



2350 W Marland Blvd Hobbs, NM 88240

Closure Report

January 15, 2020

Re: EBDU 55
API# 30-025-06568
Case # 1RP-5314

On 12/09/18 a release occurred due to an injection line failure resulting in the loss of produced water. An initial C-141 was submitted and approved by NMOCD on 2/2/19. The EBDU 55 (GPS Coordinates 32.48433 -103.12243) is located east of Eunice New Mexico in unit letter D section 13 township 21S range 37E. A groundwater survey was conducted utilizing data from NMOSE and USGS web sites. The average depth of groundwater is 59 feet below ground surface. On 9/20/2019 Apache Corporation drilled a monitor well associated with EBDU 37 (1RP-5636) release which is located south of the EBDU 55 release. The gauged water depth of the well was 57 feet below ground surface verifying depth of groundwater greater than 50 feet.

Apache Corporation excavated the well pad area south of the release source to a depth of 1 foot below ground surface. Final 5 point wall and bottom composite samples were collected not to exceed 200 square feet and submitted to a commercial laboratory for analysis of chloride, TPH, and BETEX. Laboratory analysis were all below table one closure criteria for releases 51-100 feet to groundwater. All excavated material (520 cubic yards) was hauled to a NMOCD approved disposal facility. The excavation was backfilled with clean imported caliche.

Apache Corporation has completed remediation activities in accordance with NMOCD closure criteria and respectfully request closure for 1RP-5314.

Enclosed: C-141, Groundwater Data, Map, Sample Data, Laboratory Analysis, and Photos.

Submitted by;

Bruce Baker

Environmental Technician

larry.baker@apachecorp.com

Cell# 432-631-6982

Off# 575-393-7106

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

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

Incident ID	NCH1903357465
District RP	1RP-5314
Facility ID	
Application ID	pCH1903357646

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 #	NCH1903357465 EBDU 55 @
Contact mailing address	2350 W. Marland BLVD Hobbs, NM 88240		30-025-06568

Location of Release Source

Latitude 32.48433 Longitude -103.12243
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	EBDU 55	Site Type	Injection well
Date Release Discovered	12/09/18	API# (if applicable)	30-025-06568

Unit Letter	Section	Township	Range	County
D	13	21S	37E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name NB Bunin Properties, LLP)

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) <u>533 barrels</u>	Volume Recovered (bbls) <u>360 barrels</u>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input 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 injection line failed resulting in release of produced water

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Oil Conservation Division

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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? Greater than 25 barrels of fluid loss.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Bruce Baker notified Olivia Yu, Christina Hernandez and Jim Griswold via email on 12/10/18 at 12:03 pm	

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 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: The release was naturally contained due to the construction of the lease road.	
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> Signature: <u>Bruce Baker</u> email: <u>larry.baker@apachecorp.com</u>	Title: <u>Environmental Tech SR</u> Date: <u>12-19-18</u> Telephone: <u>432-631-6982</u>
OCD Only Received by: RECEIVED By CHernandez at 3:55 pm, Feb 02, 2019	

Volume Calculation

2,610 cubic feet X 7.48 gallons per cubic foot=22,132 gallons/42 gallons to a barrel= 526 barrels
multiplied by .33 soil porosity = 173 barrels + 360 recovered = 533 barrels

Remediation Activities

To date the release area the wet area has been scraped and placed on plastic for disposal.

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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>59</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

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

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

Printed Name: Bruce Baker Title: Environmental Tech SR.

Signature: Bruce Baker Date: 3/8/19

email: larry.baker@apachecorp.com Telephone: 482-631-6982

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Bruce Baker Title: Environmental Tech SR.
 Signature: Bruce Baker Date: 1-15-20
 email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



Baker, Larry

From: Rachel Owen <rowen@laenvironmental.com>
Sent: Thursday, January 09, 2020 4:16 PM
To: Baker, Larry
Subject: [EXTERNAL] EBDU #37 Information

Hello Bruce,

I checked our data for TMW-2 and we gauged it at approximately 55 feet bgs when it was first installed. During the last water sampling event in 12/26/19, the well was gauged at 57.50 feet bgs. The gps coordinates to the well are 32°28'50.86"N, 103° 7'17.26"W. Please let me know if there is anything that need.

Thank you,

Rachel

WARNING EXTERNAL EMAIL: This email is from an external source. Do not click links or open attachments without positive sender verification of purpose. Never enter Username, Password or sensitive information on linked pages from this email. If you are unsure about the message, please contact the Apache IT ServiceDesk for assistance.

BORING RECORD							
GEOLOGIC UNIT	DEPTH	Start: 15:02 Finish: 15:55 DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	Surface Elevation: 3,563.50' TOC Elevation: 3,566.23'		REMARKS
					NUMBER	RECOVERY	DEPTH
	0	Silty Clay, 10YR, 5/6, Ash Brown, Dry	CL				15:02
	5	Caliche, 7.5YR, 8/2, Pinkish White, Sandy to Moderate Very Fine Grained Quartz Sand	Caliche				15:03
	10						15:05
	15	Silty Sand, 7.5YR, 7/2, Pinkish Gray, Very Fine Grained Quartz Sand, Poorly Sorted, Dry	SM				15:10
	20						15:15
	25	Sand, 5YR, 6/0, Reddish Yellow, Very Fine Grained Quartz Sand, Poorly Sorted, Dry					15:17
	30		SW				15:22
	35						15:23
	40						15:28
	45	Sand, 5YR, 6/6, Reddish Yellow, Moderate Well Cemented, Poorly Sorted, Dry	SW				15:30
Continue							

ONE CONTINUOUS AUGER SAMPLER

STANDARD PENETRATION TEST

UNDISTURBED SAMPLE

WATER TABLE (24 HRS)

WATER TABLE (TIME OF BORING)

LABORATORY TEST LOCATION

PENETROMETER (TONS/ SQ. FT)

NO RECOVERY

JOB NUMBER : Apache Corp. / 19-0112-49

HOLE DIAMETER : 5"

LOCATION : EBDU #37

LAI GEOLOGIST : M. Larson

DRILLING CONTRACTOR : SDC

DRILLING METHOD : Air Rotary

Larson & Associates, Inc.
Environmental Consultants

DRILL DATE : 9-20-2019

BORING NUMBER : TMW-2

BORING RECORD									
GEOLOGIC UNIT	DEPTH	Start: 15:02 Finish: 15:55	DESCRIPTION USCS	GRAPHIC LOG	Surface Elevation: 3,563.50' TOC Elevation: 3,566.23'	REMARKS			
		DESCRIPTION LITHOLOGIC			*Continue*	NUMBER	RECOVERY	DEPTH	BACKGROUND PID READING
	50	*Continue*							
	55	Silty and Clayey Below 50', Moist at 55'							
	60		SM-SC						
	65								
	70								
	75								
		Gravel, 7.5YR, 4/3, Light Brown, Poorly Sorted, Round, Red Bed	GW						
	80	TD: 79'							

<div style="display: flex; justify-content: space-between;"> <div> <div></div> ONE CONTINUOUS AUGER SAMPLER </div> <div> <div></div> STANDARD PENETRATION TEST </div> <div> <div></div> UNDISTURBED SAMPLE </div> <div> <div></div> WATER TABLE (24 HRS) </div> </div>	<div style="display: flex; justify-content: space-between;"> <div> <div></div> WATER TABLE (TIME OF BORING) </div> <div> <div></div> LABORATORY TEST LOCATION </div> <div> <div></div> PENETROMETER (TONS/ SQ. FT) </div> <div> <div></div> NO RECOVERY </div> </div>	JOB NUMBER : Apache Corp. / 19-0112-49 HOLE DIAMETER : 5" LOCATION : EBDU #37 LAI GEOLOGIST : M. Larson DRILLING CONTRACTOR : SDC DRILLING METHOD : Air Rotary
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	DRILL DATE : 9-20-2019	BORING NUMBER : TMW-2
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New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 01221 POD1	4	4	4	11	21S	37E	676254	3588506

Driller License: 1711	Driller Company: STRAUB CORPORATION		
Driller Name: MARTIN STRAUB			
Drill Start Date: 11/07/2013	Drill Finish Date: 11/07/2013	Plug Date:	
Log File Date: 12/09/2013	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size: 4.00	Depth Well: 75 feet	Depth Water: 60 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	60	66	Sandstone/Gravel/Conglomerate
	66	75	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	50	75


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

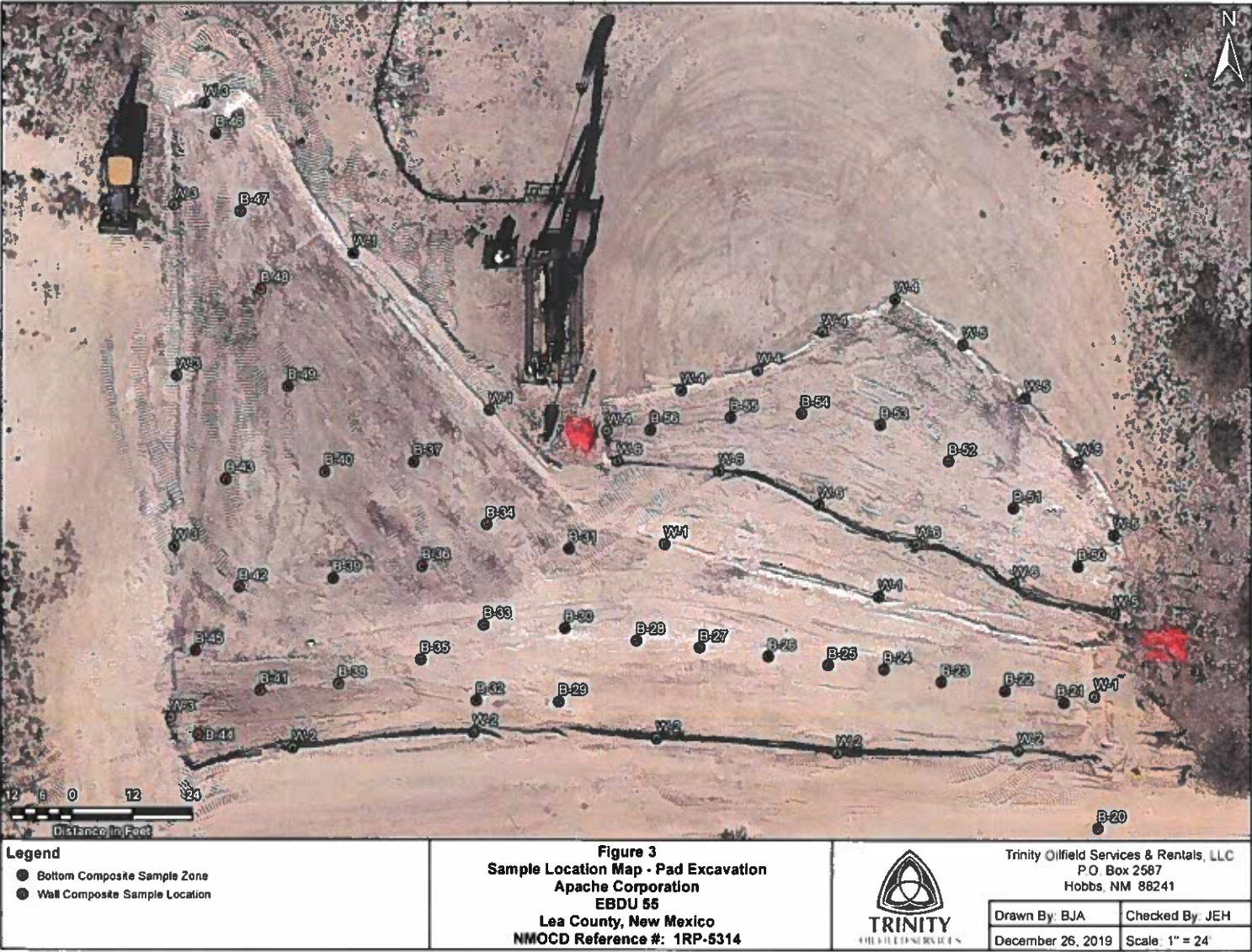
3/6/19 11:02 AM

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POD SUMMARY - CP 01221 POD1



Legend ● Composite Sample Zone	Figure 2 Sample Location Map - Road Excavation Apache Corporation EBDU 55 Lea County, New Mexico NMOCD Reference #: 1RP-5314	 TRINITY OILFIELD SERVICES	<p>Trinity Oilfield Services & Rentals, LLC P.O. Box 2587 Hobbs, NM 88241</p> <table border="1"><tr><td>Drawn By: BJA</td><td>Checked By: JEH</td></tr><tr><td>December 26, 2019</td><td>Scale: 1" = 100'</td></tr></table>	Drawn By: BJA	Checked By: JEH	December 26, 2019	Scale: 1" = 100'
Drawn By: BJA	Checked By: JEH						
December 26, 2019	Scale: 1" = 100'						



NEDU Injection Line
Complete List

Bottom Samples													
B1	10/31/2019	B-1 @ Surface	Surface	2720	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	14	<10.0
B2	10/31/2019	B-2 @ Surface	Surface	368	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	25.5	<10.0
B3	10/31/2019	B-3 @ Surface	Surface	1520	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B4	10/31/2019	B-4 @ Surface	Surface	336	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B5	10/31/2019	B-5 @ Surface	Surface	224	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B6	10/31/2019	B-6 @ Surface	Surface	128	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B7	10/31/2019	B-7 @ Surface	Surface	32	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	10.4	<10.0
B8	10/31/2019	B-8 @ Surface	Surface	64	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B9	10/31/2019	B-9 @ Surface	Surface	80	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	48.3	<10.0
B10	10/31/2019	B-10 @ Surface	Surface	80	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B11	10/31/2019	B-11 @ Surface	Surface	368	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B12	10/31/2019	B-12 @ Surface	Surface	176	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B13	10/31/2019	B-13 @ Surface	Surface	96	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	15.4	<10.0
B14	10/31/2019	B-14 @ Surface	Surface	64	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B15	10/31/2019	B-15 @ Surface	Surface	112	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B16	10/31/2019	B-16 @ Surface	Surface	448	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	32.4	<10.0
B17	10/31/2019	B-17 @ Surface	Surface	48	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	189	<10.0
B18	10/31/2019	B-18 @ Surface	Surface	16	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	119	<10.0
B19	10/31/2019	B-19 @ Surface	Surface	144	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	335	84.8
B20	10/31/2019	B-20 @ Surface	Surface	64	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	140	27.3
B21	11/4/2019	B-21 @ 1'	1'	176	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	28	<10.0
B22	11/4/2019	B-22 @ 1'	1'	96	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	459	120
B23	11/4/2019	B-23 @ 1'	1'	96	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B24	11/4/2019	B-24 @ 1'	1'	96	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	177	44.2
B25	11/4/2019	B-25 @ 1'	1'	64	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	180	25.7
B26	11/4/2019	B-26 @ 1'	1'	48	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B27	11/4/2019	B-27 @ 1'	1'	32	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B28	11/4/2019	B-28 @ 1'	1'	48	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B29	11/4/2019	B-29 @ 1'	1'	32	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B30	11/4/2019	B-30 @ 1'	1'	48	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B31	11/4/2019	B-31 @ 1'	1'	48	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B32	11/4/2019	B-32 @ 1'	1'	32	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B33	11/4/2019	B-33 @ 1'	1'	48	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B34	11/4/2019	B-34 @ 1'	1'	32	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B35	11/4/2019	B-35 @ 1'	1'	32	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B36	11/4/2019	B-36 @ 1'	1'	96	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B37	11/4/2019	B-37 @ 1'	1'	96	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B38	11/4/2019	B-38 @ 1'	1'	16	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B39	11/4/2019	B-39 @ 1'	1'	64	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B40	11/4/2019	B-40 @ 1'	1'	144	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B41	11/4/2019	B-41 @ 1'	1'	160	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0

NEDU Injection Line
Complete List

B42	11/4/2019	B-42 @ 1'	1'	144	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B43	11/4/2019	B-43 @ 1'	1'	208	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B44	11/4/2019	B-44 @ 1'	1'	144	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B45	11/4/2019	B-45 @ 1'	1'	208	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	11.9
B46	11/4/2019	B-46 @ 1'	1'	208	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	11.9
B47	11/4/2019	B-47 @ 1'	1'	160	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B48	11/4/2019	B-48 @ 1'	1'	144	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	10.8
B49	11/4/2019	B-49 @ 1'	1'	96	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B50	11/4/2019	B-50 @ 1'	1'	288	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B51	11/4/2019	B-51 @ 1'	1'	192	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B52	11/4/2019	B-52 @ 1'	1'	160	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	14.1
B53	11/4/2019	B-53 @ 1'	1'	160	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B54	11/4/2019	B-54 @ 1'	1'	144	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B55	11/4/2019	B-55 @ 1'	1'	160	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
B56	11/4/2019	B-56 @ 1'	1'	160	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0

NEDU Injection Line
Complete List

Map ID	Sample Date	Sample ID	Depth	Chloride	Benzene	Toulene	Ethylbenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO
Well Samples												
W1	11/4/2019	W-1 @ 1'	1'	192	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
W2	11/4/2019	W-2 @ 1'	1'	192	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
W3	11/4/2019	W-3 @ 1'	1'	128	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
W4	11/4/2019	W-4 @ 1'	1'	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
W5	11/4/2019	W-5 @ 1'	1'	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
W6	11/4/2019	W-6 @ 1'	1'	112	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0



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

November 05, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EBDU #55

Enclosed are the results of analyses for samples received by the laboratory on 10/31/19 16:20.

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.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 1 SURFACE (H903729-01)

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	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2720	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	14.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 90.9 % 41-142

Surrogate: 1-Chlorooctadecane 91.7 % 37.6-147

Cardinal Laboratories

*=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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 2 SURFACE (H903729-02)

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	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 85.1 % 41-142

Surrogate: 1-Chlorooctadecane 82.3 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 3 SURFACE (H903729-03)

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	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1520	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 79.5 % 41-142

Surrogate: 1-Chlorooctadecane 75.9 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 4 SURFACE (H903729-04)

BTEX 80218			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2019	ND	1.94	97.2	2.00	4.64		
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51		
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0		
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15		
Total BTEX	<0.300	0.300	11/04/2019	ND						

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

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	336	16.0	11/05/2019	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	11/01/2019	ND	212	106	200	4.55		
DRO >C10-C28*	<10.0	10.0	11/01/2019	ND	206	103	200	4.01		
EXT DRO >C28-C36	<10.0	10.0	11/01/2019	ND						

Surrogate: 1-Chlorooctane 83.2 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 5 SURFACE (H903729-05)

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	11/04/2019	ND	1.94	97.2	2.00	4.64		
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51		
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0		
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15		
Total BTX	<0.300	0.300	11/04/2019	ND						

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

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AC
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55		
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01		
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND						

Surrogate: 1-Chlorooctane 69.1 % 41-142

Surrogate: 1-Chlorooctadecane 64.3 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 6 SURFACE (H903729-06)

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	11/04/2019	ND	1.94	97.2	2.00	4.64		
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51		
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0		
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15		
Total BTX	<0.300	0.300	11/04/2019	ND						

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

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	128	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55		
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01		
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND						

Surrogate: 1-Chlorooctane 76.9 % 41-142

Surrogate: 1-Chlorooctadecane 74.1 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 7 SURFACE (H903729-07)

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	11/04/2019	ND	1.94	97.2	2.00	4.64		
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51		
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0		
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15		
Total BTEX	<0.300	0.300	11/04/2019	ND						

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

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	32.0	16.0	11/05/2019	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	11/01/2019	ND	212	106	200	4.55		
DRO >C10-C28*	<10.0	10.0	11/01/2019	ND	206	103	200	4.01		
EXT DRO >C28-C36	<10.0	10.0	11/01/2019	ND						

Surrogate: 1-Chlorooctane 75.0 % 41-142

Surrogate: 1-Chlorooctadecane 80.8 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 8 SURFACE (H903729-08)

BTEX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTEX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/05/2019	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	11/01/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/01/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/01/2019	ND					

Surrogate: 1-Chlorooctane 78.6 % 41-142

Surrogate: 1-Chlorooctadecane 84.6 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 9 SURFACE (H903729-09)

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	11/04/2019	ND	1.94	97.2	2.00	4.64			
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51			
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0			
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15			
Total BTX	<0.300	0.300	11/04/2019	ND							

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

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	80.0	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55			
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01			
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND							

Surrogate: 1-Chlorooctane 67.0 % 41-142

Surrogate: 1-Chlorooctadecane 64.4 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 10 SURFACE (H903729-10)

BTX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 87.6 % 41-142

Surrogate: 1-Chlorooctadecane 84.9 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 11 SURFACE (H903729-11)**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	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTEX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B**mg/kg****Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 85.2 % 41-142

Surrogate: 1-Chlorooctadecane 80.5 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 12 SURFACE (H903729-12)**BTEX 80218****mg/kg****Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTEX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B**mg/kg****Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/05/2019	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	11/01/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/01/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/01/2019	ND					

Surrogate: 1-Chlorooctane 85.1 % 41-142

Surrogate: 1-Chlorooctadecane 93.2 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 13 SURFACE (H903729-13)

BTX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/05/2019	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	11/02/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/02/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/02/2019	ND					

Surrogate: 1-Chlorooctane 84.0 % 41-142

Surrogate: 1-Chlorooctadecane 93.3 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 14 SURFACE (H903729-14)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 80.4 % 41-142

Surrogate: 1-Chlorooctadecane 80.6 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 15 SURFACE (H903729-15)

BTEx 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTEx	<0.300	0.300	11/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 97.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 69.4 % 41-142

Surrogate: 1-Chlorooctadecane 70.2 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 16 SURFACE (H903729-16)

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	11/04/2019	ND	1.94	97.2	2.00	4.64	
Toluene*	<0.050	0.050	11/04/2019	ND	1.65	82.3	2.00	8.51	
Ethylbenzene*	<0.050	0.050	11/04/2019	ND	1.66	83.1	2.00	11.0	
Total Xylenes*	<0.150	0.150	11/04/2019	ND	5.37	89.4	6.00	5.15	
Total BTEX	<0.300	0.300	11/04/2019	ND					

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

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	11/05/2019	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	11/04/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 90.0 % 41-142

Surrogate: 1-Chlorooctadecane 89.7 % 37.6-147

Cardinal Laboratories

* = 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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 17 SURFACE (H903729-17)

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	11/05/2019	ND	1.97	98.4	2.00	4.52	
Toluene*	<0.050	0.050	11/05/2019	ND	1.65	82.6	2.00	2.64	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.74	87.0	2.00	0.291	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.23	87.1	6.00	1.94	
Total BTX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/05/2019	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	11/02/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/02/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/02/2019	ND					

Surrogate: 1-Chlorooctane 82.5 % 41-142

Surrogate: 1-Chlorooctadecane 91.3 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 18 SURFACE (H903729-18)

BTX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.97	98.4	2.00	4.52	
Toluene*	<0.050	0.050	11/05/2019	ND	1.65	82.6	2.00	2.64	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.74	87.0	2.00	0.291	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.23	87.1	6.00	1.94	
Total BTX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/05/2019	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	11/02/2019	ND	212	106	200	4.55	
DRO >C10-C28*	<10.0	10.0	11/02/2019	ND	206	103	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/02/2019	ND					

Surrogate: 1-Chlorooctane 75.1 % 41-142

Surrogate: 1-Chlorooctadecane 83.1 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 19 SURFACE (H903729-19)

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	11/05/2019	ND	1.97	98.4	2.00	4.52	
Toluene*	<0.050	0.050	11/05/2019	ND	1.65	82.6	2.00	2.64	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.74	87.0	2.00	0.291	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.23	87.1	6.00	1.94	
Total BTX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 95.4 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	11/05/2019	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2019	ND	226	113	200	0.366	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	225	113	200	2.40	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 91.0 % 41-142

Surrogate: 1-Chlorooctadecane 92.7 % 37.6-147

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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: 10/31/2019
 Reported: 11/05/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 10/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 20 SURFACE (H903729-20)

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	11/05/2019	ND	1.97	98.4	2.00	4.52	
Toluene*	<0.050	0.050	11/05/2019	ND	1.65	82.6	2.00	2.64	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.74	87.0	2.00	0.291	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.23	87.1	6.00	1.94	
Total BTEX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/05/2019	ND	416	104	400	3.92	
TPH 8015M		mg/kg	Analyzed By: CK						

TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2019	ND	226	113	200	0.366	
DRO >C10-C28*	<10.0	10.0	11/04/2019	ND	225	113	200	2.40	
EXT DRO >C28-C36	<10.0	10.0	11/04/2019	ND					

Surrogate: 1-Chlorooctane 95.3 % 41-142

Surrogate: 1-Chlorooctadecane 96.2 % 37.6-147

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Notes and Definitions

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- 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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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Apache Corporation</u> Project Manager: <u>Jeff Brown / Bruce Baker</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: <u>EGDN #55</u> Project Location: <u>Encke, NM</u> Sampler Name: <u>Daniel Ressler</u> <small>FOR LAB USE ONLY</small>				BILL TO P.O. #: _____ Company: _____ Attn: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____			
Lab I.D. _____ Sample I.D. _____ 1 <u>B-1 Surface</u> 2 <u>B-2 Surface</u> 3 <u>B-3 Surface</u> 4 <u>B-4 Surface</u> 5 <u>B-5 Surface</u> 6 <u>B-6 Surface</u> 7 <u>B-7 Surface</u> 8 <u>B-8 Surface</u> 9 <u>B-9 Surface</u> 10 <u>B-10 Surface</u>				(G)RAB OR (C)OMP. _____ # CONTAINERS _____ MATRIX GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____			
DATE <u>10/31/14</u> TIME <u>3:25</u> DATE <u>10/31/14</u> TIME <u>3:27</u> DATE <u>10/31/14</u> TIME <u>3:29</u> DATE <u>10/31/14</u> TIME <u>3:30</u> DATE <u>10/31/14</u> TIME <u>3:32</u> DATE <u>10/31/14</u> TIME <u>3:34</u> DATE <u>10/31/14</u> TIME <u>3:36</u> DATE <u>10/31/14</u> TIME <u>3:37</u> DATE <u>10/31/14</u> TIME <u>3:39</u> DATE <u>10/31/14</u> TIME <u>3:41</u>				CL _____ EXT. TPH _____ BTEX _____			
Relinquished By: <u>[Signature]</u> Date: <u>10/31/14</u> Received By: <u>[Signature]</u> Relinquished By: <u>[Signature]</u> Date: <u>10/31/14</u> Received By: <u>[Signature]</u>				Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add Phone #: _____ All Results are emailed. Please provide Email address: _____			
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____ Observed Temp. °C <u>3.3</u> Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C <u>3.7</u> Checked By: <u>[Signature]</u>				Turnaround Time: _____ Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID #97 _____ Bacteria (only) Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Correction Factor +0.4 °C _____ Observed Temp. °C _____ Corrected Temp. °C _____			

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



CARDINAL
Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Apache Corporation				BILL TO				ANALYSIS REQUEST								
Project Manager: Jeff Brown / Bruce Butler				P.O. #:												
Address:				Company:												
City:				Attn:												
State:				Address:												
Zip:				City:												
Phone #:				State:				Zip:								
Fax #:				Phone #:												
Project #:				Project Owner:												
Project Name: EBDV #55																
Project Location: Eunice, NM																
Sampler Name: Daniel Risher				Fax #:												
FOR LAB USE ONLY																
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	PRESERV. ACID/BASE: ICE / COOL OTHER :	SAMPLING DATE TIME	CL	EXT TPH	ISTEX							
H963729	B-11 Surface					10/31/14 3:42	<input checked="" type="checkbox"/>									
	B-12 Surface					3:44	<input checked="" type="checkbox"/>									
	B-13 Surface					3:46	<input checked="" type="checkbox"/>									
	B-14 Surface					3:48	<input checked="" type="checkbox"/>									
	B-15 Surface					3:49	<input checked="" type="checkbox"/>									
	B-16 Surface					3:50	<input checked="" type="checkbox"/>									
	B-17 Surface					3:52	<input checked="" type="checkbox"/>									
	B-18 Surface					3:54	<input checked="" type="checkbox"/>									
	B-19 Surface					3:56	<input checked="" type="checkbox"/>									
	B-20 Surface					4:00	<input checked="" type="checkbox"/>									

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Relinquished By: [Signature]	Date: 10/31/14	Received By: [Signature]	Date: 10/31/14
Reinquired By: [Signature]	Date: 11/14/14	Received By: [Signature]	Date: 11/14/14

REMARKS: Ben & Trinity Oilfield Services, CRM

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.3	Sample Condition <input checked="" type="checkbox"/> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: [Signature] (Initials)	Turnaround Time:	Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition <input type="checkbox"/> Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No
Corrected Temp. °C 3.7	Time:	Thermometer ID #97	Correction Factor +0.4 °C	Add'l Phone #:	Corrected Temp. °C



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

November 07, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EBDU #55

Enclosed are the results of analyses for samples received by the laboratory on 11/04/19 16:25.

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.

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 "Coley D. Keene". The signature is fluid and cursive, with the first name "Coley" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 21 @1 (H903754-01)

BTX 8021B		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/06/2019	ND	432	108	400	3.77	
TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 96.9 % 41-142

Surrogate: 1-Chlorooctadecane 97.9 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 22 @1 (H903754-02)

BTX 80218			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 97.9 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2019	ND	432	108	400	3.77	
TPH 8015M			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 94.5 % 41-142

Surrogate: 1-Chlorooctadecane 95.7 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 23 @1 (H903754-03)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTEX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 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	96.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 104 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 24 @1 (H903754-04)

BTX 80218		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2019	ND	432	108	400	3.77	
TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 96.6 % 41-142

Surrogate: 1-Chlorooctadecane 98.8 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 25 @1 (H903754-05)

BTX 8021B		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 98.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 99.3 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 26 @1 (H903754-06)

BTX 80218		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/06/2019	ND	432	108	400	3.77	
TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 94.1 % 41-142

Surrogate: 1-Chlorooctadecane 95.7 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 27 @1 (H903754-07)

BTEX 80218			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72		
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27		
Total BTEX	<0.300	0.300	11/05/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 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	32.0	16.0	11/06/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 103 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 28 @1 (H903754-08)

BTEX 8021B		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTEX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 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	11/06/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 29 @1 (H903754-09)

BTEX 8021B		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTEX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/06/2019	ND	432	108	400	3.77	
TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 30 @1 (H903754-10)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTEX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 99.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/06/2019	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 93.0 % 41-142

Surrogate: 1-Chlorooctadecane 94.4 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 31 @1 (H903754-11)

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72		
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27		
Total BTEX	<0.300	0.300	11/05/2019	ND						

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

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	11/06/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 92.7 % 41-142

Surrogate: 1-Chlorooctadecane 95.4 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 32 @1 (H903754-12)

BTX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72		
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27		
Total BTX	<0.300	0.300	11/05/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 99.7 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/06/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 98.2 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 33 @1 (H903754-13)

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72		
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27		
Total BTEX	<0.300	0.300	11/05/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 99.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 88.2 % 41-142

Surrogate: 1-Chlorooctadecane 89.7 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 34 @1 (H903754-14)

BTX 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 95.0 % 41-142

Surrogate: 1-Chlorooctadecane 96.8 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 35 @1 (H903754-15)

BTEX 80218			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72		
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27		
Total BTEX	<0.300	0.300	11/05/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 99.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 94.6 % 41-142

Surrogate: 1-Chlorooctadecane 96.8 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 36 @1 (H903754-16)

BTEx 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72		
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27		
Total BTEx	<0.300	0.300	11/05/2019	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	231	116	200	0.986	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	228	114	200	2.88	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 90.6 % 41-142

Surrogate: 1-Chlorooctadecane 90.6 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 37 @1 (H903754-17)**BTEX 80218****mg/kg****Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTEX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.9 % 73.3-129

Chloride, SM4500Cl-B**mg/kg****Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M**mg/kg****Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 83.6 % 41-142

Surrogate: 1-Chlorooctadecane 82.8 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 38 @1 (H903754-18)

BTX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72		
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27		
Total BTX	<0.300	0.300	11/05/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 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	16.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 83.6 % 41-142

Surrogate: 1-Chlorooctadecane 83.5 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 39 @1 (H903754-19)**BTEX 8021B**

mg/kg

Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTEX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 98.5 % 73.3-129

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M

mg/kg

Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 76.2 % 41-142

Surrogate: 1-Chlorooctadecane 75.2 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 40 @1 (H903754-20)

BTEX 80218			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.72	
Toluene*	<0.050	0.050	11/05/2019	ND	1.76	88.1	2.00	9.53	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.80	89.9	2.00	9.27	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.36	89.3	6.00	9.27	
Total BTEX	<0.300	0.300	11/05/2019	ND					

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

Chloride, SM4500Cl-B			mg/kg						
			Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	11/06/2019	ND	432	108	400	3.77	

TPH 8015M			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 80.8 % 41-142

Surrogate: 1-Chlorooctadecane 79.4 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 41 @1 (H903754-21)

BTEx 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386		
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439		
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117		
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141		
Total BTEx	<0.300	0.300	11/06/2019	ND						

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

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	11/06/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 81.7 % 41-142

Surrogate: 1-Chlorooctadecane 81.2 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 42 @1 (H903754-22)

BTX 8021B			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B			mg/kg						
			Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	11/06/2019	ND	416	104	400	0.00	
TPH 8015M			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 75.3 % 41-142

Surrogate: 1-Chloroadecane 74.0 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 43 @1 (H903754-23)

BTX 8021B			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B			mg/kg						
			Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 75.6 % 41-142

Surrogate: 1-Chlorooctadecane 75.6 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 44 @1 (H903754-24)**BTEX 80218****mg/kg****Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTEX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B**mg/kg****Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M**mg/kg****Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 66.0 % 41-142

Surrogate: 1-Chlorooctadecane 65.3 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 45 @1 (H903754-25)

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386		
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439		
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117		
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141		
Total BTEX	<0.300	0.300	11/06/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 99.8 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	11.9	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 62.9 % 41-142

Surrogate: 1-Chlorooctadecane 62.4 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 46 @1 (H903754-26)

BTEX 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTEX	<0.300	0.300	11/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	11.9	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 57.3 % 41-142

Surrogate: 1-Chlorooctadecane 57.4 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 47 @1 (H903754-27)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 73.7 % 41-142

Surrogate: 1-Chlorooctadecane 73.2 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 48 @1 (H903754-28)

BTX 80218		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.9 % 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	144	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	10.8	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 67.8 % 41-142

Surrogate: 1-Chlorooctadecane 66.6 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 49 @1 (H903754-29)

BTX 8021B		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 63.5 % 41-142

Surrogate: 1-Chlorooctadecane 62.9 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 50 @1 (H903754-30)

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386		
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439		
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117		
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141		
Total BTEX	<0.300	0.300	11/06/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 99.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 62.1 % 41-142

Surrogate: 1-Chlorooctadecane 63.0 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 51 @1 (H903754-31)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTEX	<0.300	0.300	11/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 89.2 % 41-142

Surrogate: 1-Chlorooctadecane 88.6 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 52 @1 (H903754-32)

BTX 8021B		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	14.1	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 84.9 % 41-142

Surrogate: 1-Chlorooctadecane 84.0 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 53 @1 (H903754-33)

BTEX 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTEX	<0.300	0.300	11/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 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	160	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 73.9 % 41-142

Surrogate: 1-Chlorooctadecane 73.7 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 54 @1 (H903754-34)

BTX 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 91.5 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 55 @1 (H903754-35)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 90.2 % 41-142

Surrogate: 1-Chlorooctadecane 89.7 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B - 56 @1 (H903754-36)

BTX 8021B		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/05/2019	ND	210	105	200	0.333	
DRO >C10-C28*	<10.0	10.0	11/05/2019	ND	186	93.2	200	7.11	
EXT DRO >C28-C36	<10.0	10.0	11/05/2019	ND					

Surrogate: 1-Chlorooctane 77.3 % 41-142

Surrogate: 1-Chlorooctadecane 76.5 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/01/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W - 1 @1 (H903754-37)

BTEX 8021B			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTEX	<0.300	0.300	11/06/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.6 % 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	192	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/06/2019	ND	210	105	200	1.07	
DRO >C10-C28*	<10.0	10.0	11/06/2019	ND	210	105	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	11/06/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 113 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/01/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W - 2 @1 (H903754-38)

BTX 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/06/2019	ND	210	105	200	1.07	
DRO >C10-C28*	<10.0	10.0	11/06/2019	ND	210	105	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	11/06/2019	ND					

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 110 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/01/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W - 3 @1 (H903754-39)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/06/2019	ND	210	105	200	1.07	
DRO >C10-C28*	<10.0	10.0	11/06/2019	ND	210	105	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	11/06/2019	ND					

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 113 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W - 4 @1 (H903754-40)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.386	
Toluene*	<0.050	0.050	11/06/2019	ND	1.84	91.8	2.00	0.439	
Ethylbenzene*	<0.050	0.050	11/06/2019	ND	1.88	93.9	2.00	0.0117	
Total Xylenes*	<0.150	0.150	11/06/2019	ND	5.60	93.3	6.00	0.141	
Total BTX	<0.300	0.300	11/06/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/06/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/06/2019	ND	210	105	200	1.07	
DRO >C10-C28*	<10.0	10.0	11/06/2019	ND	210	105	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	11/06/2019	ND					

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 111 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W - 5 @1 (H903754-41)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/05/2019	ND	1.81	90.7	2.00	6.60	
Toluene*	<0.050	0.050	11/05/2019	ND	1.82	90.8	2.00	6.49	
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.84	92.2	2.00	6.38	
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.48	91.3	6.00	6.63	
Total BTEX	<0.300	0.300	11/05/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/06/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/06/2019	ND	210	105	200	1.07	
DRO >C10-C28*	<10.0	10.0	11/06/2019	ND	210	105	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	11/06/2019	ND					

Surrogate: 1-Chlorooctane 93.3 % 41-142

Surrogate: 1-Chlorooctadecane 97.3 % 37.6-147

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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: 11/04/2019
 Reported: 11/07/2019
 Project Name: EBDU #55
 Project Number: NONE GIVEN
 Project Location: EUNICE, NM

Sampling Date: 11/04/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W - 6 @1 (H903754-42)

BTEX 80218			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/05/2019	ND	1.81	90.7	2.00	6.60		
Toluene*	<0.050	0.050	11/05/2019	ND	1.82	90.8	2.00	6.49		
Ethylbenzene*	<0.050	0.050	11/05/2019	ND	1.84	92.2	2.00	6.38		
Total Xylenes*	<0.150	0.150	11/05/2019	ND	5.48	91.3	6.00	6.63		
Total BTEX	<0.300	0.300	11/05/2019	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 99.7 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/06/2019	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/06/2019	ND	210	105	200	1.07	
DRO >C10-C28*	<10.0	10.0	11/06/2019	ND	210	105	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	11/06/2019	ND					

Surrogate: 1-Chlorooctane 93.9 % 41-142

Surrogate: 1-Chlorooctadecane 96.8 % 37.6-147

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Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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 SM4500C-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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Received by OCD: 1/17/2020 10:33:08 AM



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

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: *Acadine Corporation*

Project Manager: *Jeff Broom / Bruce Baker*

Address:

City:

Phone #:

Project #:

Project Name:

Project Location:

Sample Name:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

(G)RAB OR (C)OMP

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

DATE

TIME

CL

EXT. TPH

BTEX

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Date: *11-4-19*

Received By: *Bruce Baker*

Verbal Result: ☐ Yes ☐ No

Add'l Phone #:

All Results are emailed. Please provide Email address:

Relinquished By: *Jeff Broom*

Date: *11-4-19*

Received By: *Bruce Baker*

Verbal Result: ☐ Yes ☐ No

Add'l Phone #:

All Results are emailed. Please provide Email address:

Remarks: *Ben @ Trinity Oilfield Services .com*

Delivered By: (Circle One)

Observed Temp. °C *1.8*

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

Rush

Bacteria (only) Sample Condition

Corrected Temp. °C

Sampler - UPS - Bus - Other:

Corrected Temp. °C *22*

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

Rush

Bacteria (only) Sample Condition

Corrected Temp. °C

FORM 500 K-30

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <i>Aracuy Corporation</i> Project Manager: <i>Jeff Brown / Bruce Baker</i> Address: City: State: Zip: Phone #: Fax #: Project #: Project Owner: Project Name: <i>EBN #55</i> Project Location: <i>Enclave NM</i> Sampler Name: <i>David Foster</i>		BILL TO P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:		ANALYSIS REQUEST	
FOR LAB USE ONLY		MATRIX <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER:		PRESERV <input type="checkbox"/> ACID/BASE <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER:	
Lab I.D.		Sample I.D.		DATE TIME	
H90354 31 B-51 @ 1 33 B-52 @ 1 33 B-53 @ 1 34 B-54 @ 1 35 B-55 @ 1 36 B-56 @ 1 37 W-1 @ 1 38 W-2 @ 1 39 W-3 @ 1 40 W-4 @ 1		(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		SAMPLING 11/4/19 4:09 11/4/19 4:11 11/4/19 4:13 11/4/19 4:15 11/4/19 4:17 11/4/19 4:19 11/4/19 4:21 11/4/19 4:23 11/4/19 4:25 11/4/19 4:27	
Relinquished By: <i>[Signature]</i> Date: <i>11-4-19</i> Time: <i>11:25</i>		Received By: <i>[Signature]</i> Date: <i>11-4-19</i> Time: <i>11:25</i>		REMARKS: <i>See @ Trinity Oilfield Services.com</i>	
Delivered By: (Circle One) UPS - B - Other:		Observed Temp. °C <i>1.8</i> Corrected Temp. °C <i>2.2</i>		Sample Condition <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	
Turnaround Time:		Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>		Bacteria (only) <input type="checkbox"/> Sample Condition <input type="checkbox"/> Observed Temp. °C Thermometer ID #97 Correction Factor +0.4 °C	

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

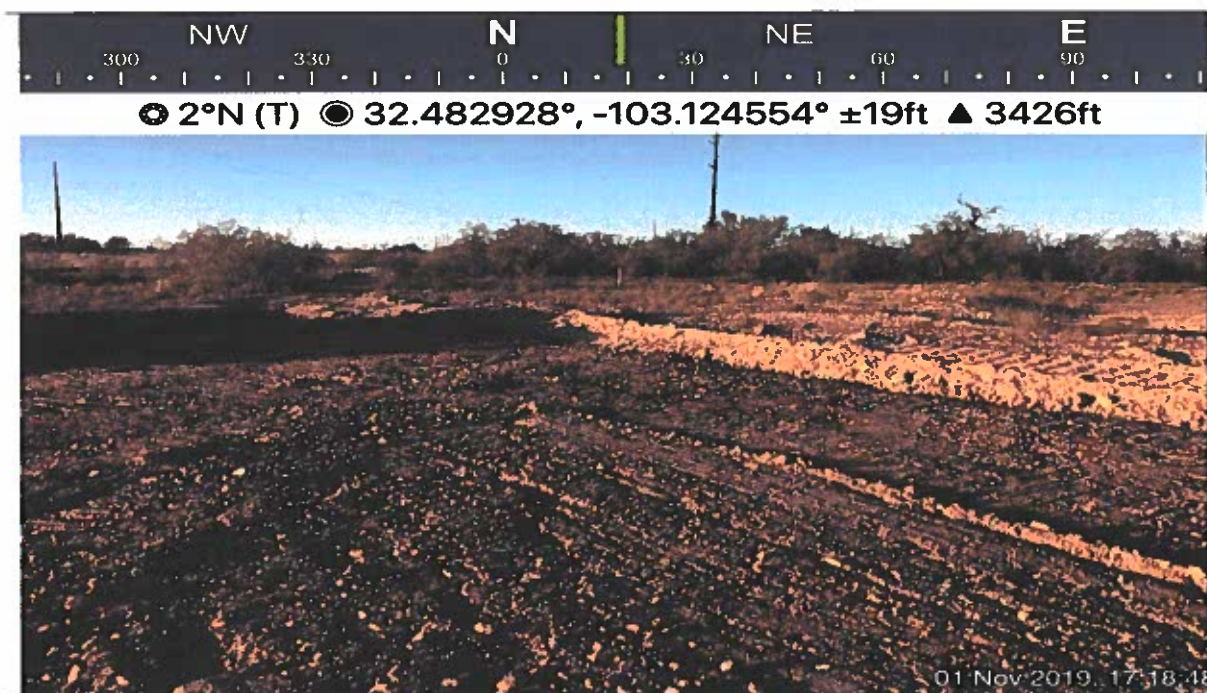


101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

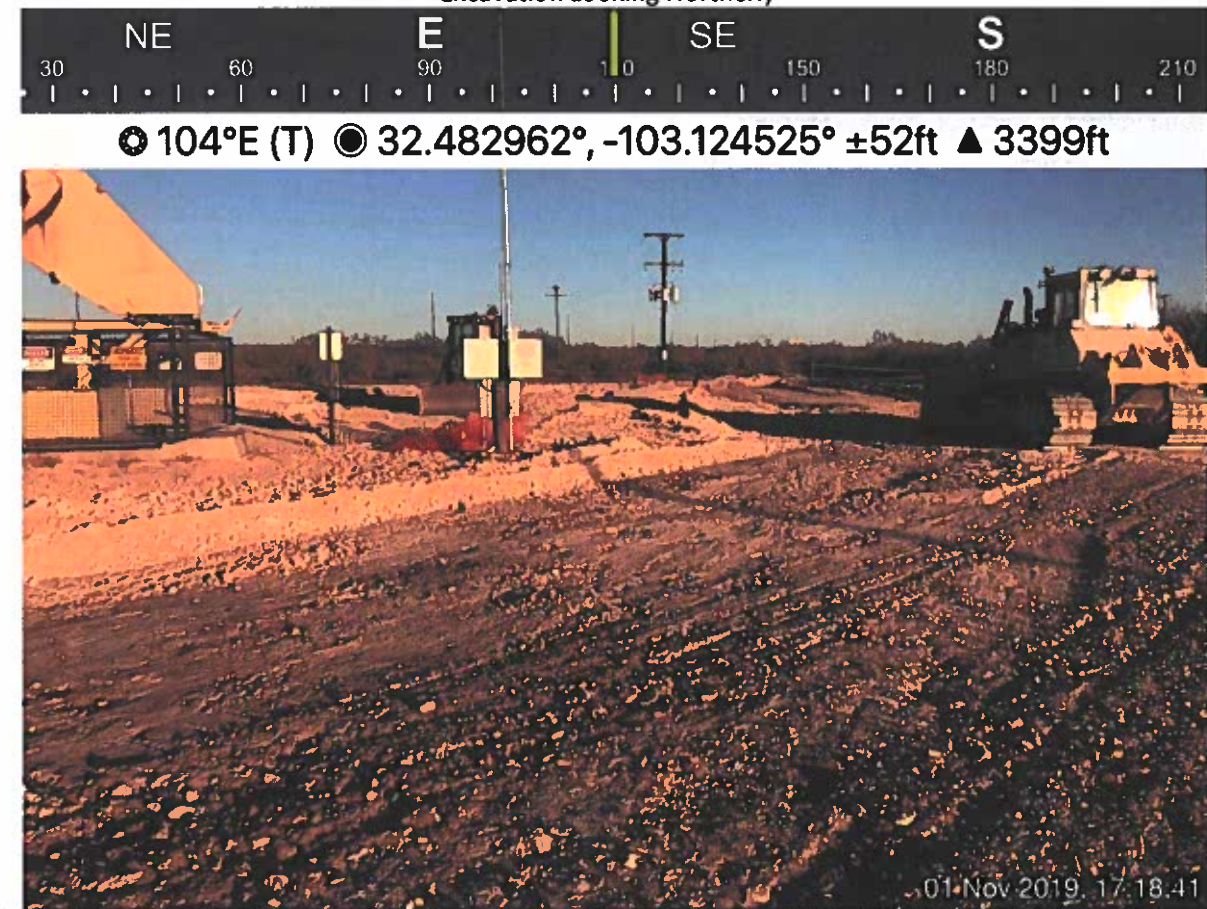
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <i>Arctic Corporation</i> Project Manager: <i>Jeff Brown/Bruce Bauer</i> Address: City: State: Zip: Phone #: Fax #: Project #: Project Owner: Project Name: <i>EBD #55</i> Project Location: <i>Eunkey, NM</i> Sampler Name: <i>Daniel Ressler</i>		BILL TO P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:		ANALYSIS REQUEST											
FOR LAB USE ONLY Lab I.D. <i>H903754</i> <i>41</i> <i>42 W-6 @ 1</i>		Sample I.D. (G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:		MATRIX PRESERV. SAMPLING DATE TIME <i>11/4/19 4:24</i> <i>11/4/19 4:31</i>		CL EXT. TPH BTEX									
Relinquished By: <i>[Signature]</i> Date: <i>11-4-19</i> Received By: <i>[Signature]</i> Date: <i>11-6-25</i> Time: <i>16:25</i> Relinquished By: <i>[Signature]</i> Received By: <i>[Signature]</i>		Observed Temp. °C <i>1.8</i> Corrected Temp. °C <i>2.2</i> Sample Condition Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Checked By: <i>[Signature]</i> Thermometer ID #97 Correction Factor +0.4 °C		Turnaround Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Add'l Phone #: Bacteria (only) <input type="checkbox"/> Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C Corrected Temp. °C		Remarks: <i>Ben@TrinityOilFieldServices.com</i>									

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



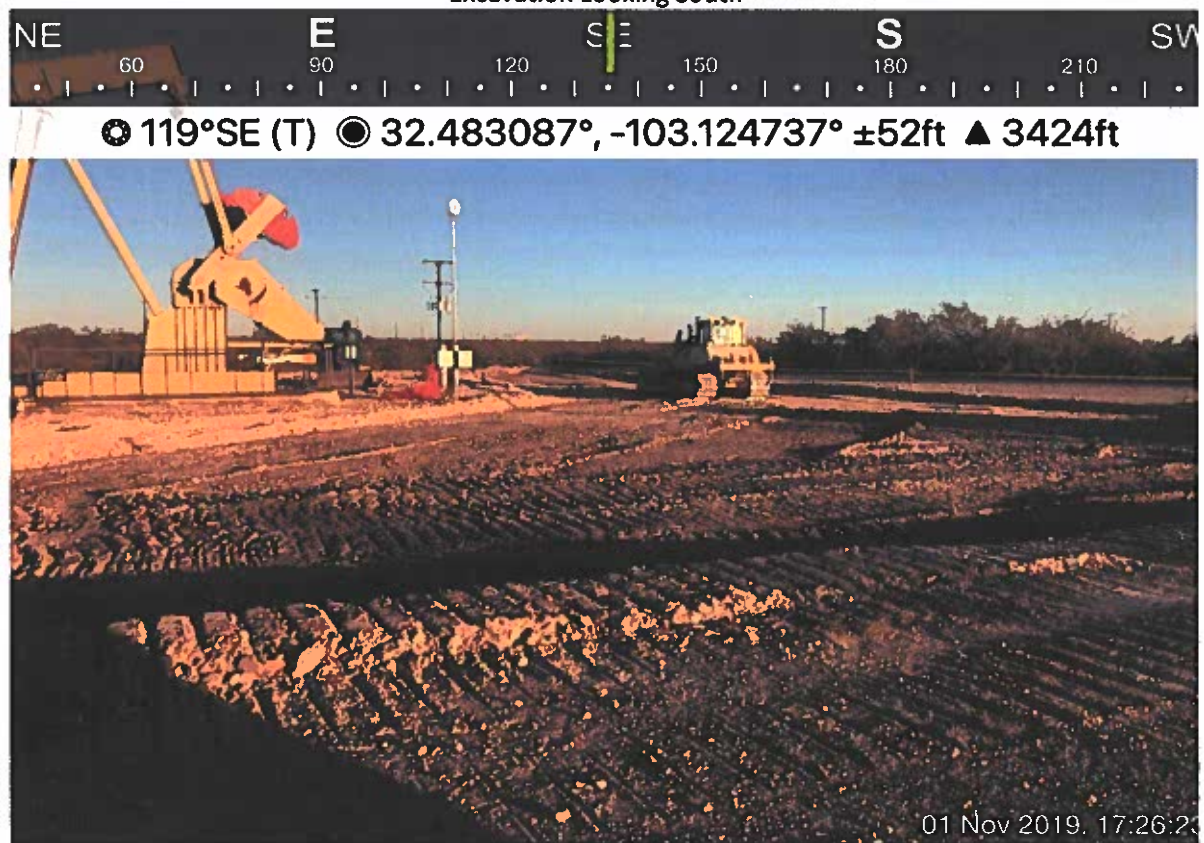
Excavation Looking Northerly



Excavation Looking Easterly



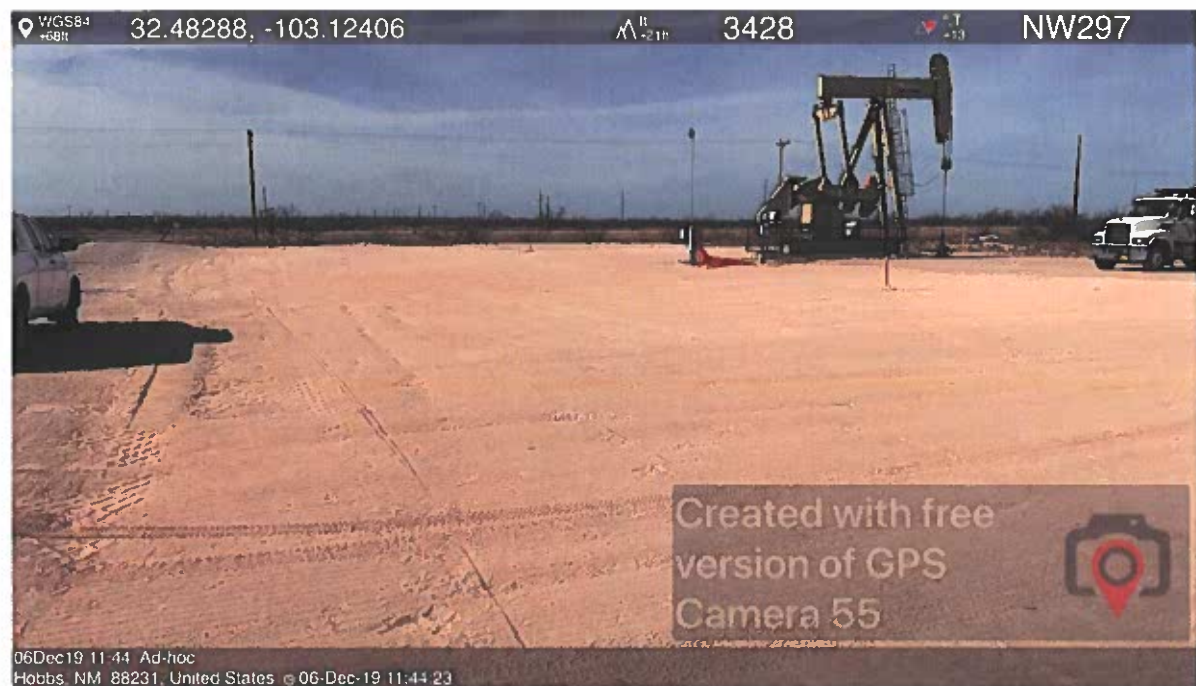
Excavation Looking South



Excavation Looking Southeast



Restored Pad looking Northeast



Restored Pad Looking Northwest