



303 Veterans Airpark Lane Midland, TX 79705

## **Deferment Request**

January 25, 2023

Re: SB Battery  
Case # nAB1719936703

*On 6/28/2017 a release occurred due to a hole developed in the fire tube on a heater treater. The entire release was contained inside the secondary containment. The release (GPS: 32.7790, -104.2570) is located east of Artesia, New Mexico in unit letter E section 2 township 18S range 27E. A groundwater survey was conducted utilizing data from the NMOSE. The closest well is located in bottom of the draw at an elevation of 3472 feet and the elevation of the release is 3579 feet. The difference in elevation suggest that the depth to groundwater under the release to be 157 feet below ground surface. The release is in an area of high karst.*

*On 7/5/2017 two verticals were attempted inside the battery utilizing a hand auger and refusal was met at 3 inches due to the hardness of soil. The surface samples were taken to a commercial laboratory for analysis of chloride, TPH, and BTEX. The release area was excavated utilizing hand shovels to the refusal depth of 3 inches. All excavated soil was hauled to an OCD approved facility. On 6/17/2019 a vertical was conducted inside the release area utilizing a backhoe. Samples were collected in one foot intervals starting at 3 inches and advanced to a depth of 4 feet. All samples were taking to a commercial laboratory for analysis of chloride, TPH, and BTEX.*

*The release was contained inside the secondary containment and has been fully delineated with depth to table one standards for releases less than 50 feet to groundwater. The release area has been excavated to the extent possible considering the hardness of soil and the close proximity to processing equipment. Apache Corporation respectfully request that the event be deferred until system abandonment.*

*On 10/25/2022 the OCD rejected the deferment request. On 11/21/2022 a horizontal 5-point composite sample was collected not to exceed 200 square feet. The sample was submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. The sample was below table one standards for the most stringent levels. The release as been delineated to the most stringent table one standards. Due to the hardness of soil and the proximity to processing equipment. Apache Corporation respectfully request that the event be deferred until the equipment is removed or system abandonment.*

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

Submitted by;

*Larry Baker*

**Environmental Technician**

*larry.baker@apachecorp.com*

**Cell# 432-250-8384**

**Off# 432-818-1654**

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Baker, Larry](#)  
**Subject:** [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 9714  
**Date:** Tuesday, October 25, 2022 4:07:40 PM

---

To whom it may concern (c/o Larry Baker for APACHE CORPORATION),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAB1719936703, for the following reasons:

- **The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.**
- **Horizontal and vertical delineation submitted was incomplete and did not meet the requirements of [19.15.29.11](#) NMAC.**
- **2RP-4295 is to be referred to as incident NAB1719936703 in all future communications.**
- **Submit remediation plan, deferral request, and/or closure plan to the OCD by 01/27/2023.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 9714.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,  
Ashley Maxwell  
Projects Environmental Specialist - A  
505-635-5000  
[Ashley.Maxwell@emnrd.nm.gov](mailto:Ashley.Maxwell@emnrd.nm.gov)

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**CAUTION: This email originated outside of Apache. DO NOT CLICK on links or attachments unless you know the content is safe and relevant to Apache business. If you are unsure about this message, click "Report Phish" in Outlook or send to [phish@apachecorp.com](mailto:phish@apachecorp.com)**

**NM OIL CONSERVATION**

ARTESIA DISTRICT

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

JUL 14 2017

Form C-141  
Revised August 8, 2011

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

Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.  
**RECEIVED**

**Release Notification and Corrective Action**

*NAB170906703*

**OPERATOR**

Initial Report  Final Report

Name of Company: Apache Corporation <i>873</i>	Contact Bruce Baker
Address: 2350 W Marland Blvd Hobbs, NM 88240	Telephone No. (432) 631-6982
Facility Name SB State Battery	Facility Type: Battery

Surface Owner State	Mineral Owner	API No. 30-015-32218
---------------------	---------------	----------------------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	2	18S	27E	1650	FNL	330	FWL	Eddy

Latitude N32.7790 Longitude W104.2570

**NATURE OF RELEASE**

Type of Release: Oil and Produce Water	Volume of Release 10 barrels of oil 10 barrels of water	Volume Recovered 8 barrels of oil 7 barrels of water
Source of Release: Heater Treater	Date and Hour of Occurrence 6/27/2017	Date and Hour of Discovery 6/27/2017
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver via email	
By Whom? Bruce Baker	Date and Hour 6/28/2017 at 3:18 pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A hole developed in fire tube on heater treater resulting in the loss of fluid. The release was isolated and fire tube repaired.

Describe Area Affected and Cleanup Action Taken.\*

The entire release was contained to the berm facility. A vacuum truck was dispatched to pick-up standing fluid. The release was mapped and surface samples collected.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: <i>Bruce Baker</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Bruce Baker	Approved by Environmental Specialist: <i>Crystal Weaver</i>	
Title: Environmental Technician	Approval Date: 7/17/17	Expiration Date: N/A
E-mail Address: larry.baker@apachecorp.com	Conditions of Approval: <i>See attached</i>	Attached <input type="checkbox"/>
Date: 6/14/2017	Phone: (432) 631-6982	

\* Attach Additional Sheets If Necessary

Please refer to the New Mexico Oil Conservation Division Website for updated form(s) at:

<http://www.emnrd.state.nm.us/OCD/forms.html>

Thank you

*2RP-4295*

*7/14/17*

Incident ID	NAB1719936703
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>157</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 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 <b>not</b> 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 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.

Incident ID	NAB1719936703
District RP	
Facility ID	
Application ID	

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

Printed Name: Larry Baker Title: Environmental Tech SR.  
Signature: *Larry Baker* Date: 8/14/2020  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

Received by: Jocelyn Harimon Date: 01/30/2023

Incident ID	NAB1719936703
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. Staff  
 Signature: Larry Baker Date: 1/25/2023  
 email: larry.baker@apachecorp.com Telephone: 432-818-1654

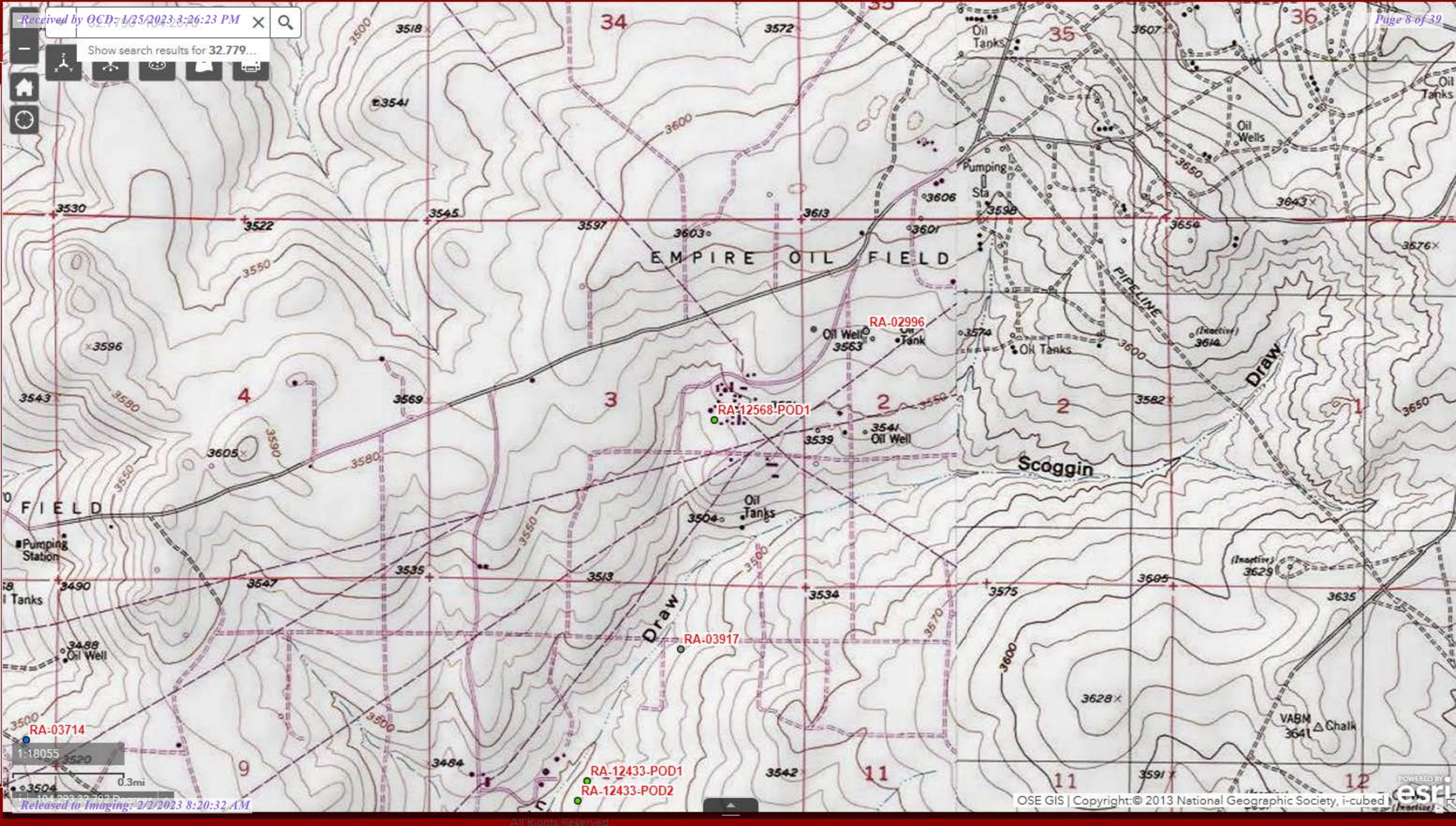
**OCD Only**

Received by: Jocelyn Harimon Date: 01/30/2023

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature: Ashley Maxwell Date: 2/02/2023

Show search results for 32.779...



1:18055  
0.3mi



# 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)				(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.

8/13/20 1:51 PM

POINT OF DIVERSION SUMMARY

### Radius

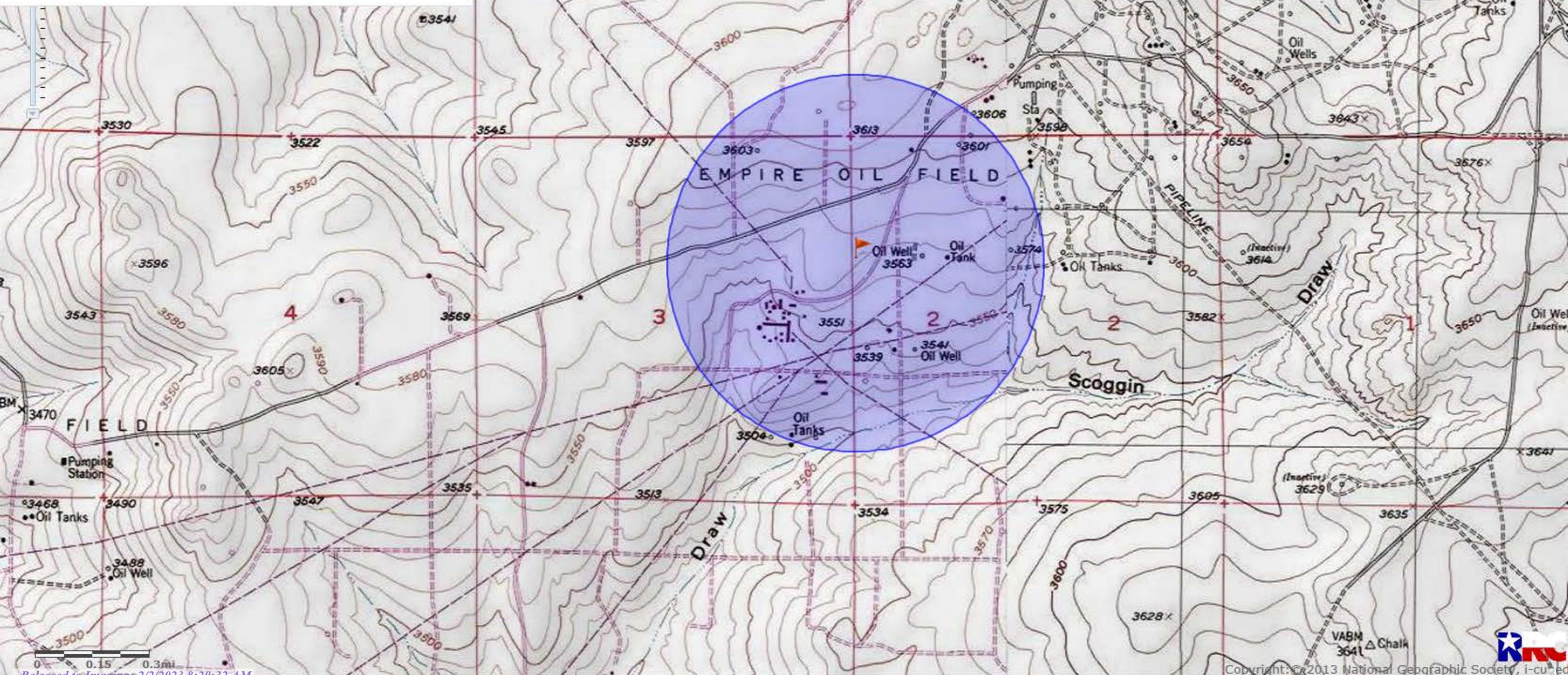
Buffer Size (miles) : 0.50

Click Map to Draw Radius

Please Select a Coordinate System and enter the coordinates:

GCS\_WGS\_1984

32.7790 -104.2570 Show



**SB State Battery**  
2RP-4295

**Remediation  
Closure**

Apache  
Corporation  
Lea County, New Mexico

**Figure 1: Sample Point Locations**



**Table 1: Field and Lab Data**

Date	Sample ID	Laboratory Results			Field Data
		BTEX (mg/kg)	TPH (mg/kg)	CL's (mg/kg)	CL's (mg/kg)
7/5/2017	SP-1	0.399	178	2400	530
	SP-2	<0.300	75.4	5680	1680



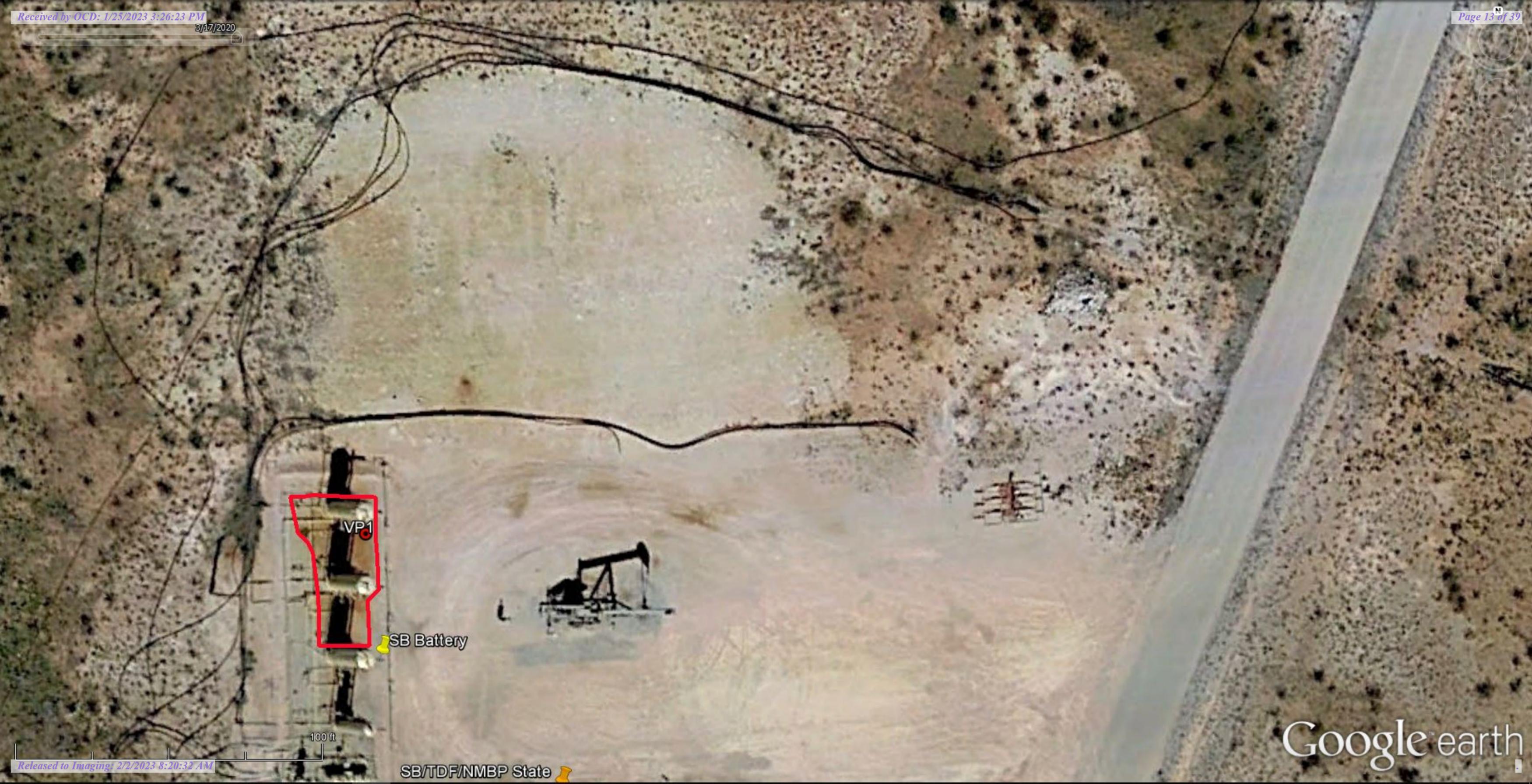
SB Battery

VP1

SB/TDF/NMBP State

© 2018 Google





100 ft



H1 @ 5'

60 ft

Sample Date	Sample ID	Depth	Chloride	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
6/17/2019	VP1 @ Surface	S	64	<0.025	0.028	0.059	0.193	0.28	<50.0	3680	1520	32.778956, -104.257072
6/17/2019	VP1 @ 1'	1'	80	<0.025	<0.025	<0.025	<0.075	<0.150	<10.0	53.3	33.6	32.778956, -104.257072
6/17/2019	VP1 @ 2'	2'	112	<0.025	<0.025	<0.025	<0.075	<0.150	<10.0	<10.0	<10.0	32.778956, -104.257072
6/17/2019	VP1 @ 3'	3'	400	<0.025	<0.025	<0.025	<0.075	<0.150	<10.0	<10.0	<10.0	32.778956, -104.257072
6/17/2019	VP1 @ 4'	4'	288	<0.025	<0.025	<0.025	<0.075	<0.150	<10.0	<10.0	<10.0	32.778956, -104.257072
11/21/2022	H1 @ 5'	Surface	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.7787672, -104.2570862



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

---

July 10, 2017

JENNIFER VAN CUREN  
ARCADIS U.S., INC.  
2999 OAK ROAD, SUITE 300  
WALNUT CREEK, CA 94597

RE: SB STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/05/17 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" at the beginning.

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

ARCADIS U.S., INC.  
 JENNIFER VAN CUREN  
 2999 OAK ROAD, SUITE 300  
 WALNUT CREEK CA, 94597  
 Fax To: NOT GIVEN

Received:	07/05/2017	Sampling Date:	07/05/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	SB STATE BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: SP1 SURFACE CALICHE (H701743-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2017	ND	2.06	103	2.00	0.235	
Toluene*	<0.050	0.050	07/06/2017	ND	1.93	96.3	2.00	0.000365	
Ethylbenzene*	<b>0.087</b>	0.050	07/06/2017	ND	2.00	99.9	2.00	0.339	
Total Xylenes*	<b>0.311</b>	0.150	07/06/2017	ND	5.99	99.8	6.00	0.507	
<b>Total BTEX</b>	<b>0.399</b>	0.300	07/06/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2400</b>	16.0	07/06/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>12.4</b>	10.0	07/07/2017	ND	187	93.7	200	0.667	
<b>DRO &gt;C10-C28</b>	<b>722</b>	10.0	07/07/2017	ND	205	102	200	0.118	
<b>EXT DRO &gt;C28-C36</b>	<b>178</b>	10.0	07/07/2017	ND					

Surrogate: 1-Chlorooctane 99.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 128 % 34.7-157

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:**

ARCADIS U.S., INC.  
 JENNIFER VAN CUREN  
 2999 OAK ROAD, SUITE 300  
 WALNUT CREEK CA, 94597  
 Fax To: NOT GIVEN

Received:	07/05/2017	Sampling Date:	07/05/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	SB STATE BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: SP2 SURFACE CALICHE (H701743-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2017	ND	2.06	103	2.00	0.235	
Toluene*	<0.050	0.050	07/06/2017	ND	1.93	96.3	2.00	0.000365	
Ethylbenzene*	<0.050	0.050	07/06/2017	ND	2.00	99.9	2.00	0.339	
Total Xylenes*	<0.150	0.150	07/06/2017	ND	5.99	99.8	6.00	0.507	
Total BTEX	<0.300	0.300	07/06/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5680</b>	16.0	07/06/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/07/2017	ND	187	93.7	200	0.667	
<b>DRO &gt;C10-C28</b>	<b>251</b>	10.0	07/07/2017	ND	205	102	200	0.118	
<b>EXT DRO &gt;C28-C36</b>	<b>75.4</b>	10.0	07/07/2017	ND					

Surrogate: 1-Chlorooctane 83.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 106 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

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

**BILL TO**

**ANALYSIS REQUEST**

Company Name: <u>Mceda's</u>		P.O. #:		
Project Manager: <u>Samuel Valverde</u>		Company: <u>Pepper</u>		
Address:		Attn: <u>buée</u>		
City:	State:	Zip:		
Phone #:	Fax #:	Address:		
Project #:	Project Owner:	City:		
Project Name: <u>SB STATE BATTERY</u>		State:	Zip:	
Project Location:		Phone #:		
Sampler Name: <u>Samuel Valverde</u>	Fax #:	PRESERV:	SAMPLING	
FOR LAB USE ONLY				
Lab I.D. <u>H 701943</u>	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	
<u>1 SP1 Surface Puck</u>	<u>X 1</u>			
<u>2 SP2 Surface Canister</u>	<u>X 1</u>			
		MATRIX		
		GROUNDWATER		
		WASTEWATER		
		SOIL		
		OIL		
		SLUDGE		
		OTHER:		
		ACID/BASE:		
		ICE / COOL		
		OTHER:		
	DATE	TIME		
	<u>7/5/17</u>	<u>3:20p</u>	<u>X</u>	<u>BTEX</u>
	<u>7/5/17</u>	<u>3:25p</u>	<u>X</u>	<u>TPH GRO, DRO, MRO</u>
			<u>X</u>	<u>Chloride</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 rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: [Signature] Date: 7/5/17 Time: 2:00pm

Received By: [Signature] Date: 7-5-17 Time: 7:00pm

Delivered By: (Circle One) UPS - UPS - Bus - Other: 18.76

Sampler - UPS - Bus - Other: 18.76

Sample Condition:  Cool  Intact  Yes  No

CHECKED BY: [Signature] (Initials) 7/5/17

REMARKS: Brought directly to job from field.



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

---

June 20, 2019

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: SB STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/17/19 15:09.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	06/17/2019	Sampling Date:	06/17/2019
Reported:	06/20/2019	Sampling Type:	Soil
Project Name:	SB STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: VP 1 @ SURFACE (H902081-01)**

BTEX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	06/19/2019	ND	1.89	94.6	2.00	2.28	
<b>Toluene*</b>	<b>0.028</b>	0.025	06/19/2019	ND	2.05	103	2.00	1.49	
<b>Ethylbenzene*</b>	<b>0.059</b>	0.025	06/19/2019	ND	2.03	101	2.00	1.23	
<b>Total Xylenes*</b>	<b>0.193</b>	0.075	06/19/2019	ND	6.71	112	6.00	0.446	
<b>Total BTEX</b>	<b>0.280</b>	0.150	06/19/2019	ND					

Surrogate: Dibromofluoromethane 97.5 % 90.4-111

Surrogate: Toluene-d8 100 % 85.3-114

Surrogate: 4-Bromofluorobenzene 96.8 % 80.1-121

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	06/20/2019	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<50.0	50.0	06/19/2019	ND	196	98.0	200	0.0730		
<b>DRO &gt;C10-C28*</b>	<b>3680</b>	50.0	06/19/2019	ND	185	92.5	200	0.880		
<b>EXT DRO &gt;C28-C36</b>	<b>1520</b>	50.0	06/19/2019	ND						

Surrogate: 1-Chlorooctane 98.9 % 41-142

Surrogate: 1-Chlorooctadecane 297 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	06/17/2019	Sampling Date:	06/17/2019
Reported:	06/20/2019	Sampling Type:	Soil
Project Name:	SB STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: VP 1 @ 1' (H902081-02)**

BTEX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	06/19/2019	ND	1.89	94.6	2.00	2.28	
Toluene*	<0.025	0.025	06/19/2019	ND	2.05	103	2.00	1.49	
Ethylbenzene*	<0.025	0.025	06/19/2019	ND	2.03	101	2.00	1.23	
Total Xylenes*	<0.075	0.075	06/19/2019	ND	6.71	112	6.00	0.446	
Total BTEX	<0.150	0.150	06/19/2019	ND					

Surrogate: Dibromofluoromethane 95.7 % 90.4-111  
 Surrogate: Toluene-d8 102 % 85.3-114  
 Surrogate: 4-Bromofluorobenzene 93.2 % 80.1-121

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>80.0</b>	16.0	06/20/2019	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	06/19/2019	ND	196	98.0	200	0.0730	
<b>DRO &gt;C10-C28*</b>	<b>53.3</b>	10.0	06/19/2019	ND	185	92.5	200	0.880	
<b>EXT DRO &gt;C28-C36</b>	<b>33.6</b>	10.0	06/19/2019	ND					

Surrogate: 1-Chlorooctane 102 % 41-142  
 Surrogate: 1-Chlorooctadecane 111 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	06/17/2019	Sampling Date:	06/17/2019
Reported:	06/20/2019	Sampling Type:	Soil
Project Name:	SB STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: VP 1 @ 2' (H902081-03)**

BTEX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	06/19/2019	ND	1.89	94.6	2.00	2.28	
Toluene*	<0.025	0.025	06/19/2019	ND	2.05	103	2.00	1.49	
Ethylbenzene*	<0.025	0.025	06/19/2019	ND	2.03	101	2.00	1.23	
Total Xylenes*	<0.075	0.075	06/19/2019	ND	6.71	112	6.00	0.446	
Total BTEX	<0.150	0.150	06/19/2019	ND					

Surrogate: Dibromofluoromethane 97.8 % 90.4-111  
 Surrogate: Toluene-d8 99.9 % 85.3-114  
 Surrogate: 4-Bromofluorobenzene 92.6 % 80.1-121

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	06/20/2019	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	06/19/2019	ND	196	98.0	200	0.0730	
DRO >C10-C28*	<10.0	10.0	06/19/2019	ND	185	92.5	200	0.880	
EXT DRO >C28-C36	<10.0	10.0	06/19/2019	ND					

Surrogate: 1-Chlorooctane 98.6 % 41-142  
 Surrogate: 1-Chlorooctadecane 103 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	06/17/2019	Sampling Date:	06/17/2019
Reported:	06/20/2019	Sampling Type:	Soil
Project Name:	SB STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: VP 1 @ 3' (H902081-04)**

BTEX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	06/19/2019	ND	1.89	94.6	2.00	2.28	
Toluene*	<0.025	0.025	06/19/2019	ND	2.05	103	2.00	1.49	
Ethylbenzene*	<0.025	0.025	06/19/2019	ND	2.03	101	2.00	1.23	
Total Xylenes*	<0.075	0.075	06/19/2019	ND	6.71	112	6.00	0.446	
Total BTEX	<0.150	0.150	06/19/2019	ND					

Surrogate: Dibromofluoromethane 98.2 % 90.4-111  
 Surrogate: Toluene-d8 101 % 85.3-114  
 Surrogate: 4-Bromofluorobenzene 91.1 % 80.1-121

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	06/20/2019	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	06/19/2019	ND	217	109	200	5.92	
DRO >C10-C28*	<10.0	10.0	06/19/2019	ND	193	96.7	200	6.69	
EXT DRO >C28-C36	<10.0	10.0	06/19/2019	ND					

Surrogate: 1-Chlorooctane 100 % 41-142  
 Surrogate: 1-Chlorooctadecane 94.9 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	06/17/2019	Sampling Date:	06/17/2019
Reported:	06/20/2019	Sampling Type:	Soil
Project Name:	SB STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: VP 1 @ 4' (H902081-05)**

BTEX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	06/19/2019	ND	1.89	94.6	2.00	2.28	
Toluene*	<0.025	0.025	06/19/2019	ND	2.05	103	2.00	1.49	
Ethylbenzene*	<0.025	0.025	06/19/2019	ND	2.03	101	2.00	1.23	
Total Xylenes*	<0.075	0.075	06/19/2019	ND	6.71	112	6.00	0.446	
Total BTEX	<0.150	0.150	06/19/2019	ND					

Surrogate: Dibromofluoromethane 96.0 % 90.4-111  
 Surrogate: Toluene-d8 102 % 85.3-114  
 Surrogate: 4-Bromofluorobenzene 93.6 % 80.1-121

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	06/20/2019	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	06/19/2019	ND	217	109	200	5.92	
DRO >C10-C28*	<10.0	10.0	06/19/2019	ND	193	96.7	200	6.69	
EXT DRO >C28-C36	<10.0	10.0	06/19/2019	ND					

Surrogate: 1-Chlorooctane 97.5 % 41-142  
 Surrogate: 1-Chlorooctadecane 92.7 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

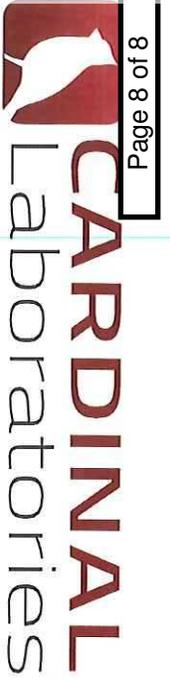
Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



8 of 8 pages

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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: <i>Aspher</i> Project Manager: <i>Jeffrey Brown/Bruce Baker</i> Address: _____ City: <i>Hobbs</i> State: <i>NM</i> Zip: <i>88240</i> Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: _____ Project Location: <i>SB State Buttery</i> Sampler Name: <i>Don Casadine Jr</i> FOR LAB USE ONLY		P.O. #: _____ Company: _____ Attn: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Lab I.D. _____ Sample I.D. _____ H902081		(G) GRAB OR (C) OMP.	
1 VP1 @ Surface 2 VP1 @ 1' 3 VP1 @ 2' 4 VP1 @ 3' 5 VP1 @ 4'		# CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: _____ ACID/BASE: _____ (C) COOL OTHER: _____	
		DATE TIME	
		EXT TPH BTEX	
Relinquished By: <i>[Signature]</i> Date: <i>6-17-19</i> Refiniquished By: <i>[Signature]</i> Date: <i>8-1-09</i>		Received By: <i>[Signature]</i>	
Delivered By: (Circle One) <i>S.I.C #97</i> Sampler - UPS - Bus - Other:		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No CHECKED BY: <i>[Signature]</i> (Initials) <i>YS</i>	
Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____ Add'l Fax #: _____ REMARKS: <i>Event Result to Jeffrey</i>			



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

November 30, 2022

BRUCE BAKER  
APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS, NM 88240

RE: SB STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/21/22 16:49.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B      Total Coliform and E. coli (Colilert MMO-MUG)  
Method EPA 524.2      Regulated VOCs and Total Trihalomethanes (TTHM)  
Method EPA 552.2      Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

APACHE CORP - HOBBS 2350 W. MARLAND BLVD. HOBBS NM, 88240	Project: SB STATE BATTERY Project Number: NONE GIVEN Project Manager: BRUCE BAKER Fax To: (575) 393-2432	Reported: 30-Nov-22 10:03
---	---	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
H 1 @ 5'	H225488-01	Soil	21-Nov-22 15:38	21-Nov-22 16:49

11/29/22 - Client changed the sample ID (see COC). This is the revised report and will replace the one sent on 11/28/22.

11/30/22 - Client changed the sample ID (see COC). This is the 2nd revision of the report and will replace the one sent on 11/29/22.

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 or 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 damage 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 2350 W. MARLAND BLVD. HOBBS NM, 88240	Project: SB STATE BATTERY Project Number: NONE GIVEN Project Manager: BRUCE BAKER Fax To: (575) 393-2432	Reported: 30-Nov-22 10:03
---	---	------------------------------

**H 1 @ 5'**  
**H225488-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**

**Inorganic Compounds**

<b>Chloride</b>	<b>48.0</b>		16.0	mg/kg	4	2112226	AC	22-Nov-22	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2112203	JH	23-Nov-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2112203	JH	23-Nov-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2112203	JH	23-Nov-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2112203	JH	23-Nov-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2112203	JH	23-Nov-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			85.6 %	69.9-140		2112203	JH	23-Nov-22	8021B	
---------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2112211	MS	22-Nov-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2112211	MS	22-Nov-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2112211	MS	22-Nov-22	8015B	

Surrogate: 1-Chlorooctane			85.4 %	45.3-161		2112211	MS	22-Nov-22	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			94.6 %	46.3-178		2112211	MS	22-Nov-22	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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 2350 W. MARLAND BLVD. HOBBS NM, 88240	Project: SB STATE BATTERY Project Number: NONE GIVEN Project Manager: BRUCE BAKER Fax To: (575) 393-2432	Reported: 30-Nov-22 10:03
---	---	------------------------------

**Inorganic Compounds - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 2112226 - 1:4 DI Water</b>										
<b>Blank (2112226-BLK1)</b>										
Prepared & Analyzed: 22-Nov-22										
Chloride	ND	16.0	mg/kg							
<b>LCS (2112226-BS1)</b>										
Prepared & Analyzed: 22-Nov-22										
Chloride	432	16.0	mg/kg	400		108	80-120			
<b>LCS Dup (2112226-BSD1)</b>										
Prepared & Analyzed: 22-Nov-22										
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

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 or 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 damage 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  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: SB STATE BATTERY  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
30-Nov-22 10:03

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2112203 - Volatiles****Blank (2112203-BLK1)**

Prepared: 22-Nov-22 Analyzed: 23-Nov-22

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		86.1	69.9-140			

**LCS (2112203-BS1)**

Prepared: 22-Nov-22 Analyzed: 23-Nov-22

Benzene	2.01	0.050	mg/kg	2.00		100	83.4-122			
Toluene	2.14	0.050	mg/kg	2.00		107	84.2-126			
Ethylbenzene	2.09	0.050	mg/kg	2.00		104	84.2-121			
m,p-Xylene	4.32	0.100	mg/kg	4.00		108	89.9-126			
o-Xylene	2.00	0.050	mg/kg	2.00		100	84.3-123			
Total Xylenes	6.32	0.150	mg/kg	6.00		105	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0413		mg/kg	0.0500		82.6	69.9-140			

**LCS Dup (2112203-BSD1)**

Prepared: 22-Nov-22 Analyzed: 23-Nov-22

Benzene	1.98	0.050	mg/kg	2.00		98.8	83.4-122	1.64	12.6	
Toluene	2.11	0.050	mg/kg	2.00		105	84.2-126	1.76	13.3	
Ethylbenzene	2.07	0.050	mg/kg	2.00		103	84.2-121	0.962	13.9	
m,p-Xylene	4.31	0.100	mg/kg	4.00		108	89.9-126	0.210	13.6	
o-Xylene	2.02	0.050	mg/kg	2.00		101	84.3-123	0.661	14.1	
Total Xylenes	6.33	0.150	mg/kg	6.00		105	89.1-124	0.0668	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0425		mg/kg	0.0500		85.0	69.9-140			

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 or 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 damage 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 2350 W. MARLAND BLVD. HOBBS NM, 88240	Project: SB STATE BATTERY Project Number: NONE GIVEN Project Manager: BRUCE BAKER Fax To: (575) 393-2432	Reported: 30-Nov-22 10:03
---	---	------------------------------

**Petroleum Hydrocarbons by GC FID - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2112211 - General Prep - Organics**

<b>Blank (2112211-BLK1)</b>		Prepared & Analyzed: 22-Nov-22								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	55.3		mg/kg	50.0		111	45.3-161			
Surrogate: 1-Chlorooctadecane	61.6		mg/kg	50.0		123	46.3-178			

<b>LCS (2112211-BS1)</b>		Prepared & Analyzed: 22-Nov-22								
GRO C6-C10	208	10.0	mg/kg	200		104	76.8-124			
DRO >C10-C28	211	10.0	mg/kg	200		106	74.9-127			
Total TPH C6-C28	420	10.0	mg/kg	400		105	77.5-124			
Surrogate: 1-Chlorooctane	58.8		mg/kg	50.0		118	45.3-161			
Surrogate: 1-Chlorooctadecane	67.6		mg/kg	50.0		135	46.3-178			

<b>LCS Dup (2112211-BSD1)</b>		Prepared & Analyzed: 22-Nov-22								
GRO C6-C10	213	10.0	mg/kg	200		106	76.8-124	2.23	17.2	
DRO >C10-C28	224	10.0	mg/kg	200		112	74.9-127	5.64	18.6	
Total TPH C6-C28	437	10.0	mg/kg	400		109	77.5-124	3.97	17.6	
Surrogate: 1-Chlorooctane	60.0		mg/kg	50.0		120	45.3-161			
Surrogate: 1-Chlorooctadecane	61.9		mg/kg	50.0		124	46.3-178			

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 or 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 damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Notes and Definitions**

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

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or 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 damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: <i>Apache</i> Project Manager: <i>Bruce Baker</i>		P.O. #: Company: Attn: Address: City: State: Zip:	
Address: City: <i>Hobbs</i> Phone #: _____ Project #: _____ Project Name: _____		State: <i>NM</i> City: _____ State: _____ Zip: _____	
Project Location: <i>SB State Batching</i> Sampler Name: <i>Sose</i>		Project Owner: Phone #: Fax #: _____	
FOR LAB USE ONLY			
Lab I.D. <i>H225488</i> Sample I.D. <i>H1G5-11/30/22</i> <i>1 HR 8' east</i>	Date: <i>1/21/22</i> Time: <i>11:29 AM</i>	(G)RAB OR (C)OMP. <input checked="" type="checkbox"/> # CONTAINERS: _____ MATRIX: GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____	DATE: <i>1/21</i> TIME: <i>3:36</i>
Relinquished By: <i>Sose</i> Date: <i>1/21/22</i> Time: <i>4:14</i>		Received By: <i>Juanita</i> Date: _____ Time: _____	
Delivered By: (Circle One) <input checked="" type="checkbox"/> UPS - Bus - Other: _____ Corrected Temp. °C: <i>1.5</i>		Sample Condition: Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No CHECKED BY: (Initials) <i>JS</i>	
Turnaround Time: _____ Thermometer ID #113 Correction Factor -0.6°C		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: All Results are emailed. Please provide Email address: REMARKS: <i>** Sample ID changed as per Bruce. 11/30/22</i> <i>E-Me 1 Results</i>	

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



SB Battery (Front side of containment)



SB Battery (Wide view of containment)



SB Battery (Backside of the containment area)

**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 179713

**CONDITIONS**

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 179713
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
amaxwell	Deferral request approved. Impacted area must be addressed when equipment is removed or during P&A activities, which ever comes first. Laboratory analysis required for closure.	2/2/2023