



January 12, 2023

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

RE: 1RP-4847 JL Muncy

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 October 6, 2017. Apache is respectfully submitting the deferral request based on remediation and studies occurring in 2019. Unless further information is requested by NMOCD, Apache Corporation considers this release deferred until system abandonment.

If there are any questions, please feel free to contact me by telephone at 432-818-1654 or by e-mail at larry.baker@apachecorp.com

Sincerely,

A handwritten signature in black ink that reads "Larry Baker".

Larry Baker
Environmental Technician SR.
Apache Corporation

Attachment: Deferment Request



2350 W Marland Blvd Hobbs, NM 88240

Deferment Report

January 12, 2023

Re: JL Muncy
Case # NOY172915506

To: NM OCD Reps
Environmental Specialist-New Mexico Oil Conservation Division Energy, Minerals and
Natural Resources Department 1220 S. St. Francis, Santa Fe, NM 87505

On October 6, 2017, a release occurred due to an industrial fire located at the JL Muncy Tank Battery at or near the vertical heater treater. As a result of the incident two (2) 3" polylines did melt on the Southwest located outside of the containment in an area that was approximately 40 sq. Ft. with a loss ½ barrel of produced water and ½ barrel of oil. An initial C-141 was submitted on October 17, 2017, to NMOCD and approved on October 18, 2020. Initial release information is shown as (GPS 32.3728256, -103.1112976) is located south of Eunice, NM in unit letter P, section 23, township 22S, range 37E. The closest well with API # was utilized for this approved C-141; however, the release occurred on the same lease pad, but is associated with the tank battery location showing the following (GPS 32.373201, -103.112537) in unit letter O, section 24, township 22S, and range 37E. A 2,000-meter radius survey was conducted utilizing the NMOSE and USGS website for wells in the area. The two closest wells average depth to groundwater is >50' feet below ground surface.

Apache Corporation has completed 2 delineation points with sample point 1 (SP1) being located within the containment and sample point 2 (SP2) being southwest of the containment. Each sample point was initially taken to a depth of 1'. All samples collected were submitted to a commercial laboratory for analysis of Chloride, TPH, and BTEX. Upon receiving results, we did find that each point did meet table one standards at a depth of 1'. SP1 is within the protected berm containment and cannot safely be remediated due the weight of the equipment and production lines found within this area. Apache respectfully requests that this area be deferred for the life cycle of the location. When the life cycle of this location is complete the area will be fully remediated to reclamation standards. SP2 is located outside of the containment area and was remediated to table one standards at a depth of 2'. All samples collected were submitted to a commercial laboratory for analysis of Chloride, TPH, and BTEX. Apache has fully remediated the area of SP2 with 5-point final composites being the collected in and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory results did show this area has been remediated to table one standards.

Deferment Request:

In accordance with NMOCD table one standards Apache Corporation has completed deferment requirements for #1RP-4847. Apache Corporation respectfully requests that #1RP-4847 be deferred at this time due to SP1 being with the containment area and further work within this

containment will cause undue risk for those involved due to the weight of the equipment shifting and the number of below ground production lines found within this containment. All excavated soil was exported to an NMOCD approved disposal facility. The pasture area was backfilled with clean imported topsoil and contoured to the surrounding area.

On 10/6/2022 a surface 5-point composite horizontal samples were collected not to exceed 200 square feet to fulfil the lateral delineation requirement.

Apache Corporation has completed remediation of the pasture to below table one standards and respectfully request that the area in proximity of the heater treater be deferred until the equipment is replaced or system abandonment.

Enclosed: C-141, Maps, Data Table, Laboratory Results, Field Notes, Groundwater Data, Maps, and Photo Page

Submitted by.

Larry Baker

Environmental Technician Sr. Staff

Larry.baker@apachecorp.com

Off# 432-818-1654

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|--|------------------------------|
| Name of Company Apache Corporation | Contact Bruce Baker |
| Address 2350 W Marland Street, Hobbs, NM 88240 | Telephone No. (432) 631-6982 |
| Facility Name JL Muncy | Facility Type Battery |
| Surface Owner Private | Mineral Owner Fee |
| API No. 30-025-25361 | |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------------------|---------------|-----------------|--------------|---------------|------------------|---------------|----------------|---------------|
| Unit Letter P | Section 24 | Township 22S | Range 37E | Feet from the | North/South Line | Feet from the | East/West Line | County Lea |
|-------------------------|---------------|-----------------|--------------|---------------|------------------|---------------|----------------|---------------|

Latitude 32.3728256 Longitude -103.1112976

NATURE OF RELEASE

| | | |
|--|--|--|
| Type of Release Oil and Produced Water | Volume of Release 1 barrel of oil and 2 barrels of water | Volume Recovered 1/2 barrel of oil and 1/2 a barrel of water |
| Source of Release Heater/Flowline | Date and Hour of Occurrence 10/06/2017 | Date and Hour of Discovery 10/06/2017 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Olivia Yu (NMOCD) left message on 10/06/2017 at 12:14 p.m. | |
| By Whom? Bruce Baker | Date and Hour | |
| 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.*

RECEIVED

By Olivia Yu at 2:40 pm, Oct 18, 2017

Describe Cause of Problem and Remedial Action Taken.*

A production heater treater caught fire after a gas connection failed. The Eunice Volunteer Fire Department extinguished the fire. During the fire two 3 inch poly line melted resulting in the loss of fluid. After the fire was extinguished a vacuum truck was dispatched to pick-up standing fluid.

Describe Area Affected and Cleanup Action Taken.*

The release affected a 40 square foot area of pasture south of the berm facility.

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> | OIL CONSERVATION DIVISION | |
| Printed Name: Bruce Baker | Approved by Environmental Specialist: <i>[Signature]</i> | |
| Title: Environmental Technician | Approval Date: 10/18/2017 | Expiration Date: |
| E-mail Address: larry.baker@apachecorp.com | Conditions of Approval: | Attached <input checked="" type="checkbox"/> |
| Date: 10/17/2017 Phone: (432) 631-6982 | see attached directive | |

* Attach Additional Sheets If Necessary

1RP-4847

nOY1729155061

pOY1729158052

| | |
|----------------|---------------|
| Incident ID | NOY1729155061 |
| 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>54</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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

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

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

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

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

| | |
|----------------|---------------|
| Incident ID | NOY1729155061 |
| 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: 9/17/2020
email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

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

| | |
|----------------|---------------|
| Incident ID | NOY1729155061 |
| 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: 1/12/2023
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: Bryan Hall Date: 1/31/2023

From: OCDOnline@state.nm.us
To: [Baker, Larry](#)
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 10247
Date: Tuesday, September 20, 2022 4:03:39 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#) nOY1729155061, for the following reasons:

- **Deferral request denied due to extents of the contamination not being fully delineated.**
- **Deferral request section of C-141 (page 5) missing.**
- **Please submit delineation and deferral request before 12/23/2022.**
- **1RP-4847 closed. Please refer to incident #NOY172915506 on future communications.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 10247.

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,
Brittany Hall
Environmental Specialist - A
505-334-6178
Brittany.Hall@state.nm.us

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



USGS 322230103072301

USGS 322224103072901

J L Muncy

32 22 22 -103 07 02 USGS 322222103070201

USGS 322159103060601

Kennann Ln

USGS 322200103071301

USGS 322151103070601 USGS 322150103070601

Drinkard Rd

USGS 322143103071301

2796 ft

© 2020 Google

Google earth

Agency code = usgs

site_no list =

- 322222103070201

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 322222103070201 22S.37E.24.32200

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°22'22", Longitude 103°07'02" NAD27

Land-surface elevation 3,312 feet above NAVD88

The depth of the well is 65 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

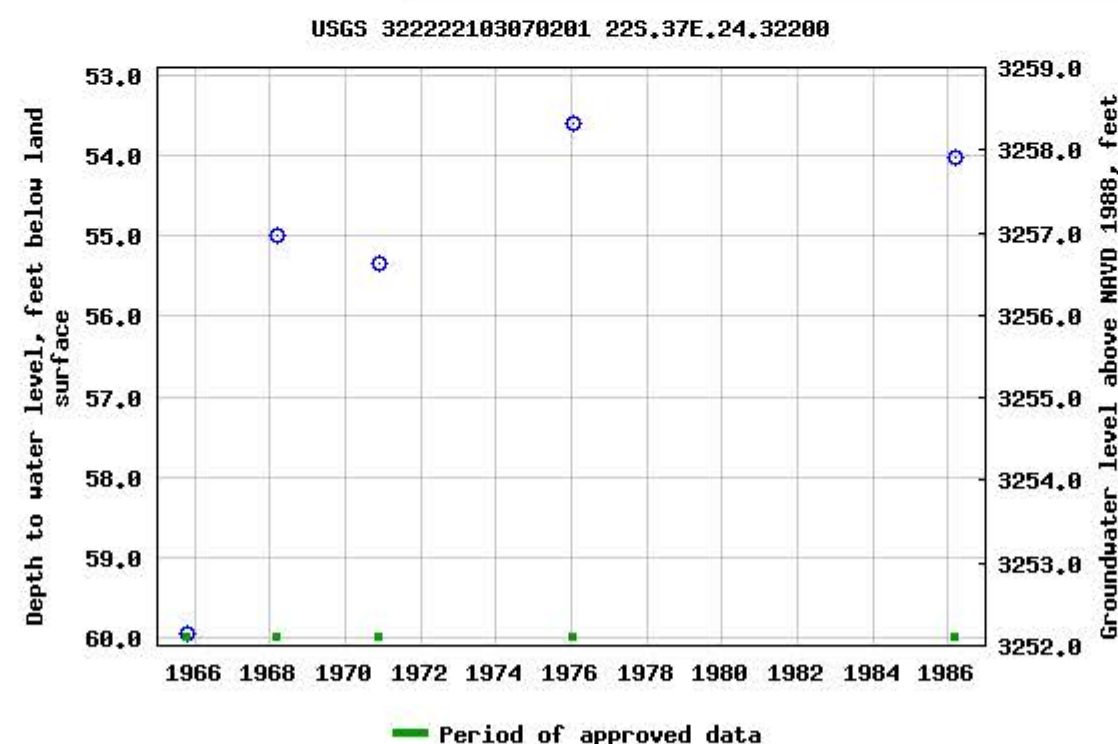
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Released to Imaging: 1/31/2023 7:20:31 AM](#)

[Help](#)

[Data Tips](#)

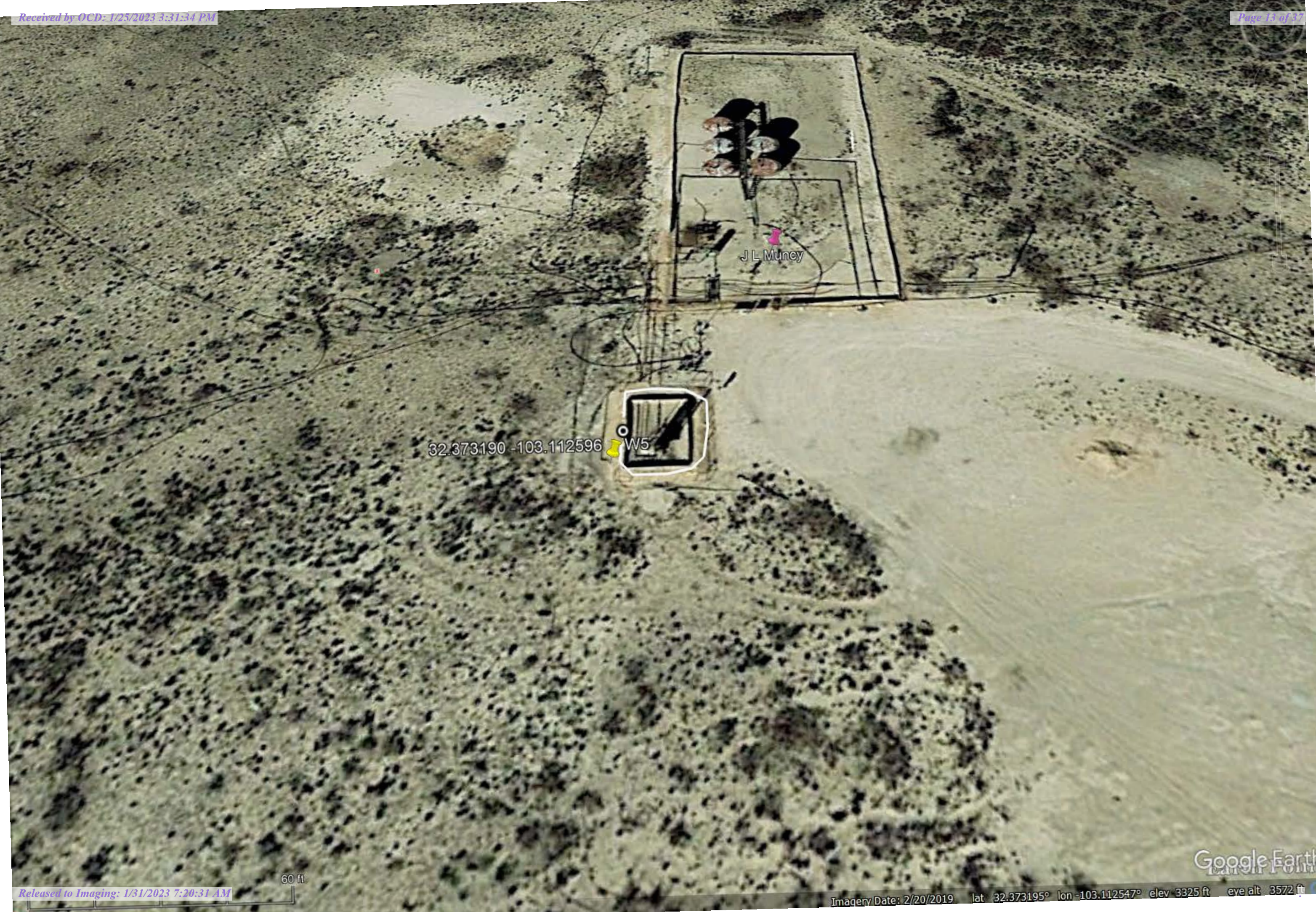
[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)







J L Muncy

32.373190 -103.112596 W5

60 ft

Delineation Samples

| Sample Date | Sample ID | Depth | Chloride | Benzene | Toulene | Ethybenzene | Total Xylenes | Total BTEX | GRO | DRO | EXT DRO | GPS Coordinates |
|-------------|-----------|-------|----------|---------|---------|-------------|---------------|------------|-------|-------|---------|------------------------|
| 6/6/2019 | SP 1 | S | 1060 | <0.050 | 0.707 | 0.147 | 0.356 | 1.21 | <10.0 | 24600 | 8090 | 32.373201 - 103.112537 |
| 6/6/2019 | | 1' | 2360 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | 948 | 269 | |
| 6/6/2019 | SP 2 | S | 624 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 32.373190 - 103.112596 |
| 6/6/2019 | | 1' | 1310 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | 2120 | 875 | |
| 8/6/2019 | | 2' | 192 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | |

Final Samples

| Sample Date | Sample ID | Depth | Chloride | Benzene | Toulene | Ethybenzene | Total Xylenes | Total BTEX | GRO | DRO | EXT DRO | GPS Coordinates |
|-------------|-------------------|---------|----------|---------|---------|-------------|---------------|------------|-------|-------|---------|------------------------|
| 8/6/2019 | SP 2 NWC@ 2' | | 224 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 32.373190 - 103.112596 |
| 8/6/2019 | SP 2 WWC @ 2' | | 32 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 32.373185 - 103.112616 |
| 8/6/2019 | SP 2 EWC @ 2' | | 384 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 32.373187 - 103.112580 |
| 8/6/2019 | SP 2 SWC @ 2' | | 48 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 32.373170 - 103.112596 |
| 8/6/2019 | SP 2 Floor C @ 2' | 2' | 96 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 32.373190 - 103.112596 |
| 10/6/2022 | W5 | Surface | 96 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 32.373216 -103.112582 |



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: JL MUNCY #5

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.

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

Received: 06/06/2019
 Reported: 06/13/2019
 Project Name: JL MUNCY #5
 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 @ SURFACE (H901985-01)

| 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* | 0.707 | 0.050 | 06/11/2019 | ND | 1.86 | 93.2 | 2.00 | 0.501 | |
| Ethylbenzene* | 0.147 | 0.050 | 06/11/2019 | ND | 2.17 | 109 | 2.00 | 3.14 | |
| Total Xylenes* | 0.356 | 0.150 | 06/11/2019 | ND | 5.64 | 94.0 | 6.00 | 3.49 | |
| Total BTEX | 1.21 | 0.300 | 06/11/2019 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 112 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | Analyzed By: AC | | | | | | |
|----------------------|-------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1060 | 16.0 | 06/10/2019 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | Analyzed By: MS | | | | | | | S-06 |
|----------------------------|--------------|-----------------|-----------------|--------------|-----|------------|---------------|-------|-----------|------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10* | <100 | 100 | 06/08/2019 | ND | 239 | 119 | 200 | 1.53 | | |
| DRO >C10-C28* | 24600 | 100 | 06/08/2019 | ND | 217 | 108 | 200 | 0.912 | | |
| EXT DRO >C28-C36 | 8090 | 100 | 06/08/2019 | ND | | | | | | |

Surrogate: 1-Chlorooctane 113 % 41-142

Surrogate: 1-Chlorooctadecane 1050 % 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
 BRUCE BAKER
 2350 W. MARLAND BLVD.
 HOBBS NM, 88240
 Fax To: (575) 393-2432

Received: 06/06/2019
 Reported: 06/13/2019
 Project Name: JL MUNCY #5
 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' (H901985-02)

| 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 (PID) 121 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2360 | 16.0 | 06/10/2019 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 06/08/2019 | ND | 239 | 119 | 200 | 1.53 | |
| DRO >C10-C28* | 948 | 10.0 | 06/08/2019 | ND | 217 | 108 | 200 | 0.912 | |
| EXT DRO >C28-C36 | 269 | 10.0 | 06/08/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 137 % 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
 BRUCE BAKER
 2350 W. MARLAND BLVD.
 HOBBS NM, 88240
 Fax To: (575) 393-2432

Received: 06/06/2019
 Reported: 06/13/2019
 Project Name: JL MUNCY #5
 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 2 @ SURFACE (H901985-03)

| 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 (PID) 113 % 73.3-129

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 624 | 16.0 | 06/10/2019 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 06/08/2019 | ND | 239 | 119 | 200 | 1.53 | |
| DRO >C10-C28* | <10.0 | 10.0 | 06/08/2019 | ND | 217 | 108 | 200 | 0.912 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 06/08/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 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
 BRUCE BAKER
 2350 W. MARLAND BLVD.
 HOBBS NM, 88240
 Fax To: (575) 393-2432

Received: 06/06/2019
 Reported: 06/13/2019
 Project Name: JL MUNCY #5
 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 2 @ 1' (H901985-04)

| 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 (PID) 112 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1310 | 16.0 | 06/10/2019 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | S-04 | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 06/09/2019 | ND | 244 | 122 | 200 | 1.39 | |
| DRO >C10-C28* | 2120 | 10.0 | 06/09/2019 | ND | 221 | 111 | 200 | 0.645 | QM-07 |
| EXT DRO >C28-C36 | 875 | 10.0 | 06/09/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 95.8 % 41-142

Surrogate: 1-Chlorooctadecane 178 % 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

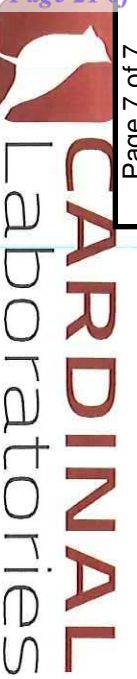
| | |
|-------|---|
| S-06 | The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's. |
| S-04 | The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. |
| QR-03 | The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values. |
| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| RPD | Relative Percent Difference |
| ** | Samples not received at proper temperature of 6°C or below. |
| *** | Insufficient time to reach temperature. |
| - | Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report |

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-----------------|--|-------------------|--|--------------|--|-------------|--|------------|--|------|--|-----|--|-------------------------|--|---------|--|------------|--|------------|--|---------|--|--------|--|------|--|----|--|------|--|---------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Company Name: APACHE CORPORATION | | P.O. #: | | BILL TO | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Manager: BRUCE BAKER | | Company: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Address: | | Attn: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| City: | | State: | | Zip: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phone #: | | Fax #: | | Address: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project #: | | City: | | State: | | Zip: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Name: VL Muncy #5 | | Phone #: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Location: VL Muncy #5 | | Fax #: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample Name: BROWN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FOR LAB USE ONLY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lab I.D. | | Sample I.D. | | (G)RAB OR (C)OMP. | | # CONTAINERS | | GROUNDWATER | | WASTEWATER | | SOIL | | OIL | | SLUDGE | | OTHER : | | ACID/BASE: | | ICE / COOL | | OTHER : | | DATE | | TIME | | CL | | BTEX | | EX. TPH | | | | | | | | | | | | | |
| H901985 | | 1 SP2 @ Surface | | | | | | | | | | | | | | | | | | | | | | | | 6-6-15 | | 9:15 | | | | | | | | | | | | | | | | | | | |
| | | 2 SP2 @ 2' | | | | | | | | | | | | | | | | | | | | | | | | 6-6-15 | | 9:17 | | | | | | | | | | | | | | | | | | | |
| | | 3 SP2 @ Surface | | | | | | | | | | | | | | | | | | | | | | | | 6-6-15 | | 9:19 | | | | | | | | | | | | | | | | | | | |
| | | 4 SP2 @ 1 | | | | | | | | | | | | | | | | | | | | | | | | 6-6-15 | | 9:21 | | | | | | | | | | | | | | | | | | | |

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

| | | | | | | | | | | | | | | | |
|----------------------------------|--|---------------------|--|-------------------------------------|--|-------------------|--|-------------------|--|---|--|--|--|---|--|
| Reinquished By: Jeff Spur | | Date: 6-6-15 | | Received By: Janetna Chappin | | Time: 2:00 | | Time: 2:00 | | Sample Condition | | CHECKED BY: 78 | | REMARKS: | |
| Reinquished By: | | Date: | | Received By: | | Time: | | Time: | | Cool <input type="checkbox"/> Intact <input type="checkbox"/> | | Yes <input type="checkbox"/> No <input type="checkbox"/> | | Add'l Phone #: <input type="checkbox"/> Add'l Fax #: <input type="checkbox"/> | |
| Delivered By: (Circle One) | | 3.4. #97 | | | | | | | | | | | | | |
| Sampler - UPS - Bus - Other: | | | | | | | | | | | | | | | |



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

August 12, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: JL MUNCY #5

Enclosed are the results of analyses for samples received by the laboratory on 08/06/19 12:36.

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.

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 "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For 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: 08/06/2019
 Reported: 08/12/2019
 Project Name: JL MUNCY #5
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/06/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 @ 2' (H902695-01)

| BTX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.09 | 105 | 2.00 | 6.89 | |
| Toluene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.13 | 107 | 2.00 | 6.44 | |
| Ethylbenzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.01 | 101 | 2.00 | 4.82 | |
| Total Xylenes* | <0.150 | 0.150 | 08/08/2019 | ND | 6.07 | 101 | 6.00 | 4.98 | |
| Total BTX | <0.300 | 0.300 | 08/08/2019 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 192 | 16.0 | 08/08/2019 | 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 | 08/07/2019 | ND | 200 | 100 | 200 | 0.271 | |
| DRO >C10-C28* | <10.0 | 10.0 | 08/07/2019 | ND | 197 | 98.7 | 200 | 1.71 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 08/07/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.3 % 41-142

Surrogate: 1-Chlorooctadecane 89.5 % 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.

Mike Snyder For 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: 08/06/2019
 Reported: 08/12/2019
 Project Name: JL MUNCY #5
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/06/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 NWC @ 2' (H902695-02)

| 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 | 08/08/2019 | ND | 2.09 | 105 | 2.00 | 6.89 | | |
| Toluene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.13 | 107 | 2.00 | 6.44 | | |
| Ethylbenzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.01 | 101 | 2.00 | 4.82 | | |
| Total Xylenes* | <0.150 | 0.150 | 08/08/2019 | ND | 6.07 | 101 | 6.00 | 4.98 | | |
| Total BTEx | <0.300 | 0.300 | 08/08/2019 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 224 | 16.0 | 08/08/2019 | 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 | 08/07/2019 | ND | 200 | 100 | 200 | 0.271 | |
| DRO >C10-C28* | <10.0 | 10.0 | 08/07/2019 | ND | 197 | 98.7 | 200 | 1.71 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 08/07/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 99.4 % 41-142

Surrogate: 1-Chlorooctadecane 98.5 % 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.

Mike Snyder For 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: 08/06/2019
 Reported: 08/12/2019
 Project Name: JL MUNCY #5
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/06/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 WWC @ 2' (H902695-03)

| BTEx 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.09 | 105 | 2.00 | 6.89 | |
| Toluene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.13 | 107 | 2.00 | 6.44 | |
| Ethylbenzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.01 | 101 | 2.00 | 4.82 | |
| Total Xylenes* | <0.150 | 0.150 | 08/08/2019 | ND | 6.07 | 101 | 6.00 | 4.98 | |
| Total BTEx | <0.300 | 0.300 | 08/08/2019 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 32.0 | 16.0 | 08/08/2019 | 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 | 08/07/2019 | ND | 200 | 100 | 200 | 0.271 | |
| DRO >C10-C28* | <10.0 | 10.0 | 08/07/2019 | ND | 197 | 98.7 | 200 | 1.71 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 08/07/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 99.9 % 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.

Mike Snyder For 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: 08/06/2019
 Reported: 08/12/2019
 Project Name: JL MUNCY #5
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/06/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 EWC @ 2' (H902695-04)

| 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 | 08/08/2019 | ND | 2.09 | 105 | 2.00 | 6.89 | | |
| Toluene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.13 | 107 | 2.00 | 6.44 | | |
| Ethylbenzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.01 | 101 | 2.00 | 4.82 | | |
| Total Xylenes* | <0.150 | 0.150 | 08/08/2019 | ND | 6.07 | 101 | 6.00 | 4.98 | | |
| Total BTX | <0.300 | 0.300 | 08/08/2019 | ND | | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 384 | 16.0 | 08/08/2019 | 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 | 08/07/2019 | ND | 200 | 100 | 200 | 0.271 | |
| DRO >C10-C28* | <10.0 | 10.0 | 08/07/2019 | ND | 197 | 98.7 | 200 | 1.71 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 08/07/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 80.7 % 41-142

Surrogate: 1-Chlorooctadecane 82.8 % 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.

Mike Snyder For 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: 08/06/2019
 Reported: 08/12/2019
 Project Name: JL MUNCY #5
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/06/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 2 SWC @ 2' (H902695-05)

| BTX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.09 | 105 | 2.00 | 6.89 | |
| Toluene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.13 | 107 | 2.00 | 6.44 | |
| Ethylbenzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.01 | 101 | 2.00 | 4.82 | |
| Total Xylenes* | <0.150 | 0.150 | 08/08/2019 | ND | 6.07 | 101 | 6.00 | 4.98 | |
| Total BTX | <0.300 | 0.300 | 08/08/2019 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 08/08/2019 | 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 | 08/07/2019 | ND | 200 | 100 | 200 | 0.271 | |
| DRO >C10-C28* | <10.0 | 10.0 | 08/07/2019 | ND | 197 | 98.7 | 200 | 1.71 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 08/07/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 109 % 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.

Mike Snyder For 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: | 08/06/2019 | Sampling Date: | 08/06/2019 |
| Reported: | 08/12/2019 | Sampling Type: | Soil |
| Project Name: | JL MUNCY #5 | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: SP 2 FLOOR C @ 2' (H902695-06)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.09 | 105 | 2.00 | 6.89 | |
| Toluene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.13 | 107 | 2.00 | 6.44 | |
| Ethylbenzene* | <0.050 | 0.050 | 08/08/2019 | ND | 2.01 | 101 | 2.00 | 4.82 | |
| Total Xylenes* | <0.150 | 0.150 | 08/08/2019 | ND | 6.07 | 101 | 6.00 | 4.98 | |
| Total BTEX | <0.300 | 0.300 | 08/08/2019 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 96.0 | 16.0 | 08/08/2019 | 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 | 08/07/2019 | ND | 200 | 100 | 200 | 0.271 | |
| DRO >C10-C28* | <10.0 | 10.0 | 08/07/2019 | ND | 197 | 98.7 | 200 | 1.71 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 08/07/2019 | ND | | | | | |

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 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.

Mike Snyder For 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 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.

A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

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

Released to Imaging: 1/31/2023 7:20:31 AM



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

October 11, 2022

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: JL MUNCY

Enclosed are the results of analyses for samples received by the laboratory on 10/06/22 15:07.

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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/06/2022
 Reported: 10/11/2022
 Project Name: JL MUNCY
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 10/06/2022
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W 5 @ SURFACE (H224697-01)

| BTEX 8021B | | mg/kg | | Analyzed By: JH | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 10/10/2022 | ND | 2.02 | 101 | 2.00 | 0.565 | |
| Toluene* | <0.050 | 0.050 | 10/10/2022 | ND | 2.17 | 109 | 2.00 | 1.74 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/10/2022 | ND | 2.00 | 99.8 | 2.00 | 1.61 | |
| Total Xylenes* | <0.150 | 0.150 | 10/10/2022 | ND | 6.02 | 100 | 6.00 | 2.08 | |
| Total BTEX | <0.300 | 0.300 | 10/10/2022 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: GM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 96.0 | 16.0 | 10/10/2022 | ND | 400 | 100 | 400 | 3.92 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 10/10/2022 | ND | 211 | 105 | 200 | 1.32 | |
| DRO >C10-C28* | <10.0 | 10.0 | 10/10/2022 | ND | 222 | 111 | 200 | 3.11 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/10/2022 | ND | | | | | |

Surrogate: 1-Chlorooctane 93.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 98.0 % 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 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

| | |
|-----|--|
| 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.

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]





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 179718

CONDITIONS

| | |
|---|---|
| Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705 | OGRID: 873 |
| | Action Number: 179718 |
| | Action Type: [C-141] Release Corrective Action (C-141) |

CONDITIONS

| | | |
|------------|--|----------------|
| Created By | Condition | Condition Date |
| bhall | Deferral approved until until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first. | 1/31/2023 |