

Incident ID	NAPP2121456443
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Larry Baker Title: Environmental Tech. SR.
Signature: *Larry Baker* Date: 10/2/2021
email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: Robert Hamlet Date: 8/31/2022

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

Signature: *Robert Hamlet* Date: 8/31/2022



May 13, 2022

NMOCD Environmental Bureau
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: ALTERNATIVE Remediation Plan
Apache Corporation EAU M9
Incident ID: Napp2121456443

To Whom it May Concern

RXSoil, Inc. is pleased to submit the remediation plan for the on-site remediation of impacted soil for the above release.

Sincerely,

A handwritten signature in black ink, appearing to read "Zach Robbins".

Zach Robbins
Technical and Engineering Analyst
RXSoil, Inc.
(210) 400-7645

RXSoil, Inc.
201 Main St. Ste. 1360, Fort Worth, TX 76102

I. Introduction

This document serves as an Alternative Remediation Plan based on the previously approved Remediation Plan, **App. A**, submitted 10/28/2021 and approved with conditions 03/04/2022.

RXSoil will follow all guidelines set in the attached plan and conditions of approval with the following changes:

II. Remediation Plan

Instead of hauling contaminated soil to an OCD approved disposal facility, RXSoil will treat the contaminated soil on site in a temporary contained treatment cell.

RXSoil will construct an above-ground treatment cell adjacent to the spill area. Berms will be constructed around the perimeter of the cell area. A 20-mil reinforced poly liner will be placed on the surface and up the sides of the berms to contain treatment. A proprietary drainage and collection system will be installed prior to filling the cells. All contaminated soil will be placed in the contained treatment cell for treatment.

To confirm successful treatment inside the cell, a grid of confirmation samples will be gathered at depth 36"-48" (bottom 12" of 48" depth treatment cell, as previously requested) with one sample representing no more than 100 cubic yards. Samples represent no more than 100 cubic yards to most closely represent the volumetric equivalent of the NMOCD determined one sample per 200 square feet.

$$\begin{aligned} 200 \text{ ft}^2 &= 14.14' \times 14.14' \\ (14.14')^3 &= 2,827 \text{ ft}^3 = 105 \text{ yds}^3 \end{aligned}$$

All cell samples will be field screened and if a sample tests above threshold, treatment will continue in that area until the soil tests clean, per strictest Table I guidelines for impacted soils. Samples will be submitted to a third-party laboratory to be tested for chlorides, TPH, and BTEX using approved NMOCD methods. Treatment will continue until all soil is below strictest Table I thresholds for remediation.

RXSoil will have all contaminated soil contained and no longer a threat to the environment within 90 days of approval of this alternative work plan. A closure document pursuant to 19.15.29 NMAC will be submitted following the treatment of soils.

APPENDIX A

APPROVED REMEDIATION PLAN

SUBMITTED OCTOBER 28, 2021

APPROVED WITH CONDITIONS MARCH 04, 2022

**RXSoil, Inc.
201 Main St. Ste. 1360, Fort Worth, TX 76102**



303 Veterans Airpark Lane Midland, TX 79705

Remediation Plan

October 28, 2021

Re: EAU M-9 Emulsion Trunk Line
Case #: nAPP2121456443

Background:

On 8/1/2021 a release occurred due to a buried fiberglass line failed. The release (GPS: 32.767600, -104.256500) is located east of Artesia, New Mexico in unit letter D section 11 township 18S range 27E. A groundwater survey was conducted utilizing NMOSE wells of record. The nearest well of record suggest the groundwater depth below the release to be 50 feet below ground surface. The release is in a high karst area.

On 3/9/2021 vertical delineation was conducted in regular intervals utilizing a backhoe to depths of 2, 3 and 5 feet. All samples collected were submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. 5 point surface horizontal samples were collected not to exceed 200 square feet and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX.

Remediation Plan:

Apache Corporation proposes that the release area around SP 1 and SP 4 be excavated to a depth of 4 feet and the area around SP 2 and SP 3 be excavated to a depth of 2 feet. All excavated soil (3000 yards) will be hauled to an OCD approved disposal facility. Once the excavation is complete final 5-point bottom composite samples will be collected not to exceed 500 square feet. Final 5-point wall composite samples will be collected not to exceed 200 square feet. All samples collected will be submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Once laboratory results are below table one standards for releases less than or equal to 50 feet to groundwater the excavation will be backfilled with clean imported topsoil. The disturbed area will be reseeded in accordance with the surface landowner guidelines. The remediation will be completed within 90 days of OCD approval of the plan.

Enclosed: C-141, Groundwater Data, Maps, Sample Data, Laboratory Results, and Revegetation and Noxious Weed Plan.

Submitted by;

Bruce Baker

Environmental Technician
larry.baker@apachecorp.com
Cell# 432-631-6982

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	50 (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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

Form C-141

Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
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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: Larry BakerTitle: Environmental Tech. SR.Signature: Larry BakerDate: 10/28/2021email: larry.baker@apachecorp.comTelephone: 432-631-6982OCD Only

Received by: _____

Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
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- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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Printed Name: Larry Baker

Title: Environmental Tech. SR.

Signature: Larry Baker

Date: 10/2/2021

email: larry.baker@apachecorp.com

Telephone: 432-631-6982

OCD Only

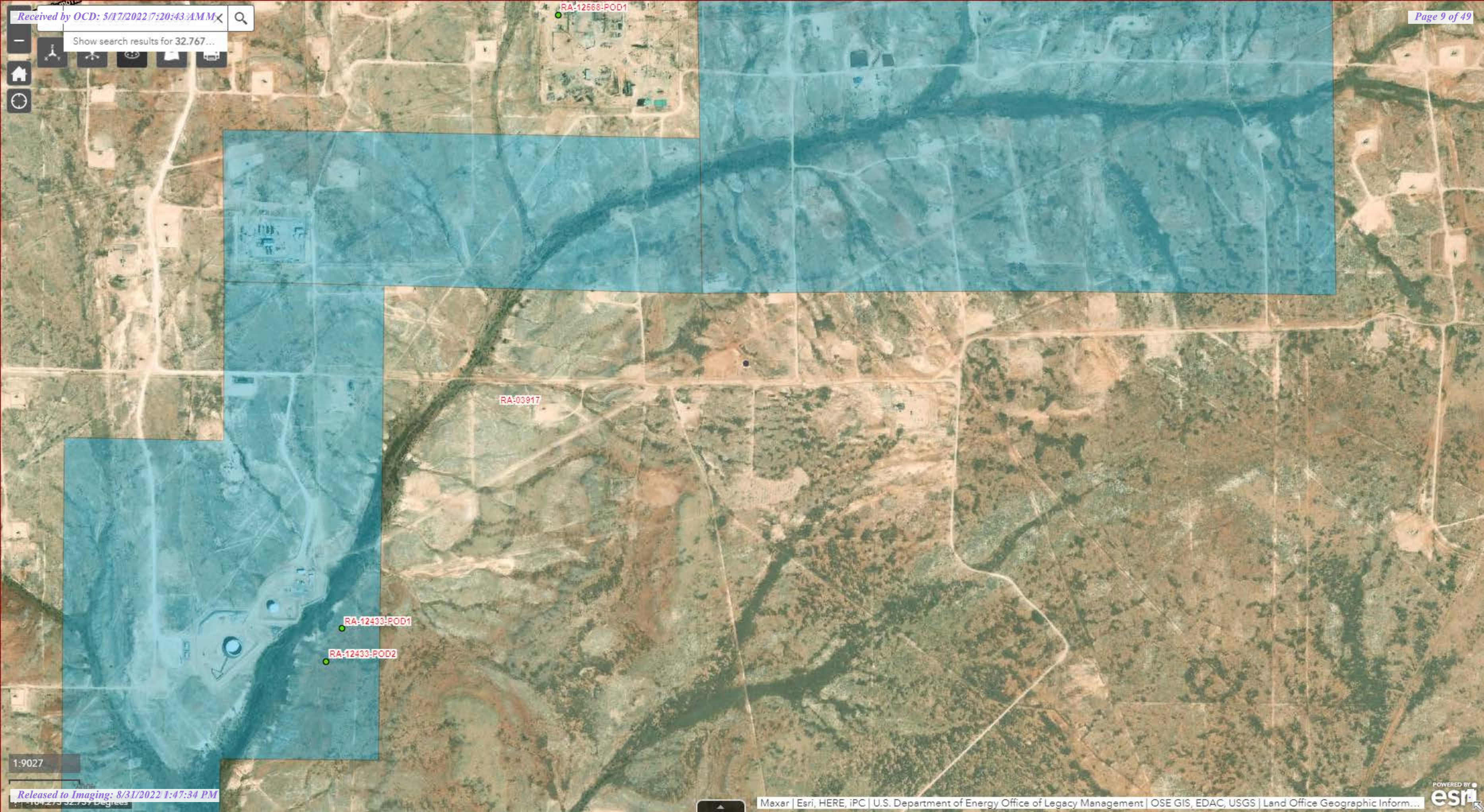
Received by: _____ Date: _____

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

Signature: _____

Date: _____


Show search results for 32.767...





New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
		Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 03917	4	1	2	10	18S	27E	569019	3625660* 
Driller License: 111		Driller Company: BURKE, EDWARD B.							
Driller Name:									
Drill Start Date:	07/31/1958	Drill Finish Date:		07/31/1958		Plug Date:			
Log File Date:	08/06/1958	PCW Rcv Date:				Source: Artesian			
Pump Type:		Pipe Discharge Size:				Estimated Yield:			
Casing Size:		Depth Well:		130 feet		Depth Water: 50 feet			

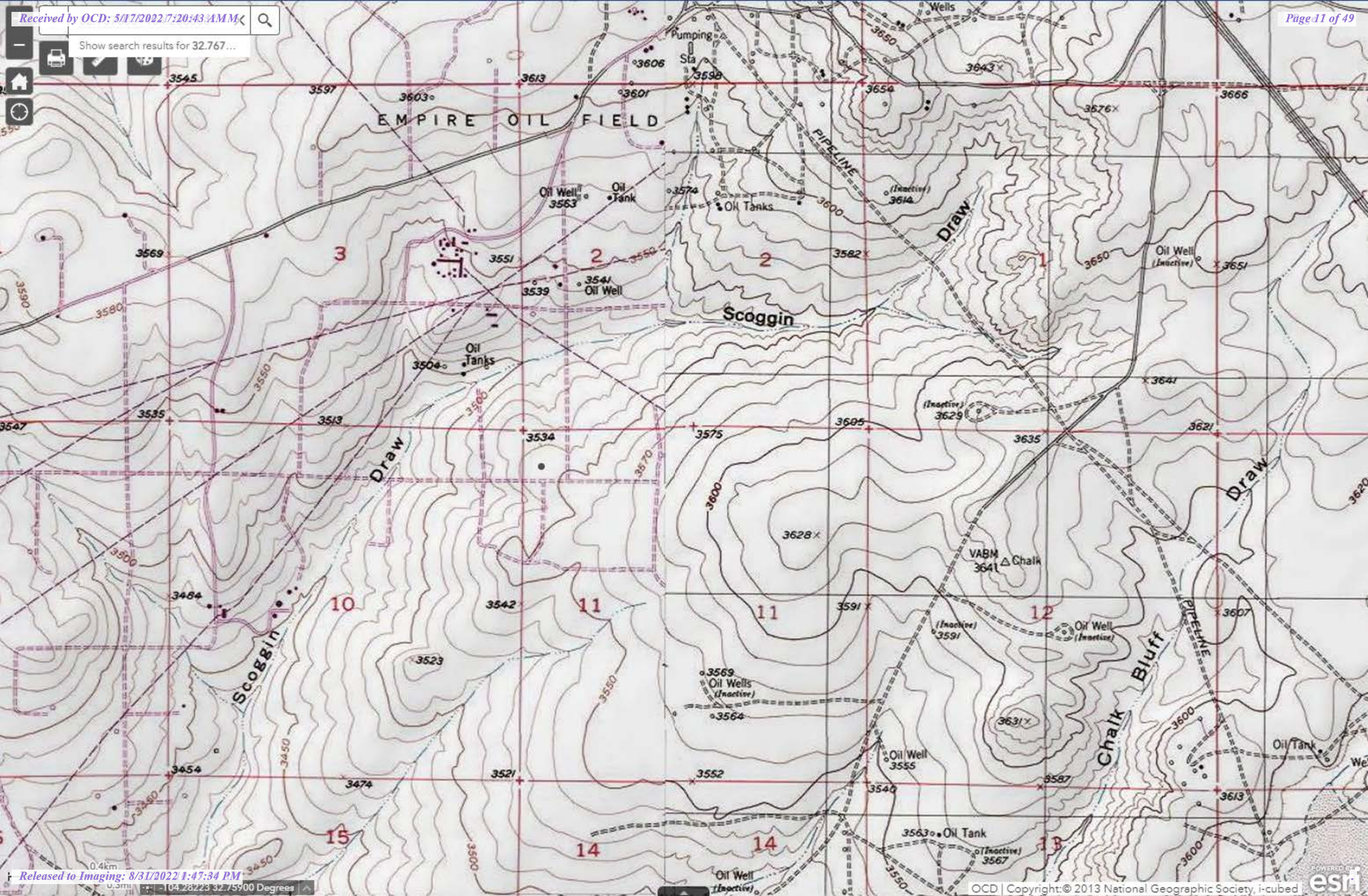
*UTM location was derived from PLSS - see Help

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

10/28/21 7:07 AM

POINT OF DIVERSION SUMMARY

Show search results for 32.767...





Delineation Samples

Sample Date	Sample ID	Depth	Chloride Lab	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
9/9/2021	SP 1	Surface	1,200	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	208	71	32.7676384, -104.2565565
		1'	4720	<0.050	<0.050	<0.050	45.1	45.1	951	7050	943	
		2'	1540	<0.050	<0.050	<0.050	0.273	<0.300	20.1	599	96.0	
		3'	1250	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	115	16.1	
		4'	544	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	41	<10.0	
		5'	528	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
9/9/2021	SP 2	Surface	15600	<0.050	<0.050	<0.050	<0.150	<0.300	<100	364	94.4	32.7677052, -104.2568891
		1'	1200	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
		2'	448	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
		3'	480	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
9/9/2021	SP 3	Surface	12200	<0.050	<0.050	<0.050	<0.150	<0.300	62.6	34600	7650	32.7676136, -104.2572679
		1'	1470	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
		2'	416	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
9/9/2021	SP 4	Surface	13300	<0.050	<0.050	<0.050	0.349	0.349	<50.0	7,940	1,990	32.7676192, -104.2576062
		1'	2600	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
		2'	1570	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	10.4	<10.0	
		3'	1070	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
		4'	768	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	10.1	<10.0	
		5'	368	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
	H1	Surface	<16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.7675504, -104.2563295
	H2	Surface	592	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	41	11	32.7677433, -104.2572270
	H3	Surface	<16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.7678324, -104.2576820
	H4	Surface	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.7675815, -104.2569367



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

September 14, 2021

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EAU M9 EMULSION LINE

Enclosed are the results of analyses for samples received by the laboratory on 09/09/21 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ SURFACE (H212499-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.050	0.050	09/11/2021	ND	2.05	103	2.00	0.466	
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.14	102	6.00	0.315	
Total BTEX	<0.300	0.300	09/11/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1200	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	208	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	71.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 83.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 93.7 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 1' (H212499-02)

BTX 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	09/11/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.200	0.200	09/11/2021	ND	2.05	103	2.00	0.466	GC-NC
Ethylbenzene*	<0.200	0.200	09/11/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	45.1	0.600	09/11/2021	ND	6.14	102	6.00	0.315	
Total BTX	45.1	1.20	09/11/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 203 % 69.9-140

Chloride, SM4500CI-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4720	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	951	50.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	7050	50.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	943	50.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 245 % 44.3-133

Surrogate: 1-Chlorooctadecane 262 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

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

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Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ 2' (H212499-03)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466	
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	0.273	0.150	09/10/2021	ND	6.14	102	6.00	0.315	
Total BTEx	<0.300	0.300	09/10/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1540	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	20.1	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	599	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	96.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 110 % 44.3-133

Surrogate: 1-Chlorooctadecane 123 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 2 @ SURFACE (H212499-04)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282		
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466		
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987		
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315		
Total BTEx	<0.300	0.300	09/10/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	15600	16.0	09/13/2021	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	364	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	94.4	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 93.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 109 % 38.9-142

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Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 @ 1' (H212499-05)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282		
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466		
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987		
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315		
Total BTEx	<0.300	0.300	09/10/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1200	16.0	09/13/2021	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 99.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 103 % 38.9-142

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Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 @ 2' (H212499-06)

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	09/10/2021	ND	1.88	94.0	2.00	0.282		
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466		
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987		
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315		
Total BTX	<0.300	0.300	09/10/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 99.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 104 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 3 @ SURFACE (H212499-07)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.050	0.050	09/11/2021	ND	2.05	103	2.00	0.466	
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.14	102	6.00	0.315	
Total BTX	<0.300	0.300	09/11/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	12200	16.0	09/13/2021	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	62.6	50.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	34600	50.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	7650	50.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 134 % 44.3-133

Surrogate: 1-Chlorooctadecane 1270 % 38.9-142

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Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 @ 3' (H212499-08)

BTX 8021B			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282		
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466		
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987		
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315		
Total BTX	<0.300	0.300	09/10/2021	ND						

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

Chloride, SM4500CI-B			mg/kg							
			Analyzed By: GM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	480	16.0	09/13/2021	ND	432	108	400	3.77		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42		
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24		
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND						

Surrogate: 1-Chlorooctane 96.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 101 % 38.9-142

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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 3 @ 1' (H212499-09)

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	09/10/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466	
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315	
Total BTX	<0.300	0.300	09/10/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 84.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 88.2 % 38.9-142

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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 3 @ 2' (H212499-10)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTX	<0.300	0.300	09/11/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 96.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 101 % 38.9-142

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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 4 @ SURFACE (H212499-11)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	0.349	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTX	0.349	0.300	09/11/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	13300	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	7940	50.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	1990	50.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-133

Surrogate: 1-Chlorooctadecane 342 % 38.9-142

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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 4 @ 1' (H212499-12)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTEX	<0.300	0.300	09/11/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2600	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 97.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 103 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 4 @ 2' (H212499-13)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTX	<0.300	0.300	09/11/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1570	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	10.4	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 93.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 98.6 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ 3' (H212499-14)

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	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTX	<0.300	0.300	09/11/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1250	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	115	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	16.1	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 91.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 100 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ 4' (H212499-15)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTX	<0.300	0.300	09/11/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	544	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	40.8	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 91.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 97.4 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 4 @ 3' (H212499-16)

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	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTX	<0.300	0.300	09/11/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1070	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 99.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 104 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 4 @ 4' (H212499-17)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTEX	<0.300	0.300	09/11/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	768	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	10.1	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 96.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 101 % 38.9-142

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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 4 @ 5' (H212499-18)

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	09/11/2021	ND	1.86	92.9	2.00	1.31		
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42		
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51		
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38		
Total BTX	<0.300	0.300	09/11/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	09/13/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2021	ND	216	108	200	1.73	
DRO >C10-C28*	<10.0	10.0	09/12/2021	ND	220	110	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	09/12/2021	ND					

Surrogate: 1-Chlorooctane 95.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 99.3 % 38.9-142

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Analytical Results For:

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 5' (H212499-19)

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	09/11/2021	ND	1.86	92.9	2.00	1.31	
Toluene*	<0.050	0.050	09/11/2021	ND	2.04	102	2.00	1.42	
Ethylbenzene*	<0.050	0.050	09/11/2021	ND	2.01	101	2.00	1.51	
Total Xylenes*	<0.150	0.150	09/11/2021	ND	6.06	101	6.00	1.38	
Total BTX	<0.300	0.300	09/11/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	09/13/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2021	ND	216	108	200	1.73	
DRO >C10-C28*	<10.0	10.0	09/12/2021	ND	220	110	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	09/12/2021	ND					

Surrogate: 1-Chlorooctane 102 % 44.3-133

Surrogate: 1-Chlorooctadecane 107 % 38.9-142

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

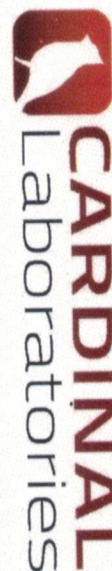
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Aspetive</u> Project Manager: <u>Jeff Brown</u> Address: City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88240</u> Phone #: Fax #: Project #: Project Owner: Project Name: Project Location: <u>EAU m4 Eruption line</u> Sampler Name: <u>Joe Caswell Jr.</u> FOR LAB USE ONLY				BILL TO P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:				ANALYSIS REQUEST			
Lab I.D.: <u>4213499</u>		Sample I.D.:		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: <input checked="" type="checkbox"/> CE COOL OTHER:		DATE TIME		EXT TPH TEST			
<u>1 SP1 @ Surface</u> <u>2 SP1 @ 1'</u> <u>3 SP1 @ 2'</u> <u>4 SP2 @ Surface</u> <u>5 SP2 @ 1'</u> <u>6 SP2 @ 2'</u> <u>7 SP2 @ Surface</u> <u>8 SP2 @ 2'</u> <u>9 SP3 @ 1'</u> <u>10 SP3 @ 2'</u>		<u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u>		<u>9-9</u> <u>1:13</u> <u>1:15</u> <u>1:17</u> <u>1:19</u> <u>1:21</u> <u>1:23</u> <u>1:27</u> <u>1:32</u> <u>1:04</u> <u>1:11</u>		<u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u>		<u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u>			

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

Relinquished By: <u>Joe Caswell Jr.</u> Date: <u>9-9-21</u> Time: <u>11:30</u> Relinquished By: <u>Joe Caswell Jr.</u> Date: <u>9-9-21</u> Time: <u>11:30</u>		Received By: <u>Anna Maria</u> Date: <u>9-9-21</u> Time: <u>1:11</u> Received By: <u>Anna Maria</u> Date: <u>9-9-21</u> Time: <u>1:11</u>	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C <u>6.8</u> Corrected Temp. °C Sample Condition <input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID #113 Correction Factor None		Bacteria (only) Sample Condition <input type="checkbox"/> Cool <input type="checkbox"/> Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C	

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Apukey Project Manager: Jeff Boon Address: City: Hobbs State: NM Zip: 88240 Phone #: Fax #: Project #: Project Owner: Project Name: Project Location: EAN McEmulsion line Sampler Name: Joe Quereza Jr. FOR LAB USE ONLY							BILL TO P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #: ANALYSIS REQUEST													
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX		PRESERV.	SAMPLING											
						GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME				
H213449		SP4 @ Surface		6	1										9.9	1:25	X	X	X	
12 SP4 @ 1'															1:27	1:27	X	X	X	
13 SP4 @ 2'															1:29	1:29	X	X	X	
14 SP1 @ 3'															1:44	1:44	X	X	X	
15 SP1 @ 4'															1:46	1:46	X	X	X	
14 SP4 @ 31															1:50	1:50	X	X	X	
17 SP4 @ 4															1:52	1:52	X	X	X	
18 SP4 @ 5'															3:02	3:02	X	X	X	
19 SP1 @ 5'																				

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Relinquished By: _____ Date: 4-9-21 Received By: _____ Time: 16:30	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:
Reinquinshed By: _____ Date: _____ Received By: _____ Time: _____	All Results are emailed. Please provide Email address:
REMARKS:	

Delivered By: (Circle One) UPS - Bus - Other:	Observed Temp. °C 6.8	Corrected Temp. °C	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	CHECKED BY: _____ (Initials)	Turnaround Time:	Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	Bacteria (only) Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	Observed Temp. °C	Corrected Temp. °C
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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 14, 2021

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EAU M9 EMULSION LINE

Enclosed are the results of analyses for samples received by the laboratory on 09/09/21 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: H 1 (H212498-01)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466	
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315	
Total BTEX	<0.300	0.300	09/10/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: GM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	218	109	200	3.95	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	220	110	200	3.59	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 90.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 89.0 % 38.9-142

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

Received: 09/09/2021
 Reported: 09/14/2021
 Project Name: EAU M9 EMULSION LINE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/09/2021
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: H 2 (H212498-02)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466	
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315	
Total BTEx	<0.300	0.300	09/10/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	41.4	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	11.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-133

Surrogate: 1-Chlorooctadecane 111 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: H 3 (H212498-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282	
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466	
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987	
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315	
Total BTEX	<0.300	0.300	09/10/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/13/2021	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 86.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 90.9 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/09/2021	Sampling Date:	09/09/2021
Reported:	09/14/2021	Sampling Type:	Soil
Project Name:	EAU M9 EMULSION LINE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: H 4 (H212498-04)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/10/2021	ND	1.88	94.0	2.00	0.282		
Toluene*	<0.050	0.050	09/10/2021	ND	2.05	103	2.00	0.466		
Ethylbenzene*	<0.050	0.050	09/10/2021	ND	2.03	102	2.00	0.0987		
Total Xylenes*	<0.150	0.150	09/10/2021	ND	6.14	102	6.00	0.315		
Total BTEx	<0.300	0.300	09/10/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/13/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/11/2021	ND	216	108	200	4.42	
DRO >C10-C28*	<10.0	10.0	09/11/2021	ND	221	111	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	09/11/2021	ND					

Surrogate: 1-Chlorooctane 94.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 99.3 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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A handwritten signature in cursive script, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 7 of 7



**EAU M-9 Emulsion Trunk Line
nAPP2121456443
Revegetation
And
Noxious Weed Plan**

Revegetation Plan:

All the disturbed area in the pasture will be properly prepared and reseeded with BLM # 2. The disturbed area will be monitored to ensure successful revegetation is achieved. If revegetation is not successful after a couple of growing seasons the site will be reseeded.

Noxious Weed Plan:

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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2121456443
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Larry Baker

Title: Environmental Tech. SR.

Signature: Larry Baker

Date: 10/2/2021

email: larry.baker@apachecorp.com

Telephone: 432-631-6982

OCD Only

Received by: Robert Hamlet

Date: 3/4/2022

☐ Approved

☒ Approved with Attached Conditions of Approval

☐ Denied

☐ Deferral Approved

Signature: Robert Hamlet

Date: 3/4/2022

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 58359

CONDITIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 58359
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Workplan/Remediation Plan is approved with the following conditions: Sidewall/floor samples need to comply with the strictest closure criteria limits 600 mg/kg for Chlorides and 100 mg/kg TPH. The variance for 500 ft2 confirmation floor samples is approved. Please collect confirmation sidewall samples, representing no more than 200 ft2. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The work will need to occur in 90 days after the work plan has been approved.	3/4/2022

END OF REPORT

RXSoil, Inc.
201 Main St. Ste. 1360, Fort Worth, TX 76102

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 107363

CONDITIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 107363
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Alternative Remediation Plan is Conditionally Approved. A 5-point composite sample should represent no more than 50 cubic yards before used as backfill material. Due to the high karst potential, please do not put treatment cell on any visible karst features. Treated soil will need to meet strictest closure criteria standards. The work will need to occur in 90 days after the work plan has been approved.	8/31/2022