



DAVID FEATHER  
ENVIRONMENTAL SUPERVISOR  
DIRECT (432) 818-1615  
E-MAIL: DAVID.FEATHER@APACHECORP.COM

November 4, 2019

Mr. Bradford Billings  
State of New Mexico Oil Conservation Division  
1220 South St Francis Drive  
Santa Fe, NM 87505

RE: 1RP-3065 NM S State Battery

Mr. Billings,

In compliance with 19.15.29.15(B) NMAC and the agreement submitted by Apache Corporation on November 8, 2018, Apache Corporation is submitting information related to closure for the release occurring July 25, 2010. Apache is respectfully submitting the closure report based on studies occurring in 2019 that demonstrate the site meeting the requirements of the agency. Unless further information is requested by NMOCD, Apache Corporation considers this release closed.

If there are any questions, please feel free to contact me by telephone at 432-818-1615 or by e-mail at David.Feather@ApacheCorp.com.

Sincerely,

A handwritten signature in black ink, appearing to read "David Feather".

David Feather  
Environmental Supervisor  
Apache Corporation - Permian Basin Region

Attachment: Closure Report Dated November 4, 2019



2350 W Marland Blvd Hobbs, NM 88240

## **Closure Report**

November 4, 2019

Re: NM S State Battery  
API# 30-025-37335  
Case # 1RP-3065

To: Bradford Billings  
New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department  
1220 South St. Francis Dr. Santa Fe, NM 87505

On July 25, 2010 a release occurred due to an oil truck overfilled. An initial C-141 was submitted to NMOCD on July 25, 2010. The release (GPS Coordinates: 32.419310, - 103.139495) is located south of Eunice NM in unit letter L section 2 township 22S range 37E. According to the NMOSE groundwater data the average depth to groundwater beneath the release is 47.75 feet.

On January 24 2012 the release area was mapped and 2 surface samples collected and submitted to a commercial laboratory for analysis of chloride and TPH. On July 5, 2012 1 foot samples were obtained in the area of the two original sample points and submitted to a commercial laboratory for analysis of TPH. Due to no documentation of remediation activities Apache Corporation conducted further sampling on June 6, 2019 to confirm remediation had occurred in the past. Surface and 1 foot samples were obtained utilizing the scaled map created in 2012 in the area of Pt. 1 and Pt. 2. Once the samples were collected they were submitted to a commercial laboratory for analysis of chloride, TPH, and Btex. Laboratory analysis were below table one standards for releases occurring less than 50 feet to groundwater.

Apache Corporation has demonstrated that the release is below table one standards and respectfully request that RP-3065 be closed.

Enclosed: C-141, Maps, Sample Data, and Laboratory Results.

Submitted by;

*Bruce Baker*

**Environmental Technician**  
larry.baker@apachecorp.com  
**Cell# 432-631-6982**  
**Off# 575-393-7106**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED

AUG 04 2010

HOBBSOCD

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

DUPE

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

## Release Notification and Corrective Action

## OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Apache Corporation	Contact Natalie Gladden
Address P.O. Box 1849 Eunice, NM 88231	Telephone No. 575-390-4186
Facility Name NM S State Battery (Nearest Well NM S State #43)	Facility Type Production Facility

Surface Owner Holt	Mineral Owner NMOCD	Lease No. 30-025-37335
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## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	2	22S	37E	2140'	FSL	950'	FWL	Lea

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

## NATURE OF RELEASE

Type of Release Hydrocarbon and chlorides	Volume of Release 18	Volume Recovered 12
Source of Release Sentinel Trucking	Date and Hour of Occurrence 07/25/2010 1pm	Date and Hour of Discovery 07/25/2010 430pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jeff Leiking	
By Whom? Natalie Gladden	Date and Hour 07/26/2010 7am	
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.\*

WATER @ 35'


Describe Cause of Problem and Remedial Action Taken.\*

Truck driver fell asleep while loading his truck from the last unit. Sentinel Trucking is taking care of the cost associated with this release but Apache is doing the remediation. Standing fluid was vacuumed up immediately and excavation of saturated soil was dug out immediately as well.

Describe Area Affected and Cleanup Action Taken.\*

The contaminated soil will be hauled to Sundance Disposal once the NMOCD Standards for chlorides/TPH have been met.

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: 	OIL CONSERVATION DIVISION	
Printed Name: Natalie Gladden	Approved by District Supervisor:	
Title: EHS Environmental Tech	Approval Date:	Expiration Date:
E-mail Address: natalie.gladden@apachecorp.com	Conditions of Approval:	
Date: 07/25/2010 Phone: 575-390-4186	Attached <input type="checkbox"/> RR-06-14-306 5	

\* Attach Additional Sheets If Necessary

Form C-141

State of New Mexico  
Oil Conservation Division

Page 3

Incident ID	
District RP	
Facility ID	
Application ID	

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>47.75</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Bruce Baker Title: Environmental Tech SR.  
Signature: Bruce Baker Date: 11-4-19  
email: barry.baker@apackcorp.com Telephone: 432-631-6982

**OCD Only**

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

Form C-141

State of New Mexico  
Oil Conservation Division

Page 6

Incident ID	nJXK1606054660
District RP	1RP-1305
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Bruce Baker Title: Environmental Tech. SR.  
Signature: Bruce Baker Date: 11-4-19  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

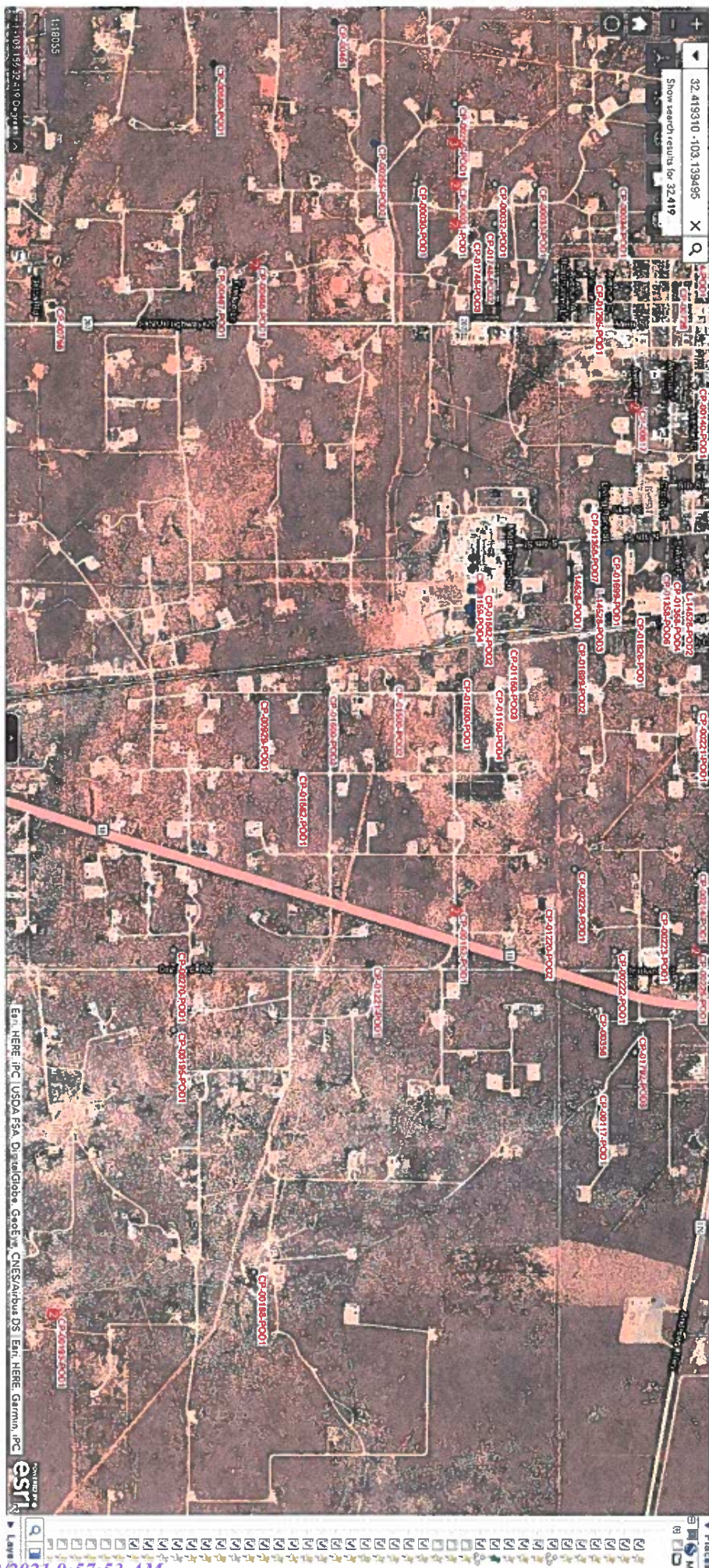
**OCD Only**

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

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

Closure Approved by: Bradford Billings Date: 07/20/2021  
Printed Name: Bradford Billings Title: Env.Spec.A







## New Mexico Office of the State Engineer Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 01358 POD1		2	1	4	34	21S	37E	674134	3589539

Driller License: 1456

Driller Company: WHITE DRILLING COMPANY

Driller Name: WHITE, JOHN W

Drill Start Date: 07/08/2014

Drill Finish Date: 07/10/2014

Plug Date:

Log File Date: 07/28/2014

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well: 65 feet

Depth Water: 48 feet

Water Bearing Stratifications:	Top	Bottom	Description
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	34	65	Sandstone/Gravel/Conglomerate
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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.

11/4/19 1:33 PM

POINT OF DIVERSION SUMMARY





## New Mexico Office of the State Engineer Point of Diversion Summary

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

Well Tag	POD Number	Q64 Q16 Q4	Sec	Tws	Rng	X	Y
CP 01220	POD1	1	2	02	22S 37E	675925	3589363

Driller License: 1711

Driller Company: STRAUB CORPORATION

Driller Name: MARTIN STRAUB

Drill Start Date: 11/05/2013

Drill Finish Date: 11/05/2013

Plug Date:

Log File Date: 12/04/2013

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 4.00

Depth Well: 65 feet

Depth Water: 48 feet

### Water Bearing Stratifications:

Top	Bottom	Description
41	50	Sandstone/Gravel/Conglomerate
50	57	Sandstone/Gravel/Conglomerate
57	65	Sandstone/Gravel/Conglomerate

### Casing Perforations:

Top	Bottom
40	65

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.

11/4/19 1:29 PM

POINT OF DIVERSION SUMMARY



## New Mexico Office of the State Engineer Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	CP 01699 POD1	2	3	4	34	21S	37E	674185	3589671

**Driller License:** 1664      **Driller Company:** CASCADE DRILLING, LP  
**Driller Name:** SHAWN CAIN  
**Drill Start Date:** 09/11/2018      **Drill Finish Date:** 09/12/2018      **Plug Date:**  
**Log File Date:** 02/15/2019      **PCW Rcv Date:**      **Source:** Shallow  
**Pump Type:**      **Pipe Discharge Size:**      **Estimated Yield:** 0 GPM  
**Casing Size:** 2.00      **Depth Well:** 65 feet      **Depth Water:** 35 feet

Water Bearing Stratifications:	Top	Bottom	Description
	25	63	Sandstone/Gravel/Conglomerate
	63	65	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	55	65

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.

11/4/19 1:12 PM

POINT OF DIVERSION SUMMARY



## New Mexico Office of the State Engineer Point of Diversion Summary

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

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

Driller License: 1711

Driller Company: STRAUB CORPORATION

Driller Name: MARTIN STRAUB

Drill Start Date: 11/07/2013

Drill Finish Date: 11/07/2013

Plug Date:

Log File Date: 12/09/2013

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 4.00

Depth Well: 75 feet

Depth Water: 60 feet

**Water Bearing Stratifications:**

Top	Bottom	Description
60	66	Sandstone/Gravel/Conglomerate
66	75	Sandstone/Gravel/Conglomerate

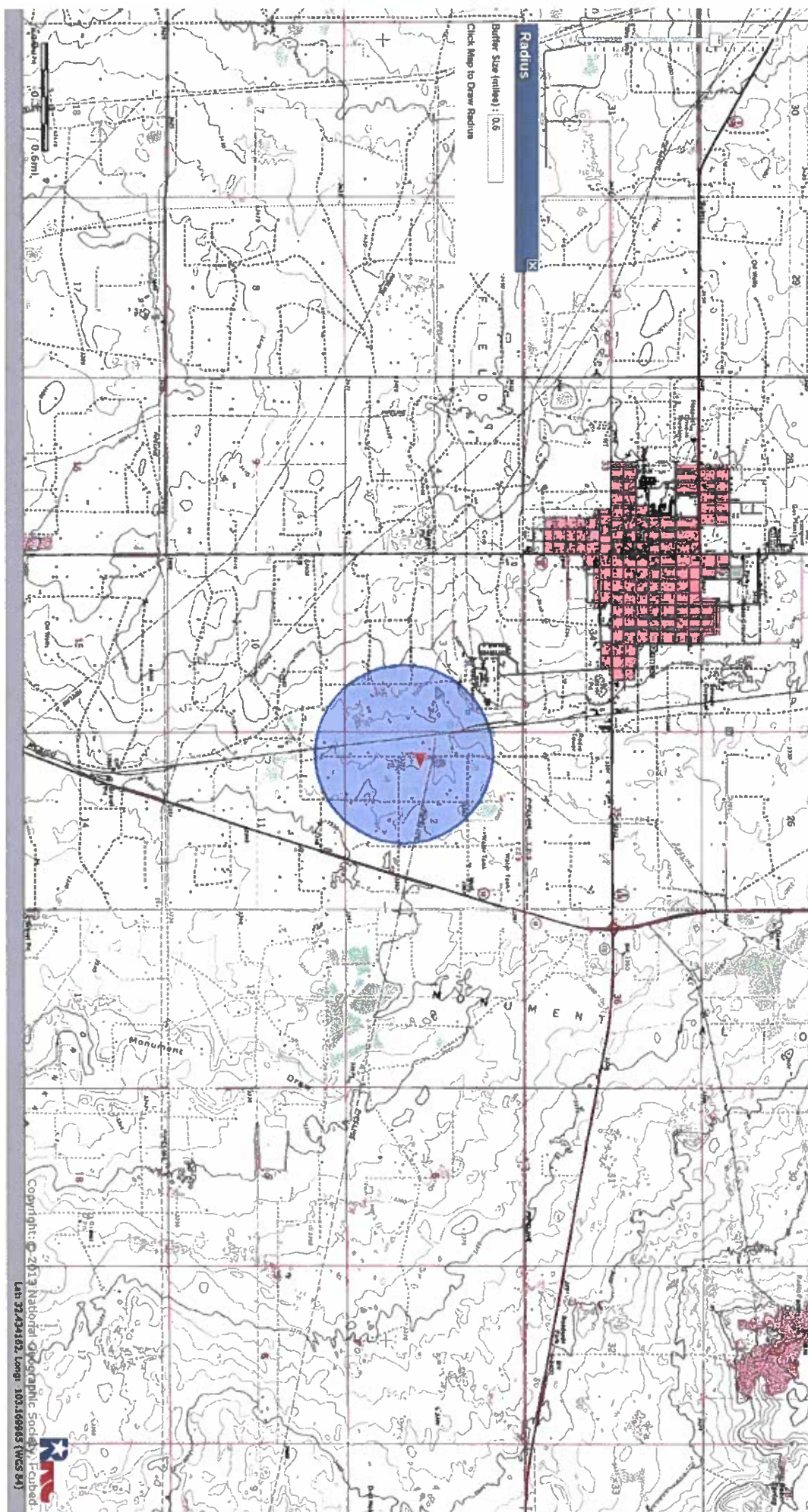
**Casing Perforations:**

Top	Bottom
50	75

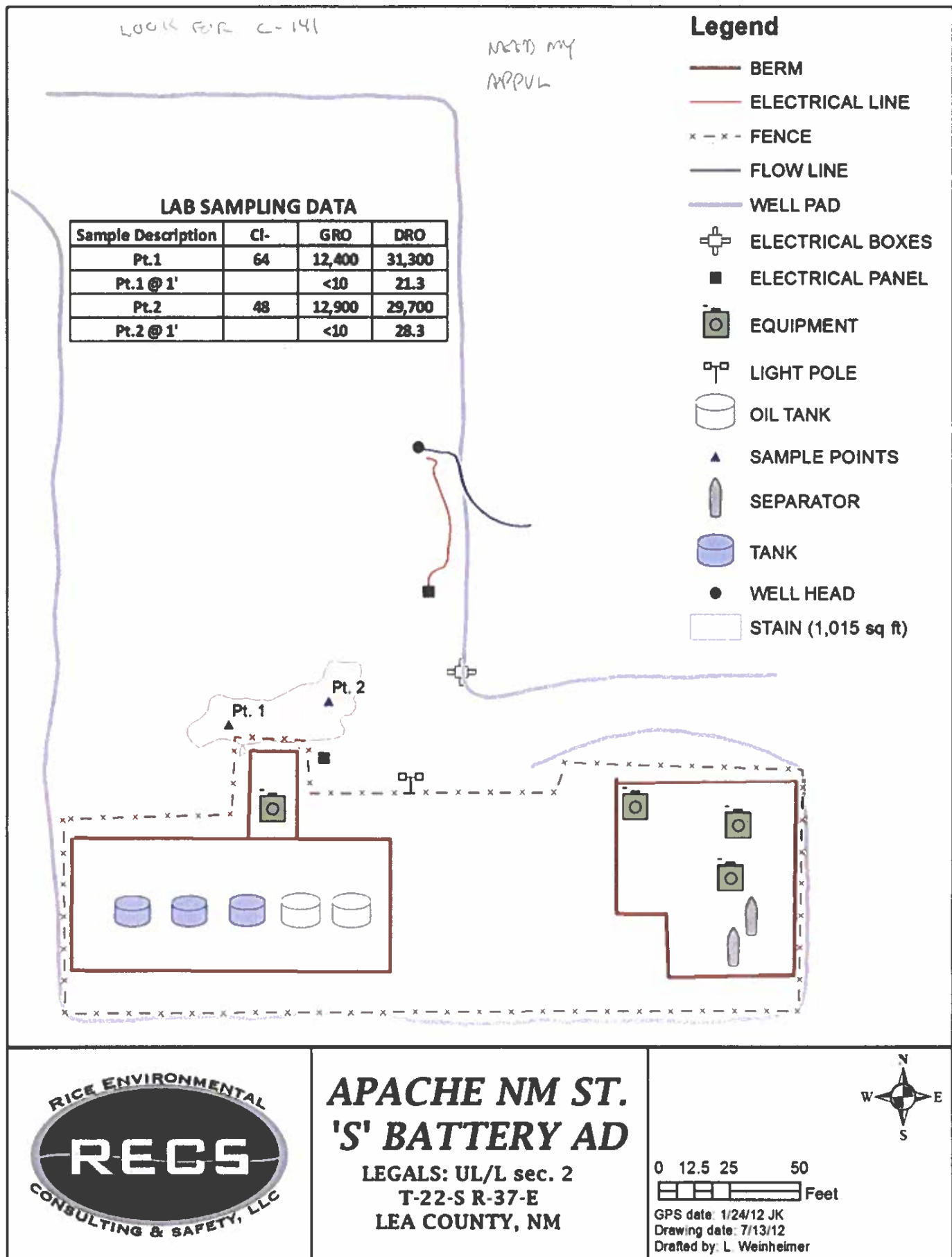
The data is furnished by the NMOSE/SC and is accepted by the recipient with the expressed understanding that the OSE/SC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/4/19 1:11 PM

POINT OF DIVERSION SUMMARY







## APACHE NM ST. 'S' BATTERY AD

LEGALS: UL/L sec. 2  
T-22-S R-37-E  
LEA COUNTY, NM



0 12.5 25 50  
Feet

GPS date: 1/24/12 JK  
Drawing date: 7/13/12  
Drafted by: L. Weinheimer

NM S State Battery Sample Data 6/6/2019

Sample ID	Depth	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	Ext. DRO
SP 1	Surface	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
SP 1	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
SP 2	Surface	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
SP 2	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0



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

January 30, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEW MEXICO ST. 'S' BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 01/24/12 15:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 "Coley D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

Received:	01/24/2012	Sampling Date:	01/24/2012
Reported:	01/30/2012	Sampling Type:	Soil
Project Name:	NEW MEXICO ST. 'S' BATTERY AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 1 (H200175-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	01/26/2012	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	12400	100	01/27/2012	ND	180	90.1	200	2.81	
DRO >C10-C28	31300	100	01/27/2012	ND	210	105	200	2.67	
Surrogate: 1-Chlorooctane	263 %	55.5-154							
Surrogate: 1-Chlorooctadecane	106 %	57.6-158							

**Sample ID: PT. 2 (H200175-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/26/2012	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	12900	100	01/28/2012	ND	180	90.1	200	2.81	
DRO >C10-C28	29700	100	01/28/2012	ND	210	105	200	2.67	
Surrogate: 1-Chlorooctane	274 %	55.5-154							
Surrogate: 1-Chlorooctadecane	110 %	57.6-158							

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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### Notes and Definitions

S-MS	Surrogate recovery outside of acceptance window confirmed as matrix effect by analysis of MS/MSD on this sample.
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.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

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

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Celey D. Keene, Lab Director/Quality Manager

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

\* Cardinal cannot accept verbal changes. Please fax written changes to: 504. 937. 475

#26



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

July 13, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NM ST 'S' BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/05/12 8:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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).

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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 "Hope S. Moreno". The signature is written in a cursive, flowing style.

Hope Moreno

Inorganic Technical Director



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

**Analytical Results For:**

APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

Received: 07/05/2012  
 Reported: 07/13/2012  
 Project Name: NM ST 'S' BATTERY  
 Project Number: [none]  
 Project Location: EUNICE, NEW MEXICO

Sampling Date: 06/26/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT 1 @ 1' (H201520-01)**

TPH 8015M	mg/kg		Analyzed By: AM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2012	ND	193	96.5	200	0.00207	
<b>DRO &gt;C10-C28</b>	<b>21.3</b>	10.0	07/11/2012	ND	202	101	200	0.0431	
Surrogate: 1-Chlorooctane	77.4 %	65.2-140							
Surrogate: 1-Chlorooctadecane	98.2 %	63.6-154							

**Sample ID: PT 2 @ 1' (H201520-02)**

TPH 8015M	mg/kg		Analyzed By: AM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2012	ND	193	96.5	200	0.00207	
<b>DRO &gt;C10-C28</b>	<b>28.3</b>	10.0	07/11/2012	ND	202	101	200	0.0431	
Surrogate: 1-Chlorooctane	81.8 %	65.2-140							
Surrogate: 1-Chlorooctadecane	102 %	63.6-154							

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Hope Moreno, Inorganic Technical Director



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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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Hope Moreno, Inorganic Technical Director

**• ARDINAL LABORATORIES**

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(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

June 13, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NM S BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/06/19 14:00.

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,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	06/06/2019	Sampling Date:	06/06/2019
Reported:	06/13/2019	Sampling Type:	Soil
Project Name:	NM S BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: SP 1 @ SURFACE (H901987-01)**

BTX 8021B		mg/kg		Analyzed By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/11/2019	ND	2.22	111	2.00	0.995	
Toluene*	<0.050	0.050	06/11/2019	ND	1.86	93.2	2.00	0.501	
Ethylbenzene*	<0.050	0.050	06/11/2019	ND	2.17	109	2.00	3.14	
Total Xylenes*	<0.150	0.150	06/11/2019	ND	5.64	94.0	6.00	3.49	
Total BTX	<0.300	0.300	06/11/2019	ND					

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2019	ND	244	122	200	1.39	
DRO >C10-C28*	<10.0	10.0	06/08/2019	ND	221	111	200	0.645	
EXT DRO >C28-C36	<10.0	10.0	06/08/2019	ND					

Surrogate: 1-Chlorooctane 96.7 % 41-142

Surrogate: 1-Chlorooctadecane 100 % 37.6-147

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 06/06/2019  
 Reported: 06/13/2019  
 Project Name: NM S BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 06/06/2019  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 1' (H901987-02)**

BTEx 8021B		mg/kg		Analyzed By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/11/2019	ND	2.22	111	2.00	0.995	
Toluene*	<0.050	0.050	06/11/2019	ND	1.86	93.2	2.00	0.501	
Ethylbenzene*	<0.050	0.050	06/11/2019	ND	2.17	109	2.00	3.14	
Total Xylenes*	<0.150	0.150	06/11/2019	ND	5.64	94.0	6.00	3.49	
Total BTEx	<0.300	0.300	06/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 123 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2019	ND	244	122	200	1.39	
DRO >C10-C28*	<10.0	10.0	06/08/2019	ND	221	111	200	0.645	
EXT DRO >C28-C36	<10.0	10.0	06/08/2019	ND					

Surrogate: 1-Chlorooctane 88.5 % 41-142

Surrogate: 1-Chlorooctadecane 89.3 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received:	06/06/2019	Sampling Date:	06/06/2019
Reported:	06/13/2019	Sampling Type:	Soil
Project Name:	NM S BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: SP 2 @ SURFACE (H901987-03)**

BTX 8021B		mg/kg		Analyzed By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/11/2019	ND	2.22	111	2.00	0.995	
Toluene*	<0.050	0.050	06/11/2019	ND	1.86	93.2	2.00	0.501	
Ethylbenzene*	<0.050	0.050	06/11/2019	ND	2.17	109	2.00	3.14	
Total Xylenes*	<0.150	0.150	06/11/2019	ND	5.64	94.0	6.00	3.49	
Total BTX	<0.300	0.300	06/11/2019	ND					

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2019	ND	244	122	200	1.39	
DRO >C10-C28*	<10.0	10.0	06/08/2019	ND	221	111	200	0.645	
EXT DRO >C28-C36	<10.0	10.0	06/08/2019	ND					

Surrogate: 1-Chlorooctane 94.0 % 41-142

Surrogate: 1-Chlorooctadecane 95.0 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	06/06/2019	Sampling Date:	06/06/2019
Reported:	06/13/2019	Sampling Type:	Soil
Project Name:	NM S BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: SP 2 @ 1' (H901987-04)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/11/2019	ND	2.37	118	2.00	1.09	
Toluene*	<0.050	0.050	06/11/2019	ND	2.37	119	2.00	0.114	
Ethylbenzene*	<0.050	0.050	06/11/2019	ND	2.23	111	2.00	1.10	
Total Xylenes*	<0.150	0.150	06/11/2019	ND	6.70	112	6.00	1.29	
Total BTX	<0.300	0.300	06/11/2019	ND					

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/08/2019	ND	244	122	200	1.39	
DRO >C10-C28*	<10.0	10.0	06/08/2019	ND	221	111	200	0.645	
EXT DRO >C28-C36	<10.0	10.0	06/08/2019	ND					

Surrogate: 1-Chlorooctane 86.8 % 41-142

Surrogate: 1-Chlorooctadecane 90.4 % 37.6-147

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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.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500C-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Released to Imaging: 7/20/2021 9:57:53 AM

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

CONDITIONS  
  
Action 2302

CONDITIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 2302
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	7/20/2021