provide Email address:		
Relinquished By:	Date:	Received By:	REMARKS:		
	Time:				
Delivered By: (Circle One)	Observed Temp. °C	Sample Condition	CHECKED BY: (Initials)	Turnaround Time:	Standard
Sampler - UPS - Bus - Other:	Corrected Temp. °C	Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/>	<i>P.B.</i>	Thermometer ID #113	Rush <input checked="" type="checkbox"/>
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Correction Factor None	Bacteria (only) <input checked="" type="checkbox"/>
					Cool <input type="checkbox"/> Intact <input type="checkbox"/>
					Yes <input type="checkbox"/> No <input type="checkbox"/>
					No <input type="checkbox"/> No <input type="checkbox"/>
					Corrected Temp. °C

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

**BORING LOCATION:** APACHE CORPORATION NEDU #206  
DESERT SAND DRILLING

**DATE:** 2/1/2021





DEPTH (FEET BGL)					
FROM	TO	THICKNESS	TYPE OF SOIL	YES	NO
0'	5'	5'	TOPSOIL		X
5'	10'	5'	CALICHE		X
10'	20'	10'	CALICHE/RED SAND		X
20'	38'	18'	RED SAND/CLAY		X
38'	48'	10'	RED SAND		X
48'	57'	9'	TAN SAND/RED CLAY		X



# APACHE CORPORATION

NEDU #206 BOREHOLE MAP

## Legend

-  .36 MILES FROM NEDU 206
-  BOREHOLE 0.36 MILES FROM NEDU 206
-  HAWK B 3 #26
-  NEDU #206





## APACHE CORPORATION:

## NEDU 206

## CLOSURE SAMPLES

SMP PT	DEPTH	FIELD CHL	LAB CHL	BENZENE	TOLUENE	ETHYLENZ ENE	TOTAL XYLENES	TOTAL BTEX	GRO	DRO	EXT DRO	TPH
COMP 1	1'	60	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 2	1'	60	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 3	1'	100	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 4	1'	124	112	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 5	1'	40	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 6	1'	40	<16	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 7	1'	40	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 8	1'	40	<16	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 9	1'	120	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 10	1'	40	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 11	1'	460	432	<0.050	<0.050	<0.050	<0.150	<0.300	<10	97	92.7	199.7
COMP 12	1'	600	544	<0.050	<0.050	<0.050	<0.150	<0.300	<10	96.8	79.3	186.1
COMP 13	1'	600	560	<0.050	<0.050	<0.050	<0.150	<0.300	<10	287	192	489
COMP 14	1'	300	272	<0.050	<0.050	<0.050	<0.150	<0.300	<10	22.6	18.7	51.3
COMP 15	1'	500	464	<0.050	<0.050	<0.050	<0.150	<0.300	<10	81.9	98	189.9
COMP 16	1'	720	688	<0.050	<0.050	<0.050	<0.150	<0.300	<10	105	97.4	212.4
COMP 17	1'	520	480	<0.050	<0.050	<0.050	<0.150	<0.300	<10	21.5	12.1	43.6
COMP 18	1'	400	368	<0.050	<0.050	<0.050	<0.150	<0.300	<10	113	110	233
COMP 19	1'	380	336	<0.050	<0.050	<0.050	<0.150	<0.300	<10	206	130	346
COMP 20	1'	340	320	<0.050	<0.050	<0.050	<0.150	<0.300	<10	83.4	82.4	175.8
COMP 21	1'	300	256	<0.050	<0.050	<0.050	<0.150	<0.300	<10	70.6	87.7	168.3
COMP 22	1'	300	304	<0.050	<0.050	<0.050	<0.150	<0.300	<10	83.6	115	208.6
COMP 23	1'	440	416	<0.050	<0.050	<0.050	<0.150	<0.300	<10	57.4	56.1	123.5
COMP 24	1'	800	720	<0.050	<0.050	<0.050	<0.150	<0.300	<10	83.8	98.3	192.1
COMP 25	1'	740	704	<0.050	<0.050	<0.050	<0.150	<0.300	<10	57.1	51.2	118.3
COMP 26	1'	400	352	<0.050	<0.050	<0.050	<0.150	<0.300	<10	114	70.6	194.6
COMP 27	1'	320	256	<0.050	<0.050	<0.050	<0.150	<0.300	<10	18.2	16	34.2
COMP 28	1'	180	160	<0.050	<0.050	<0.050	<0.150	<0.300	<10	40.4	39.2	79.6
COMP 29	1'	120	96	<0.050	<0.050	<0.050	<0.150	<0.300	<10	39.9	37.7	87.6
COMP 30	1'	240	224	<0.050	<0.050	<0.050	<0.150	<0.300	<10	74.5	75.2	149.7

COMP 31	1'	200	144	<0.050	<0.050	<0.050	<0.150	<0.300	<10	47	48.9	135.9
COMP 32	1'	900	816	<0.050	<0.050	<0.050	<0.150	<0.300	<10	23.3	16.5	49.8
COMP 33	1'	200	224	<0.050	<0.050	<0.050	<0.150	<0.300	<10	30.5	22.8	63.3
COMP 34	1'	520	448	<0.050	<0.050	<0.050	<0.150	<0.300	<10	172	124	306
COMP 35	1'	200	144	<0.050	<0.050	<0.050	<0.150	<0.300	<10	47.5	51.4	108.9
COMP 36	1'	240	224	<0.050	<0.050	<0.050	<0.150	<0.300	<10	76.7	77.8	164.5
COMP 37	1'	800	784	<0.050	<0.050	<0.050	<0.150	<0.300	<10	20.7	10.9	41.6
COMP 38	1'	520	464	<0.050	<0.050	<0.050	<0.150	<0.300	<10	62.3	39.5	111.8
COMP 39	1'	380	304	<0.050	<0.050	<0.050	<0.150	<0.300	<10	32.6	20	62.6
COMP 40	1'	340	304	<0.050	<0.050	<0.050	<0.150	<0.300	<10	146	84.6	240.6
COMP 41	1'	660	608	<0.050	<0.050	<0.050	<0.150	<0.300	<10	40.3	14.1	64.4
COMP 42	1'	220	208	<0.050	<0.050	<0.050	<0.150	<0.300	<10	10.4	<10	34.4
COMP 43	1'	500	480	<0.050	<0.050	<0.050	<0.150	<0.300	<10	27.3	12.8	50.1
COMP 44	1'	800	736	<0.050	<0.050	<0.050	<0.150	<0.300	<10	21.7	<10	41.7
COMP 45	1'	340	320	<0.050	<0.050	<0.050	<0.150	<0.300	<10	22.6	10.1	42.7
COMP 46	1'	1020	1010	<0.050	<0.050	<0.050	<0.150	<0.300	<10	20	<10	40
COMP 47	1'	640	624	<0.050	<0.050	<0.050	<0.150	<0.300	<10	19.6	10.8	40.4
COMP 48	1'	500	528	<0.050	<0.050	<0.050	<0.150	<0.300	<10	16.7	<10	36.7
COMP 49	1'	600	560	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	<30
COMP 50	1'	400	368	<0.050	<0.050	<0.050	<0.150	<0.300	<10	69	21.5	100.5
COMP 51	1'	340	320	<0.050	<0.050	<0.050	<0.150	<0.300	<10	33.5	17.9	61.4
COMP 52	1'	380	352	<0.050	<0.050	<0.050	<0.150	<0.300	<10	10.2	<10	30.2
W1		200	176	<0.050	<0.050	<0.050	<0.150	<0.300	<10	22.4	12.5	44.9
W2		180	176	<0.050	<0.050	<0.050	<0.150	<0.300	<10	22.3	10.3	42.6
W3		280	240	<0.050	<0.050	<0.050	<0.150	<0.300	<10	15.6	<10	35.6
W4		300	272	<0.050	<0.050	<0.050	<0.150	<0.300	<10	10.3	<10	30.3







APACHE CORPORATION  
NEDU 206 - CLOSURE COMPOSITE GPS

SAMPLE ID	LAT	LONG
CP1	32.513524	-103.153424
CP2	32.513544	-103.153356
CP3	32.513539	-103.153316
CP4	32.513534	-103.153285
CP5	32.513516	-103.153247
CP6	32.513223	-103.153210
CP7	32.513499	-103.153189
CP8	32.513499	-103.153189
CP9	32.513404	-103.153181
CP10	32.513357	-103.153188
CP11	32.513314	-103.153198
CP12	32.513286	-103.153218
CP13	32.513486	-103.153149
CP14	32.513444	-103.153144
CP15	32.513405	-103.153146
CP16	32.513359	-103.153148
CP17	32.513141	-103.153141
CP18	32.513281	-103.153173
CP19	32.513472	-103.153096
CP20	32.513427	-103.153101
CP21	32.513390	-103.153098
CP22	32.513354	-103.153100
CP23	32.513310	-103.153104
CP24	32.513267	-103.153132
CP25	32.513261	-103.153092
CP26	32.513463	-103.153050
CP27	32.513427	-103.153050
CP28	32.513394	-103.153049
CP29	32.513362	-103.153047
CP30	32.513331	-103.153049
CP31	32.513299	-103.153037
CP32	32.513262	-103.153050
CP33	32.513437	-103.152984
CP34	32.513407	-103.152976
CP35	32.513378	-103.152984
CP36	32.513333	-103.152989
CP37	32.513262	-103.153001
CP38	32.513378	-103.152913
CP39	32.513331	-103.152939
CP40	32.513297	-103.152959
CP41	32.513265	-103.152955
CP42	32.513343	-103.152895
CP43	32.513303	-103.152903



CP44	32.513263	-103.152903
CP45	32.513300	-103.152846
CP46	32.513257	-103.152852
CP47	32.513253	-103.152818
CP48	32.513248	-103.152771
CP49	32.513293	-103.152784
CP50	32.513244	-103.152732
CP51	32.513246	-103.152684
CP52	32.513244	-103.152646
SW1	32.513521	-103.153459
SW2	32.513365	-103.152860
SW3	32.513245	-103.152593
SW4	32.513243	-103.153028



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

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February 02, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NEDU #206

Enclosed are the results of analyses for samples received by the laboratory on 01/29/21 16:38.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 1 (H210227-01)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/01/2021	ND	2.08	104	2.00	4.93		
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74		
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72		
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41		
Total BTEX	<0.300	0.300	02/01/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 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	48.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 97.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 98.0 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 2 (H210227-02)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 93.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 3 (H210227-03)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 97.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 97.5 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 4 (H210227-04)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 106 % 44.3-144

Surrogate: 1-Chlorooctadecane 107 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 5 (H210227-05)**

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	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 91.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.5 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 6 (H210227-06)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 93.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 7 (H210227-07)**

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	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	32.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-144

Surrogate: 1-Chlorooctadecane 102 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 8 (H210227-08)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 95.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 96.7 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 9 (H210227-09)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/01/2021	ND	2.08	104	2.00	4.93	
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74	
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72	
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41	
Total BTX	<0.300	0.300	02/01/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 87.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/29/2021  
 Reported: 02/02/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 01/29/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: COMPOSITE - 10 (H210227-10)**

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	02/01/2021	ND	2.08	104	2.00	4.93		
Toluene*	<0.050	0.050	02/01/2021	ND	2.00	99.8	2.00	4.74		
Ethylbenzene*	<0.050	0.050	02/01/2021	ND	1.96	97.9	2.00	5.72		
Total Xylenes*	<0.150	0.150	02/01/2021	ND	5.82	97.0	6.00	5.41		
Total BTEx	<0.300	0.300	02/01/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 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	32.0	16.0	02/02/2021	ND	400	100	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	02/01/2021	ND	169	84.4	200	7.62	
DRO >C10-C28*	<10.0	10.0	02/01/2021	ND	170	85.2	200	7.52	
EXT DRO >C28-C36	<10.0	10.0	02/01/2021	ND					

Surrogate: 1-Chlorooctane 98.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

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

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Celey D. Keene, Lab Director/Quality Manager





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>APACHE CORPORATION</u>		P.O. #:		ANALYSIS REQUEST			
Project Manager: <u>BRUCE BAKER</u>		Company: <u>APACHE</u>					
Address: <u>3350 W MARLAND BLVD</u>		Attn: <u>BRUCE BAKER</u>					
City: <u>HOBBS</u> State: <u>NM</u> Zip: <u>88240</u>		Address:					
Phone #: _____ Fax #: _____		City:					
Project #: _____ Project Owner:		State:					
Project Name: <u>NEOY 206</u>		Zip:					
Project Location: <u>NEOY 206 - BRUCE UT</u>		Phone #:					
Sampler Name: <u>MAURICE</u>		Fax #:					

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTX	EX - TPH	CHLORIDE							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :												ACID/BASE:
H21D227	COMPOSITE-1	G	1							1-29	9:00										
	COMPOSITE-2										9:25										
	COMPOSITE-3										9:50										
	COMPOSITE-4										10:25										
	COMPOSITE-5										11:00										
	COMPOSITE-6										11:35										
	COMPOSITE-7										1:15										
	COMPOSITE-8										1:45										
	COMPOSITE-9										2:15										
	COMPOSITE-10										3:00										

Relinquished By: <u>MC</u>		Date: <u>1-29-21</u>	Received By: <u>MAURICE</u>	Time: <u>4:30</u>	Remarks: <u>ATM BRUCE BAKER</u>
Relinquished By:		Date:	Received By:	Time:	Remarks:
Delivered By: (Circle One)		Observed Temp. °C: <u>0.9</u>	Sample Condition	CHECKED BY: <u>(initials)</u>	Turnaround Time: <u>Standard</u>
Sampler - UPS - Bus - Other:		Corrected Temp. °C	<input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Bacteria (only) <input type="checkbox"/> Sample Condition <input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Corrected Temp. °C	Thermometer ID #113 Correction Factor None

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



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February 04, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NEDU #206

Enclosed are the results of analyses for samples received by the laboratory on 02/01/21 16:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 11 (H210252-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	02/03/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	97.0	10.0	02/02/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	92.7	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 85.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	02/01/2021	Sampling Date:	02/01/2021
Reported:	02/04/2021	Sampling Type:	Soil
Project Name:	NEDU #206	Sampling Condition:	Cool & Intact
Project Number:	NEDU #206	Sample Received By:	Tamara Oldaker
Project Location:	EUNICE, NM		

**Sample ID: COMPOSITE 12 (H210252-02)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	544	16.0	02/03/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	96.8	10.0	02/02/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	79.3	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 66.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 71.2 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 13 (H210252-03)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	02/03/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	287	10.0	02/02/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	192	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 93.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 104 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 14 (H210252-04)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	02/03/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	22.6	10.0	02/02/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	18.7	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 80.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.1 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 15 (H210252-05)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35		
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62		
Total BTEx	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	02/03/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	81.9	10.0	02/02/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	98.0	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 87.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.6 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 16 (H210252-06)**

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	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	688	16.0	02/03/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	105	10.0	02/02/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	97.4	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 87.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 17 (H210252-07)**

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	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	02/03/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	21.5	10.0	02/03/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	12.1	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 63.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 65.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 18 (H210252-08)**

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	02/03/2021	ND	2.26	113	2.00	2.35		
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62		
Total BTEx	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	02/03/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	113	10.0	02/03/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	110	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 68.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 72.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 19 (H210252-09)**

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	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	02/03/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	188	93.8	200	6.18	
DRO >C10-C28*	206	10.0	02/03/2021	ND	189	94.7	200	4.76	
EXT DRO >C28-C36	130	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 97.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 105 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 20 (H210252-10)**

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	02/03/2021	ND	2.26	113	2.00	2.35		
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62		
Total BTEx	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	02/03/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	172	86.0	200	7.69	QM-07, QR-03
DRO >C10-C28*	83.4	10.0	02/02/2021	ND	175	87.5	200	7.73	QR-03
EXT DRO >C28-C36	82.4	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 81.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 21 (H210252-11)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	02/03/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	70.6	10.0	02/02/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	87.7	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 82.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 22 (H210252-12)**

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	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	83.6	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	115	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 77.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 23 (H210252-13)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35	
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	57.4	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	56.1	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 75.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.9 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 24 (H210252-14)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2021	ND	2.26	113	2.00	2.35		
Toluene*	<0.050	0.050	02/03/2021	ND	2.21	110	2.00	2.21		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.18	109	2.00	1.75		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.37	106	6.00	1.62		
Total BTEx	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	83.8	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	98.3	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 58.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 64.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 25 (H210252-15)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/02/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/02/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/02/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/02/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	57.1	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	51.2	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 80.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 26 (H210252-16)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/02/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/02/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/02/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/02/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	02/03/2021	ND	416	104	400	8.00		

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	114	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	70.6	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 69.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 27 (H210252-17)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/02/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/02/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/02/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/02/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	02/03/2021	ND	416	104	400	8.00		

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	18.2	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	16.0	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 76.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.5 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 28 (H210252-18)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/02/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/02/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/02/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/02/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	40.4	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	39.2	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 72.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 76.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 29 (H210252-19)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/02/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/02/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/02/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/02/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	39.9	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	37.7	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 76.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 30 (H210252-20)**

BTX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11		
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08		
Total BTX	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	02/03/2021	ND	416	104	400	8.00		

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	74.5	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	75.2	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 71.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 76.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 31 (H210252-21)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	47.0	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	48.9	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 73.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 76.2 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 32 (H210252-22)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	23.3	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	16.5	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 50.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 52.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 33 (H210252-23)**

BTX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11		
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08		
Total BTX	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	02/03/2021	ND	416	104	400	8.00		

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	30.5	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	22.8	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 68.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 71.8 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 34 (H210252-24)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	172	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	124	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 82.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 35 (H210252-25)**

BTX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11		
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08		
Total BTX	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	47.5	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	51.4	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 83.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 36 (H210252-26)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	76.7	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	77.8	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 81.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 37 (H210252-27)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/03/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	784	16.0	02/03/2021	ND	416	104	400	8.00		

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	20.7	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	10.9	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 79.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.0 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 38 (H210252-28)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	62.3	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	39.5	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 78.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 39 (H210252-29)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/03/2021	ND	172	86.0	200	7.69	
DRO >C10-C28*	32.6	10.0	02/03/2021	ND	175	87.5	200	7.73	
EXT DRO >C28-C36	20.0	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 87.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 40 (H210252-30)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	02/03/2021	ND	416	104	400	8.00	

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	02/02/2021	ND	176	87.8	200	7.93	QM-07
DRO >C10-C28*	146	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	84.6	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 61.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.0 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 41 (H210252-31)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	02/03/2021	ND	416	104	400	8.00		

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	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	40.3	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	14.1	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 74.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 81.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 42 (H210252-32)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	10.4	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 74.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.0 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 43 (H210252-33)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	480	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	27.3	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	12.8	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 75.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 44 (H210252-34)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.01	100	2.00	6.11	
Toluene*	<0.050	0.050	02/03/2021	ND	2.03	101	2.00	6.72	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.00	100	2.00	7.22	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.36	106	6.00	7.08	
Total BTEx	<0.300	0.300	02/03/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	736	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	21.7	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 73.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.7 % 42.2-156

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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 45 (H210252-35)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	QR-03
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	QR-03
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	22.6	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	10.1	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 81.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 46 (H210252-36)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTEx	<0.300	0.300	02/03/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1010	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	20.0	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 84.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
 BRUCE BAKER  
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 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 47 (H210252-37)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	02/03/2021	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	19.6	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	10.8	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 86.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 48 (H210252-38)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	16.7	10.0	02/02/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/02/2021	ND					

Surrogate: 1-Chlorooctane 85.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.8 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 49 (H210252-39)**

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33		
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992		
Total BTEx	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	560	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	<10.0	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 85.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 50 (H210252-40)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	02/03/2021	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	69.0	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	21.5	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 78.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 51 (H210252-41)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	33.5	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	17.9	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 69.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 76.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: COMPOSITE 52 (H210252-42)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTEx	<0.300	0.300	02/03/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	10.2	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 78.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 1 (H210252-43)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	02/03/2021	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	22.4	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	12.5	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 76.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	02/01/2021	Sampling Date:	02/01/2021
Reported:	02/04/2021	Sampling Type:	Soil
Project Name:	NEDU #206	Sampling Condition:	Cool & Intact
Project Number:	NEDU #206	Sample Received By:	Tamara Oldaker
Project Location:	EUNICE, NM		

**Sample ID: W 2 (H210252-44)**

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33		
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371		
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555		
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992		
Total BTEX	<0.300	0.300	02/03/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	02/03/2021	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	22.3	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	10.3	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 73.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 3 (H210252-45)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTEx	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	02/03/2021	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	15.6	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 79.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/01/2021  
 Reported: 02/04/2021  
 Project Name: NEDU #206  
 Project Number: NEDU #206  
 Project Location: EUNICE, NM

Sampling Date: 02/01/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 4 (H210252-46)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	1.33	
Toluene*	<0.050	0.050	02/03/2021	ND	2.12	106	2.00	0.371	
Ethylbenzene*	<0.050	0.050	02/03/2021	ND	2.10	105	2.00	0.555	
Total Xylenes*	<0.150	0.150	02/03/2021	ND	6.62	110	6.00	0.992	
Total BTX	<0.300	0.300	02/03/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	02/03/2021	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2021	ND	176	87.8	200	7.93	
DRO >C10-C28*	10.3	10.0	02/03/2021	ND	168	84.2	200	6.50	
EXT DRO >C28-C36	<10.0	10.0	02/03/2021	ND					

Surrogate: 1-Chlorooctane 69.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 74.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager

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

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### Notes and Definitions

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

---

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

---

Celey D. Keene, Lab Director/Quality Manager





ANALYSIS REQUEST

FOR LAB USE ONLY		Lab I.D.		Sample I.D.	
# CONTAINERS					
GROUNDWATER					
WASTEWATER					
SOIL					
OIL					
SLUDGE					
OTHER :					
ACID/BASE:					
ICE / COOL					
OTHER :					
DATE		TIME			
2/1/21					
Composite 11					
Composite 12					
Composite 13					
Composite 14					
Composite 15					
Composite 16					
Composite 17					
Composite 18					
Composite 19					
Composite 20					
Composite 21					
Composite 22					
Composite 23					
Composite 24					
Composite 25					
Composite 26					
Composite 27					
Composite 28					
Composite 29					
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Composite 98					
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Composite 100					
Composite 101					
Composite 102					
Composite 103					
Composite 104					
Composite 105					
Composite 106					
Composite 107					
Composite 108					
Composite 109					
Composite 110					

Delivered By: (Circle One)	Observed Temp. °C <i>1.2</i>	Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	CHECKED BY: (Initials) <i>JO</i>	Turnaround Time:	Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	Bacteria (only) <input checked="" type="checkbox"/>	Sample Condition Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C			Thermometer ID #113	Correction Factor None		Corrected Temp. °C	

FORM-006 R-3 106104/20

Released to Imaging: 3/29/2021 8:24:51 AM





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Atchafalaya Corp</u>		P.O. #:		ANALYSIS REQUEST		
Project Manager: <u>Bruce Baker</u>		Company: <u>Atchafalaya Corp</u>				
Address: <u>8 Ellison Lane</u>		Attn: <u>Bruce Baker</u>				
City: <u>Twice</u>		Address:				
State: <u>NM</u> Zip: <u>88231</u>		City:				
Phone #:		State:				
Fax #:		Zip:				
Project #:		Phone #:				
Project Name: <u>VEDU#206</u>		Fax #:				
Project Location: <u>VEDU#206</u>						
Sampler Name:						
FOR LAB USE ONLY						
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING
				GROUNDWATER		
				WASTEWATER		
				SOIL		
				OIL		
				SLUDGE		
				OTHER :		
				ACID/BASE:		
				ICE / COOL		
				OTHER :		
				DATE	TIME	
<u>4210252</u>	<u>Composite 21</u>	<u>G</u>	<u>1</u>	<u>2/1/21</u>		<u>Chlorides</u>
<u>12</u>	<u>Composite 22</u>					<u>"EXT" TPH</u>
<u>13</u>	<u>Composite 23</u>					<u>BTEX</u>
<u>14</u>	<u>Composite 24</u>					
<u>15</u>	<u>Composite 25</u>					
<u>16</u>	<u>Composite 26</u>					
<u>17</u>	<u>Composite 27</u>					
<u>18</u>	<u>Composite 28</u>					
<u>19</u>	<u>Composite 29</u>					
<u>20</u>	<u>Composite 30</u>					

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Relinquished By:	Date: <u>2-1-21</u>	Received By:	Date: <u>2-1-21</u>
Time: <u>10:55</u>	Time: <u>10:55</u>	Time: <u>10:55</u>	Time: <u>10:55</u>
Delivered By: (Circle One)	Observed Temp. °C	Corrected Temp. °C	Sample Condition
Sampler - UPS - Bus - Other:	<u>1.2</u>	<u>1.2</u>	Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
FORM-006 R-3-1 06/04/20			Checked BY: (Initials) <u>VB</u>
			Turnaround Time: <u>Standard</u> <input checked="" type="checkbox"/> Rush <input type="checkbox"/>
			Thermometer ID #113 <input checked="" type="checkbox"/> None <input type="checkbox"/>
			Bacteria (only) Sample Condition <input checked="" type="checkbox"/> Observed Temp. °C <input type="checkbox"/>
			Corrected Temp. °C <input type="checkbox"/>
			Remarks: <u>Natalie @ Energy Storage LLC. Com</u>
			<u>Larry Baker @ Hachibv.com</u>

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

All Results are emailed. Please provide Email address:

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





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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Archie Corp</u>		P.O. #:		ANALYSIS REQUEST	
Project Manager: <u>Bruce Baker</u>		Company: <u>Archie Corp</u>			
Address: <u>8 Ellison Lane</u>		Attn: <u>Bruce Baker</u>			
City: <u>Kenice</u>		Address:			
State: <u>NM</u> Zip: <u>89031</u>		City:			
Phone #:		State:			
Fax #:		Zip:			
Project #:		Phone #:			
Project Name: <u>Nedra # 206</u>		Fax #:			
Project Location: <u>Nedra # 206</u>					
Sampler Name:					
FOR LAB USE ONLY					
Lab I.D.		Sample I.D.			
<p>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 analysis. 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.</p>		<p>(G) RAB OR (C) OMP.</p>		<p># CONTAINERS</p>	
<p>Relinquished By: <u>[Signature]</u></p>		<p>Received By: <u>[Signature]</u></p>		<p>DATE</p>	
<p>Date: <u>2-1-21</u></p>		<p>Time: <u>1655</u></p>		<p>TIME</p>	
<p>Relinquished By: <u>[Signature]</u></p>		<p>Received By: <u>[Signature]</u></p>		<p>TIME</p>	
<p>Delivered By: (Circle One)</p>		<p>Observed Temp. °C</p>		<p>CHECKED BY: (Initials)</p>	
<p>Sampler - UPS - Bus - Other:</p>		<p>Corrected Temp. °C</p>		<p>Turnaround Time:</p>	
<p>FOR LAB USE ONLY</p>		<p>Sample Condition</p>		<p>Standard</p>	
<p>COOL</p>		<p>Intact</p>		<p>RUSH</p>	
<p>Yes</p>		<p>Yes</p>		<p>Bacteria (only)</p>	
<p>No</p>		<p>No</p>		<p>Sample Condition</p>	
<p>Observed Temp. °C</p>		<p>Corrected Temp. °C</p>		<p>Observed Temp. °C</p>	
<p>Corrected Temp. °C</p>		<p>Observed Temp. °C</p>		<p>Observed Temp. °C</p>	





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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <b>APACHE CORP</b>		P.O. #:		BILL TO				ANALYSIS REQUEST					
Project Manager: <b>Bruce Baker</b>													
Address: <b>8 Ellison Lane</b>		Company: <b>Apache Corp</b>											
City: <b>Farmville</b>		Attn: <b>Bruce Baker</b>											
State: <b>NM</b> Zip: <b>88231</b>		Address:											
Phone #:		City:											
Fax #:		State:											
Project #: <b>11000000000000000000</b>		Zip:											
Project Location: <b>Well # 206</b>		Phone #:											
Sampler Name:		Fax #:											
FOR LAB USE ONLY													
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING	
								GROUNDWATER					
								WASTEWATER					
								SOIL					
								OIL					
								SLUDGE					
								OTHER:					
								ACID/BASE:					
								ICE / COOL					
								OTHER:					
								DATE					
								TIME					
31 Composite 41		X		X		X		X		X		X	
32 Composite 42		X		X		X		X		X		X	
33 Composite 43		X		X		X		X		X		X	
34 Composite 44		X		X		X		X		X		X	
35 Composite 45		X		X		X		X		X		X	
36 Composite 46		X		X		X		X		X		X	
37 Composite 47		X		X		X		X		X		X	
38 Composite 48		X		X		X		X		X		X	
39 Composite 49		X		X		X		X		X		X	
40 Composite 50		X		X		X		X		X		X	

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Relinquished By:	Date: <b>2-1-21</b>	Received By:	Date: <b>2/1/21</b>
Relinquished By:	Time: <b>1:55</b>	Received By:	Time: <b>2:15</b>
Delivered By: (Circle One)	Observed Temp. °C: <b>1.2</b>	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	Corrected Temp. °C:	Cool <input type="checkbox"/> Intact <input type="checkbox"/>	Thermometer ID #113
		Yes <input type="checkbox"/> No <input type="checkbox"/>	Standard <input type="checkbox"/> Rush <input type="checkbox"/>
		Yes <input type="checkbox"/> No <input type="checkbox"/>	Bacteria (only) <input type="checkbox"/>
		Yes <input type="checkbox"/> No <input type="checkbox"/>	Cool Intact <input type="checkbox"/>
		Yes <input type="checkbox"/> No <input type="checkbox"/>	Observed Temp. °C
		Yes <input type="checkbox"/> No <input type="checkbox"/>	Corrected Temp. °C

REMARKS: **Natalie G. Energy Services LLC. Com 1 Larry. Baker @ Apache Corp. Com 1**

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





## Page 53 of 53

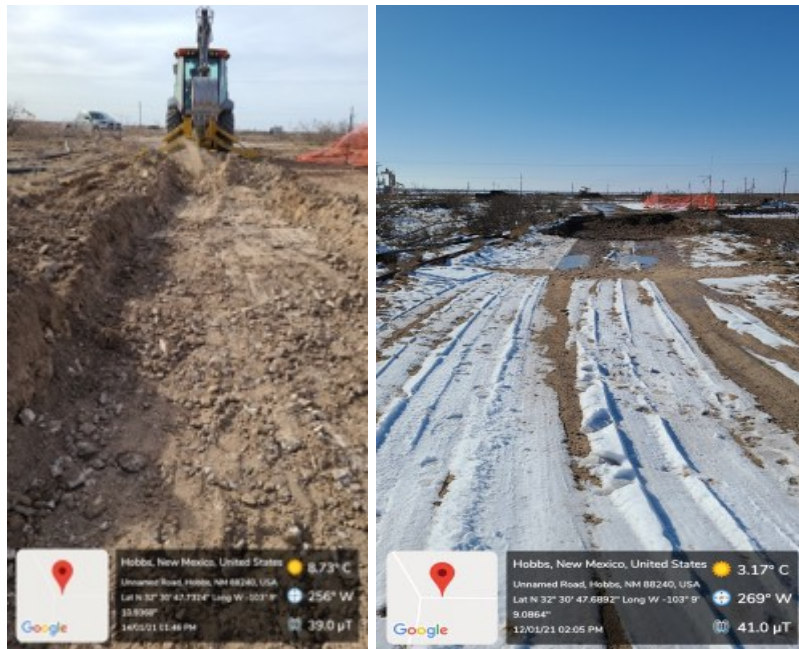
† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)

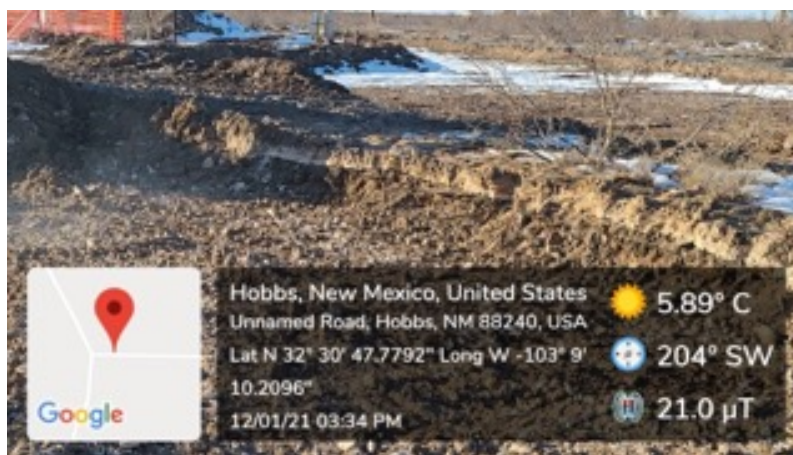
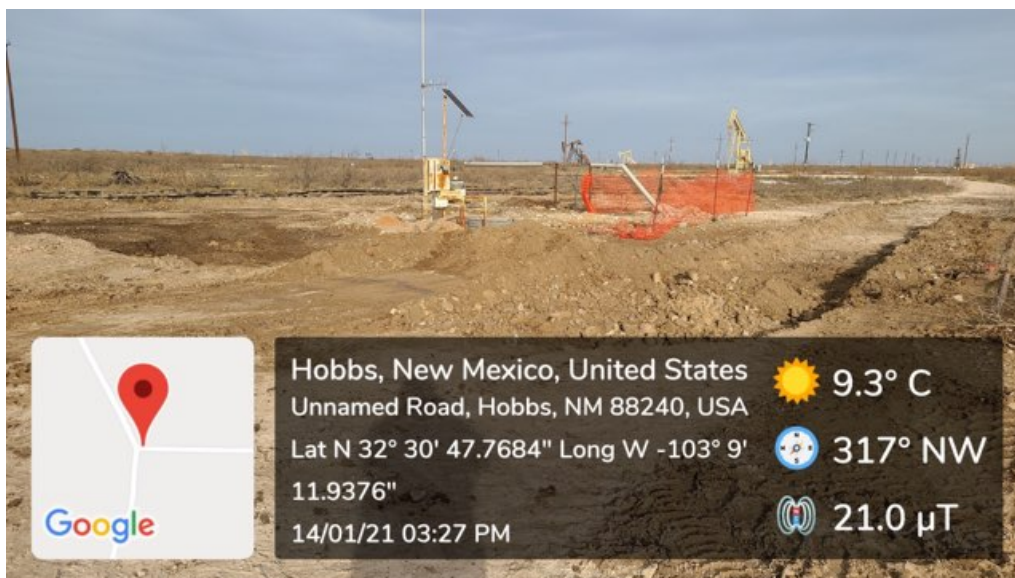




**NEDU #206**  
**REMEDIATION PHOTOS**









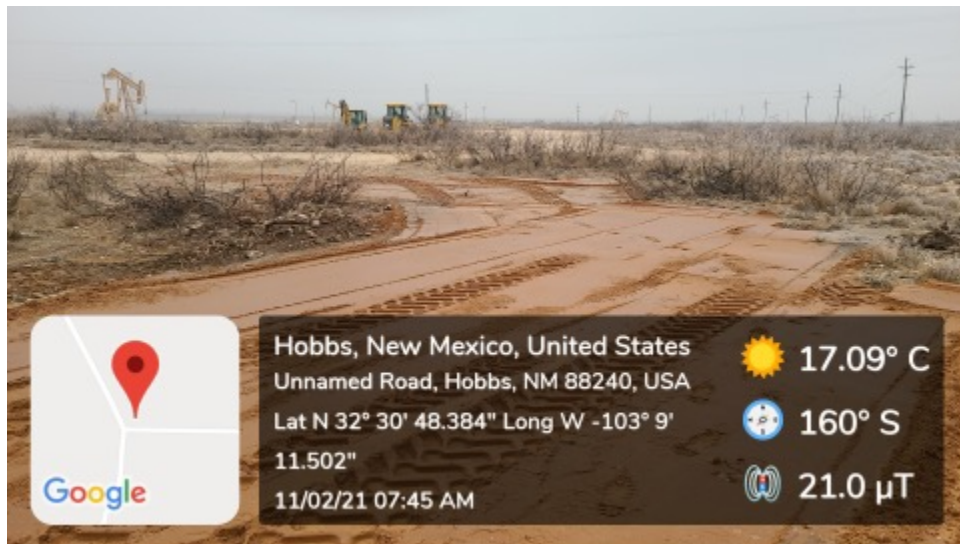
**NEDU #206**  
**FINAL SITE PHOTOS**



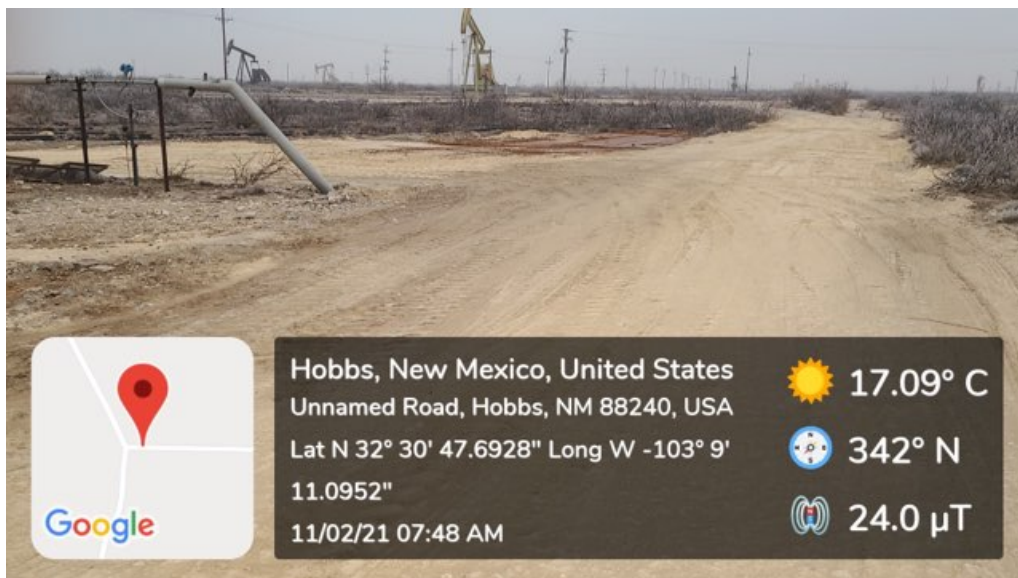
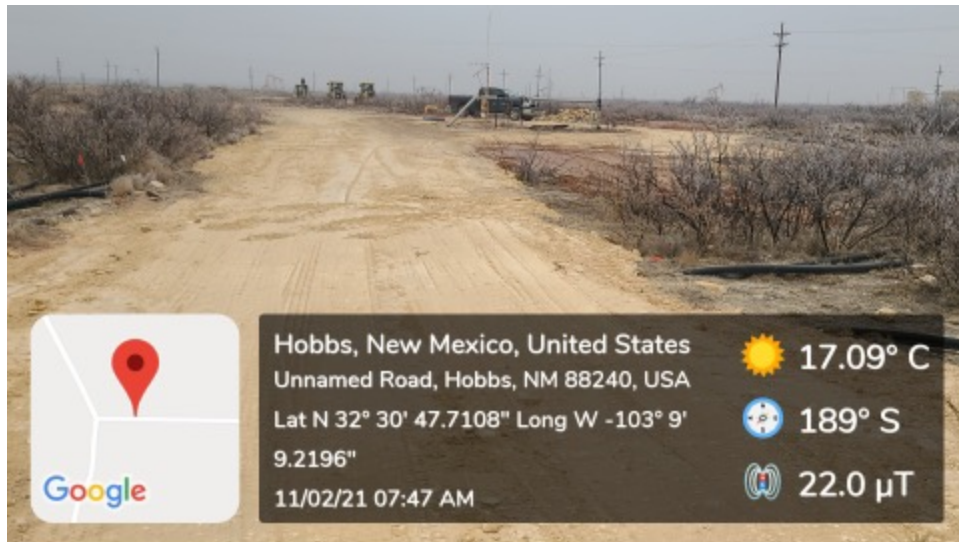




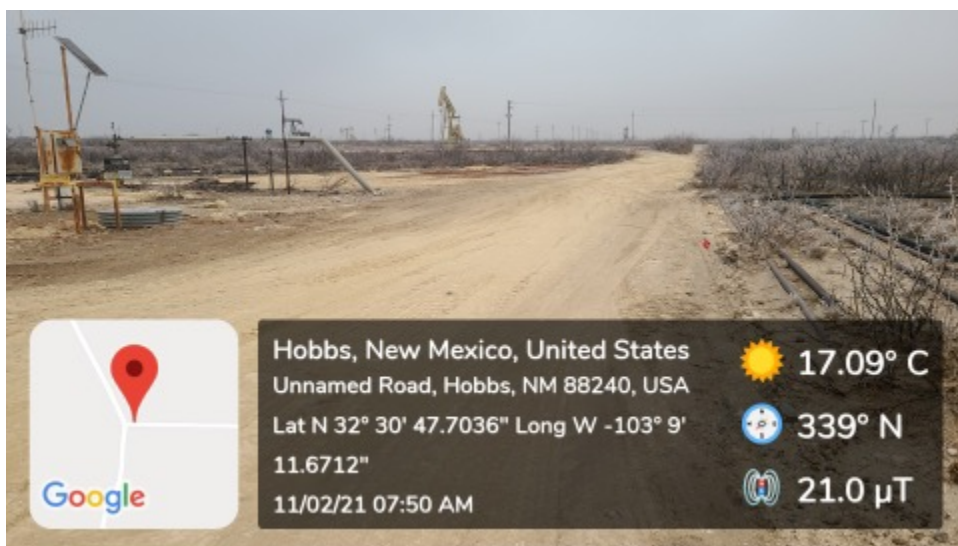
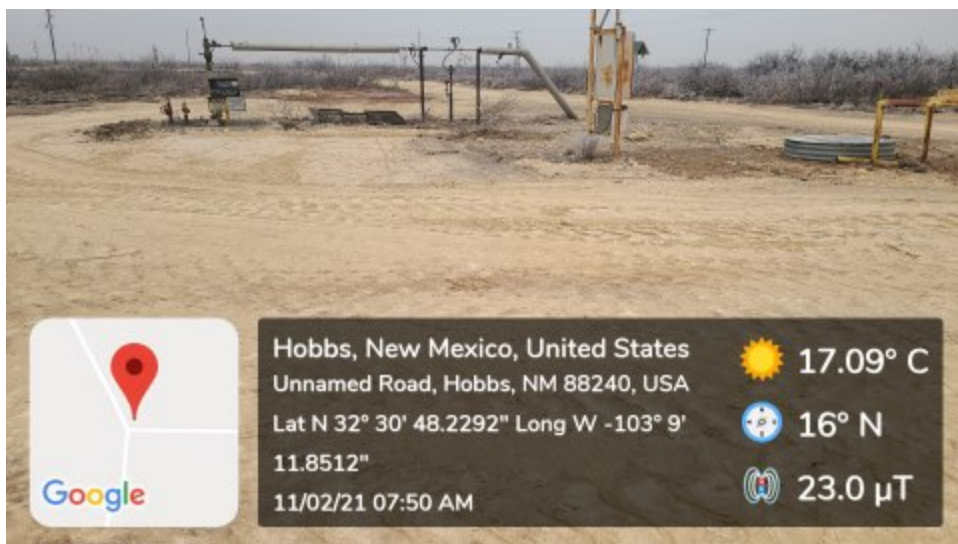
















Incident ID	
District RP	
Facility ID	
Application ID	

## 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: Larry Baker

Title: Environmental Tech SR.

Signature: Larry Baker

Date: 2/11/2021

email: larry.baker@apachecorp.com

Telephone: 432-631-6982

**OCD Only**

Received by: Chad Hensley

Date: 03/29/2021

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

Closure Approved by: Chad Hensley

Date: 03/29/2021

Printed Name: Chad Hensley

Title: Environmental Specialist Advanced

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 17862

CONDITIONS OF APPROVAL

Operator: #1000	APACHE CORPORATION Midland, TX79705	303 Veterans Airpark Ln	OGRID: 873	Action Number: 17862	Action Type: C-141
OCD Reviewer chensley	Condition None				