VERTEX

March 19, 2025 Vertex Project #: 25A-00763

**Spill Closure Report:** Mesa Verde 6 Federal #005
Unit G, Section 6, Township 24 South, Range 32 East
API: 30-025-32504
County: Lea
Incident Report: nGRL0927342490, 1RP-2288

**Prepared For:** **Devon Energy Production Company**
6488 Seven Rivers Highway
Artesia, New Mexico 88210

**New Mexico Oil Conservation Division**
508 West Texas Ave.
Artesia, New Mexico

Devon Energy Production Company (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment and Remediation for a release of produced water and crude oil due to a leak in an underground flowline near the wellhead at Mesa Verde 6 Federal #005, API 30-025-32504, Incident nGRL0927342490, 1RP-2288 (hereafter referred to as "Mesa Verde"). This letter provides a description of the Spill Assessment and Remediation and includes a request for Spill Closure. The spill area is located at N 32.2482376, W -103.7116165.

## Background

The site is located approximately 21.2 miles west of Malaga, New Mexico (Google Inc., 2022). The legal location for site is Unit G, Section 6, Township 24 South and Range 32 East in Lea County, New Mexico. The spill area is located on Bureau of Land Management property. An aerial photograph and site schematic are included in Figure 1 - Attachment 1.

*The Geological Map of New Mexico* (New Mexico Bureau of Geology and Mineral Resources, 2022) indicates the site's surface geology is comprised primarily of Qep – eolian and piedmont deposits that include eolian sands interlaid with piedmont-slope deposits (New Mexico Bureau of Geology and Mineral Resources, 2022). The Natural Resources Conservation Service *Web Soil Survey* characterizes the predominant soil texture on the site is Maljamar and Palomas fine sands. It tends to be well drained with very low runoff and low available moisture levels in the soil profile (United States Department of Agriculture, Natural Resources Conservation Service, 2022).

The surrounding landscape is associated with plains at elevations of 3,000 to 3,900 feet above sea level. The climate is semi-arid, with an annual precipitation ranging between 10 to 15 inches. Historically, the plant community has grassland aspect, dominated by black grama, dropseeds, and bluestems with scattered shinnery oak and sand sage. Perennial and annual forb abundance and distribution are dependent on precipitation. Overgrazing and extended drought can reduce grass cover (United States Department of Agriculture, Natural Resources Conservation Service, 2022).

There is no surface water located on-site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 Mexico Administrative Code (NMAC; New Mexico Oil Conservation Division, 2018), is an intermittent stream located approximately 5.71 miles west of the site (United States Fish and Wildlife Service, 2024). There are no continuous flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes, or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

## Incident Description

The spill occurred on August 27, 2009, due to a leak in a buried flowline near the wellhead. The spill was reported on August 28, 2009, and involved the release of approximately 4 barrels (bbl.) of produced water and 1 bbl. produced oil on the engineered pad site. Approximately 0 bbl. of free fluid was removed during initial spill clean-up. Field screening and laboratory analysis results from the initial site inspection are included in Table 3 (Attachment 2). The New Mexico Oil Conservation Division (NMOCD) C-141 Report: nGRL0927342490, 1RP-2288 is included in Attachment 3. The daily field report (DFR) and site photographs are included in Attachment 4.

## Closure Criteria Determination

The closest depth to groundwater reference is from a dry exploratory borehole drilled to 105 feet bgs approximately 0.57 miles from the site. (New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System, 2024). The depth to groundwater reference exceeded 0.5 miles from the release area, therefore the closure criteria for remediation of the site was determined to be associated with the strictest constituent concentration limits.

The release at Mesa Verde would be subject to the requirements of Paragraph (4) of Subsection C of 19.15.29.12 of NMAC and the closure criteria for the site would be determined to be associated with the following constituent concentration limits based on depth to groundwater. The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2. Documentation used in Closure Criteria Determination research is included in Attachment 5.

| **Table 1. Closure Criteria Determination** | | | |
|---|---|---|---|
| **Site Name: Mesa Verde 6 Federal #005** | | | |
| **Spill Coordinates: 32.2482376,-103.7116165** | | **X: 621370** | **Y: 3568680** |
| **Site Specific Conditions** | | **Value** | **Unit** |
| 1 | Depth to Groundwater (nearest reference) | **>105** | feet |
| | Distance between release and nearest DTGW reference | **3,020** | feet |
| | | **0.57** | miles |
| | Date of nearest DTGW reference measurement | **December 14, 2023** | |
| 2 | Within 300 feet of any continuously flowing watercourse or any other significant watercourse | 30,182 | feet |
| 3 | Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark) | 35,747 | feet |
| 4 | Within 300 feet from an occupied residence, school, hospital, institution or church | 17,390 | feet |
| 5 | i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, **or** | 4,873 | feet |
| | ii) Within 1000 feet of any fresh water well or spring | 4,873 | feet |
| 6 | Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves | No | (Y/N) |
| 7 | Within 300 feet of a wetland | 3,009 | feet |
| 8 | Within the area overlying a subsurface mine | No | (Y/N) |
| | Distance between release and nearest registered mine | 65,532 | feet |
| 9 | Within an unstable area (Karst Map) | Low | Critical<br>High<br>Medium<br>Low |
| | Distance between release and nearest Medium/High\Critical Karst | 40,778 | feet |
| 10 | Within a 100-year Floodplain | Undetermined | year |
| | Distance between release and nearest FEMA Zone A (100-year Floodplain) | 37,151 | feet |
| 11 | Soil Type | Fine sand, sandy clay loam | |
| 12 | Ecological Classification | Loamy Sand | |
| 13 | Geology | Eolian and piedmont deposits | |
| vertex.ca | **NMAC 19.15.29.12 E (Table 1) Closure Criteria** | <50' | <50'<br>51-100'<br>>100' |

| Table 2. Closure Criteria for Soils Impacted by a Release | | |
|---|---|---|
| **Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS** | **Constituent** | **Limit** |
| < 50 feet | Chloride | 600 mg/kg |
| | TPH (GRO+DRO+MRO) | 100 mg/kg |
| | BTEX | 50 mg/kg |
| | Benzene | 10 mg/kg |

TDS - Total dissolved solids, TPH - Total petroleum hydrocarbons = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO), BTEX - Benzene, toluene, ethylbenzene, and xylenes

## Remedial Actions Taken

Initial site inspection and site characterization activities at Mesa Verde were completed by Vertex on February 9, 2022, including horizontal and vertical delineation. The impacted area was determined to be approximately 128 feet long and 73 feet wide; the total affected area was estimated to be 6,872 square feet as presented in Figure 1 (Attachment 1). The DFR associated with the site inspection is included in Attachment 4.

Remediation efforts began on October 19, 2022, and were completed on October 26, 2022. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on multiple sample points and consisted of analysis using a photo ionization detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and electroconductivity meter (chloride). Field screening results were used to identify areas requiring further remediation from those areas showing concentrations below determined closure criteria levels. Soils were removed to depths ranging from 1 to 3 feet bgs. The aerial photograph and excavation schematic is included on Figure 2 (Attachment 1). The total base surface area of the final excavation was 4,751 square feet and the final total excavation wall surface area was 1,058 square feet. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. Approximately 326 cubic yards of material were removed from the excavation. Field screening results are included in Table 4 (Attachment 2).

Notifications that confirmatory samples were being collected was provided to the NMOCD on October 21 and 25, 2022, and are included in Attachment 6. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 42 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Hall Environmental Analysis Laboratory under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 4 (Attachment 2) and the laboratory data report is included in Attachment 7. All confirmatory samples collected and analyzed were below closure criteria for the site.

## Closure Request

Vertex recommends no additional remediation action to address the releases at Mesa Verde 6 Federal #005. Laboratory analyses of the final confirmatory samples showed constituent of concern concentration levels below NMOCD closure criteria for areas where depth to groundwater less than 50 feet bgs as shown in Table 2. There are no anticipated risks to human, ecological or hydrological receptors associated with the release sites.

The excavation was backfilled with non-waste-containing, uncontaminated, earthen material, sourced locally, and placed to meet the site's existing grade to prevent ponding of water and erosion.

Vertex requests that this incident (nGRL0927342490, 1RP-2288) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. Devon certifies that all information in this report and the attachments is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the August 27, 2009 release at Mesa Verde 6 Federal #005.

The release area was fully delineated, remediated, and backfilled with local soil. Confirmatory samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations less than 50 feet to groundwater. Based on these findings, Devon requests that this release be closed.

Should you have any questions or concerns, please do not hesitate to contact Kent Stallings at 346.814.1413 or kstallings@vertexresource.com.

Lakin Pullman

Lakin Pullman, B.Sc.
ENVIRONMENTAL SPECIALIST, REPORTING

March 22, 2025
Date

Kent Stallings P.G.

Kent Stallings P.G.
PROJECT MANAGER, REPORT REVIEW

March 24, 2025
Date

## Attachments

Attachment 1. Figures
Attachment 2. Tables
Attachment 3. NMOCD C-141 Report
Attachment 4. Daily Field Reports with Pictures
Attachment 5. Closure Criteria for Soils Impacted by a Release Research Determination Documentation
Attachment 6. Confirmatory Sample Notification
Attachment 7. Laboratory Data Reports and Chain of Custody Forms

## References

Google Inc. (2022). *Google Earth Pro* (Version 7.3.4) [Software]. Retrieved from http://www.google.com/earth on November 8, 2022.

New Mexico Bureau of Geology and Mineral Resources. (2022). *Interactive Geologic Map.* Retrieved from http://geoinfo.nmt.edu.

New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2024). *Water Column/Average Depth to Water Report.* Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html

New Mexico Oil Conservation Division. (2018). N*ew Mexico Administrative Code – Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.

United States Department of Agriculture, Natural Resources Conservation Service. (2022). *Web Soil Survey.* Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

United States Department of Homeland Security, FEMA Flood Map Service Center. (2020). *Flood Map Number 35015C1875D*. Retrieved from https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor

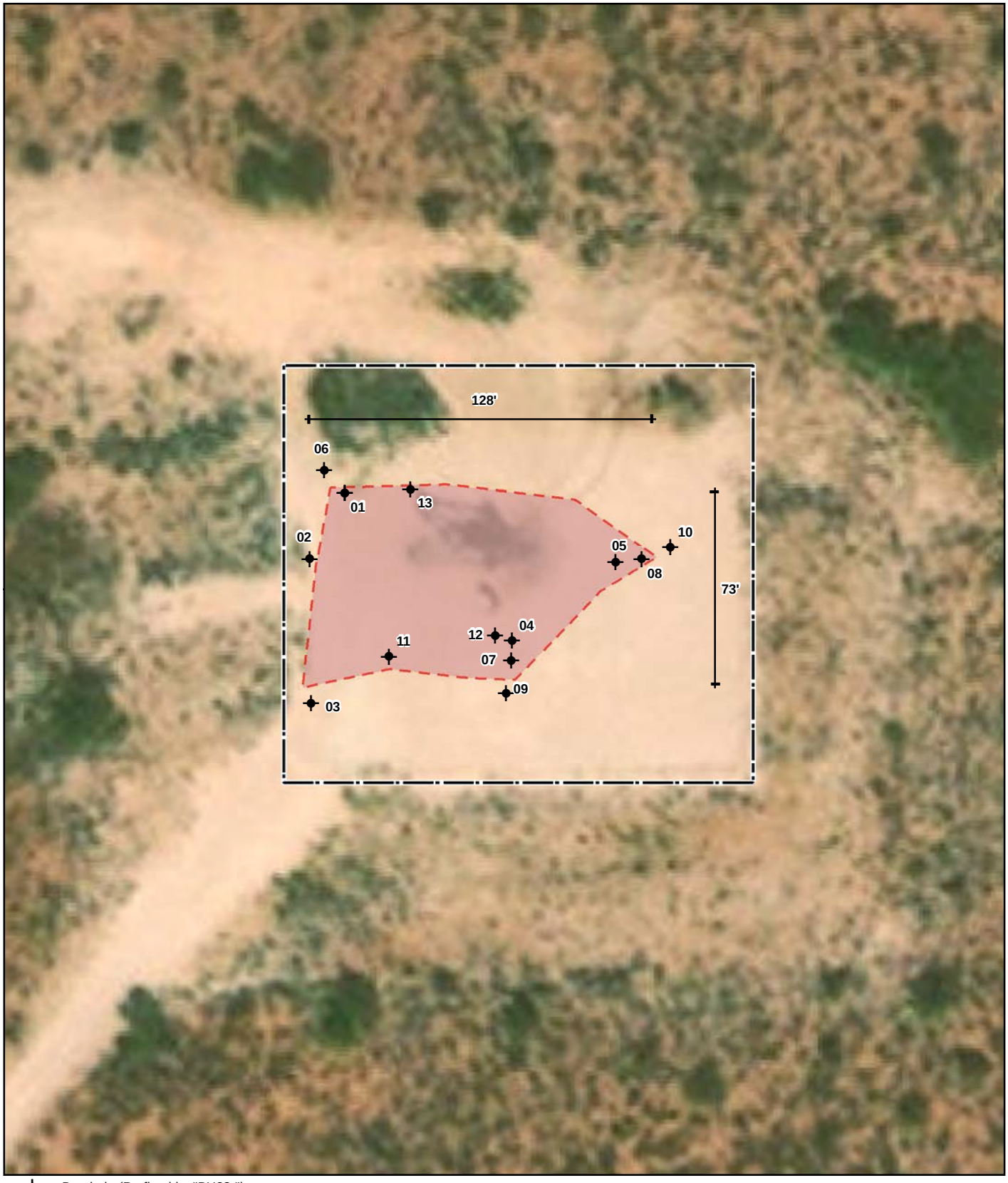
United States Fish and Wildlife Service. (2024). *National Wetlands Inventory Surface Waters and Wetland*. Retrieved from https://www.fws.gov/ wetlands/data/Mapper.html.

## Limitations

This report has been prepared for the sole benefit of Devon Energy Production Company. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and Bureau of Land Management, without the express written consent of Vertex Resource Services Inc. (Vertex) and Devon Energy Production Company. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

# ATTACHMENT 1




Borehole (Prefixed by "BH22-")

Approximate Extent of Spill (~6,872 sq. ft.)

Approximate Lease Boundary

VERTEX

0 5 10 20 ft.

NAD 1983 UTM Zone 13N

Date: Nov 21/22

Map Center:
Lat: 32.248080,
Long:-103.711513

N

**Initial Characterization**
**Mesa Verde 6 Fed 5**

FIGURE: 1

devon

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Background imagery from ESRI, 2020. Feature locations from GPS, Vertex Professional Services Ltd., 2021.

VERSATILITY. EXPERTISE.

Document Path: \\vtx-s-fs01.corp.internal\shared\vps\04 - Geomatics\1-Projects_US PROJECTS\Devon Energy Corporation\20211121E-02816\030 - Mesa Verde 6 Fed 5\Figure 1 Initial Characterization Mesa Verde 6 Fed 5.mxd


- Base Sample (Prefixed by "BS22-")
- Electrical Panel
- Wall Sample (Prefixed by "WS22-")
- Electrical Lines
- Pipeline
- 1' Excavation (~604 sq. ft.)
- 1.5' Excavation (~2,392 sq. ft.)
- 2' Excavation (~299 sq. ft.)
- 2.5' Excavation (~748 sq. ft.)
- 3' Excavation (~708 sq. ft.)
- Approximate Lease Boundary
- Pump jack

VERTEX

0 5 10 20 ft.

NAD 1983 UTM Zone 13N
Date: Nov 08/22

Map Center:
Lat: 32.248095,
Long:-103.711496

N

**Confirmatory Schematic**
**Mesa Verde 6 Federal 5**

FIGURE: 2

devon

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Background imagery from Google Earth, 2017. Feature locations from GPS, Vertex Professional Services Ltd., 2022.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Devon Energy Corporation\2021\21E-028160030 - Mesa Verde 6 Fed 5\Figure 2 Confirmatory Schematic Mesa Verde 6 Fed 5.mxd

# ATTACHMENT 2

**Client Name: Devon Energy Production Company, LP**
**Site Name: Mesa Verde 6 Federal #005**
**NMOCD Tracking #: nGRL0927342490, 1RP-2288**
**Project #: 24E-04980-04**
**Lab Report: 2202641**

**Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs**

| Sample Description | | | Field Screening | | | Petroleum Hydrocarbons | | | | | | | Inorganic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volatile | | Extractable | | | | | |
| Sample ID | Depth (ft) | Sample Date | Volatile Organic Compounds (PID) | Extractable Organic Compounds (PetroFlag) | Chloride Concentration | Benzene | BTEX (Total) | Gasoline Range Organics (GRO) | Diesel Range Organics (DRO) | Motor Oil Range Organics (MRO) | (GRO + DRO) | Total Petroleum Hydrocarbons (TPH) | Chloride Concentration |
| | | | (ppm) | (ppm) | (ppm) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| BH22-01 | 0.5 | February 9, 2022 | 0 | - | 883 | - | - | - | - | - | - | - | - |
| BH22-02 | 0.5 | February 9, 2022 | 0 | 78 | 314 | ND | ND | ND | ND | ND | ND | ND | 420 |
| BH22-03 | 0.5 | February 9, 2022 | 0 | 65 | 111 | ND | ND | ND | ND | ND | ND | ND | 130 |
| BH22-04 | 0.5 | February 9, 2022 | 0 | - | 1,124 | - | - | - | - | - | - | - | - |
| BH22-05 | 0.5 | February 9, 2022 | 0 | - | 751 | - | - | - | - | - | - | - | - |
| BH22-06 | 0.5 | February 9, 2022 | 0 | 82 | 83 | ND | ND | ND | 10 | ND | 10 | 10 | 69 |
| BH22-07 | 0.5 | February 9, 2022 | 0 | - | 1,040 | - | - | - | - | - | - | - | - |
| BH22-08 | 0.5 | February 9, 2022 | 0 | - | 2,019 | - | - | - | - | - | - | - | - |
| BH22-09 | 0.5 | February 9, 2022 | 0 | 57 | 190 | ND | ND | ND | ND | ND | ND | ND | 170 |
| BH22-10 | 0.5 | February 9, 2022 | 0 | 86 | 334 | ND | ND | ND | ND | ND | ND | ND | 320 |
| BH22-11 | 0.5 | February 9, 2022 | 0 | 591 | 3,546 | ND | ND | ND | 210 | 170 | **210** | **380** | **4,900** |
| | 1 | February 9, 2022 | 0 | 21 | 471 | ND | ND | ND | ND | ND | ND | ND | 520 |
| BH22-12 | 0.5 | February 9, 2022 | 0 | 161 | 1,957 | ND | ND | ND | 32 | ND | 32 | 32 | **1,100** |
| | 1 | February 9, 2022 | 0 | 20 | 184 | ND | ND | ND | ND | ND | ND | ND | 200 |
| BH22-13 | 0.5 | February 9, 2022 | 0 | 294 | 4,495 | ND | ND | ND | 200 | 190 | **200** | **390** | **5200** |
| | 1 | February 9, 2022 | 0 | 24 | 620 | ND | ND | ND | ND | ND | ND | ND | 520 |

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed
**Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria**

**Client Name: Devon Energy Production Company, LP**
**Site Name: Mesa Verde 6 Federal #005**
**NMOCD Tracking #: nGRL0927342490, 1RP-2288**
**Project #: 24E-04980-04**
**Lab Report: 2210E19**

**Table 4. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs**

| Sample Description | | | Field Screening | | | Petroleum Hydrocarbons | | | | | | | Inorganic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volatile | | Extractable | | | | | |
| Sample ID | Depth (ft) | Sample Date | Volatile Organic Compounds (PID) | Extractable Organic Compounds (PetroFlag) | Chloride Concentration | Benzene | BTEX (Total) | Gasoline Range Organics (GRO) | Diesel Range Organics (DRO) | Motor Oil Range Organics (MRO) | (GRO + DRO) | Total Petroleum Hydrocarbons (TPH) | Chloride Concentration |
| | | | (ppm) | (ppm) | (ppm) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| BS22-01 | 1.5 | October 26, 2022 | - | 16 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-02 | 1.5 | October 26, 2022 | - | 24 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-03 | 1.5 | October 26, 2022 | - | 122 | 170 | ND | ND | ND | 28 | ND | 28 | 28 | 160 |
| BS22-04 | 1.5 | October 26, 2022 | - | 117 | 285 | ND | ND | ND | 20 | ND | 20 | 20 | 240 |
| BS22-05 | 1.5 | October 26, 2022 | - | 20 | 5 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-06 | 1.5 | October 26, 2022 | - | 31 | 313 | ND | ND | ND | ND | ND | ND | ND | 250 |
| BS22-07 | 1.5 | October 26, 2022 | - | 24 | 187 | ND | ND | ND | ND | ND | ND | ND | 100 |
| BS22-08 | 1.5 | October 26, 2022 | - | 27 | 261 | ND | ND | ND | ND | ND | ND | ND | 160 |
| BS22-09 | 1.5 | October 26, 2022 | - | 25 | 238 | ND | ND | ND | ND | ND | ND | ND | 120 |
| BS22-10 | 1.5 | October 26, 2022 | - | 18 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-11 | 1.5 | October 26, 2022 | - | 17 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-12 | 1.5 | October 26, 2022 | - | 14 | 526 | ND | ND | ND | ND | ND | ND | ND | 360 |
| BS22-13 | 3 | October 26, 2022 | - | 28 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-14 | 3 | October 26, 2022 | - | 30 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-15 | 3 | October 26, 2022 | - | 25 | 63 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-16 | 2.5 | October 26, 2022 | - | 16 | 18 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-17 | 2.5 | October 26, 2022 | - | 20 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-18 | 2.5 | October 26, 2022 | - | 12 | 249 | ND | ND | ND | ND | ND | ND | ND | 150 |
| BS22-19 | 2.5 | October 26, 2022 | - | 25 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-20 | 2 | October 26, 2022 | - | 22 | 4 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS22-21 | 2 | October 26, 2022 | - | 13 | 350 | ND | ND | ND | ND | ND | ND | ND | 260 |
| BS22-22 | 1 | October 26, 2022 | - | 26 | 158 | ND | ND | ND | ND | ND | ND | ND | 120 |
| BS22-23 | 1 | October 26, 2022 | - | 19 | 438 | ND | ND | ND | ND | ND | ND | ND | 250 |
| BS22-24 | 1 | October 26, 2022 | - | 13 | 347 | ND | ND | ND | ND | ND | ND | ND | 270 |
| WS22-01 | 0-1.5 | October 26, 2022 | - | 73 | 109 | ND | ND | ND | ND | ND | ND | ND | 130 |
| WS22-02 | 0-1.5 | October 26, 2022 | - | 17 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| WS22-03 | 0-1.5 | October 26, 2022 | - | 17 | 47 | ND | ND | ND | ND | ND | ND | ND | 75 |
| WS22-04 | 0-3 | October 26, 2022 | - | 13 | 51 | ND | ND | ND | ND | ND | ND | ND | 77 |
| WS22-05 | 0-2.5 | October 26, 2022 | - | 14 | 135 | ND | ND | ND | ND | ND | ND | ND | 78 |
| WS22-06 | 0-2.5 | October 26, 2022 | - | 27 | 259 | ND | ND | ND | ND | ND | ND | ND | 170 |
| WS22-07 | 0-2 | October 26, 2022 | - | 16 | 59 | ND | ND | ND | ND | ND | ND | ND | 71 |
| WS22-08 | 0-1 | October 26, 2022 | - | 30 | 28 | ND | ND | ND | ND | ND | ND | ND | 71 |
| WS22-09 | 0-1 | October 26, 2022 | - | 15 | 63 | ND | ND | ND | ND | ND | ND | ND | 110 |
| WS22-10 | 0-1 | October 26, 2022 | - | 18 | 126 | ND | ND | ND | ND | ND | ND | ND | 82 |
| WS22-11 | 0-2 | October 26, 2022 | - | 25 | 177 | ND | ND | ND | ND | ND | ND | ND | 180 |
| WS22-12 | 0-2.5 | October 26, 2022 | - | 19 | 56 | ND | ND | ND | ND | ND | ND | ND | 72 |
| WS22-13 | 0-3 | October 26, 2022 | - | 20 | 70 | ND | ND | ND | ND | ND | ND | ND | 75 |
| WS22-14 | 0-1.5 | October 26, 2022 | - | 25 | 119 | ND | ND | ND | ND | ND | ND | ND | 140 |
| WS22-15 | 1.5-3 | October 26, 2022 | - | 20 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| WS22-16 | 2.5-3 | October 26, 2022 | - | 70 | 160 | ND | ND | ND | ND | ND | ND | ND | 100 |
| WS22-17 | 2-2.5 | October 26, 2022 | - | 33 | 228 | ND | ND | ND | ND | ND | ND | ND | 170 |
| WS22-18 | 1-2.5 | October 26, 2022 | - | 35 | 92 | ND | ND | ND | ND | ND | ND | ND | 74 |

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed
**Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria**

# ATTACHMENT 3

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
SEP 02 2009
HOBBSOCD

Form C-141
Revised March 17, 1999

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 Devon Energy | Contact Roger Hernandez |
| Address P. O. Box 250<br>Artesia, NM 88211 | Telephone No. 575-748-5238 |
| Facility Name Mesa Verde 6 Fed #5 | Facility Type Oil Well |

| | | |
|---|---|---|
| Surface Owner FEDERAL | Mineral Owner | Lease No. |

## LOCATION OF RELEASE

API # 30-025-32504-00-00

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---|---|---|---|---|---|---|---|---|
| F | 6 | 024S | 032E | 1980 | North | 1980 | East | Lea County, NM |

## NATURE OF RELEASE

| | | |
|---|---|---|
| Type of Release Oil and Produced Water | Volume of Release 5 bbls | Volume Recovered 0 |
| Source of Release Flowline | Date and Hour of Occurrence<br>8-27-2009 2:30 PM | Date and Hour of Discovery 8-27-2009<br>2.30 PM |
| Was Immediate Notice Given?<br>☒ Yes ☐ No ☐ Not Required | If YES, To Whom? BLM – Lea County, NM<br>Trish BadBear | |
| By Whom? Roger Hernandez | Date and Hour 8-28-2009 7:30 AM | |
| Was a Watercourse Reached?<br>☐ Yes ☒ No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*

N/A

WATER @ 335

Describe Cause of Problem and Remedial Action Taken.*
Leak in buried flowline, shut well in while making repairs. Replaced with poly line.

Describe Area Affected and Cleanup Action Taken.*
8' radious around wellhead, and an area 1'x100', back dragged the location.

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: Roger Hernandez

Printed Name: Roger Hernandez

Title: Production Foreman

Date: August 31, 2009 Phone 575-748-4238

## OIL CONSERVATION DIVISION

Approved by ~~District Supervisor~~ ENV ENGINEER: Jeffrey Labine

Approval Date: 09/03/09 Expiration Date: 11/03/09

Conditions of Approval: SAMPLING CONFIRMATION CLEAN CONCENTRATIONS HAVE BEEN REACHED MUST BE PERFORMED AND ANALYSIS RESULTS SUBMITTED TO NMOCD. Attached ☐ IRP-09-9-2288

* Attach Additional Sheets If Necessary

FGRL0927341991

# ATTACHMENT 4

# Daily Site Visit Report

| | | | |
|---|---|---|---|
| Client: | Devon Energy Corporation | Inspection Date: | 2/9/2022 |
| Site Location Name: | Mesa Verde 6 Federal 5 | Report Run Date: | 2/10/2022 12:48 AM |
| Client Contact Name: | Wes Matthews | API #: | 30-025-32504 |
| Client Contact Phone #: | (575) 748-0176 | | |
| Unique Project ID | | Project Owner: | |
| Project Reference # | | Project Manager: | |

## Summary of Times

| | |
|---|---|
| Arrived at Site | 2/9/2022 7:30 AM |
| Departed Site | 2/9/2022 4:00 PM |

## Field Notes

**15:41** Arrived on site to complete site delineation.

**15:42** Using the CST-Berger line locator, a blind sweep revealed what seems to be an unmarked gas line.
Off site carbon fiber locator says “Santa Fe Energy Pipeline”
See pictures.
Did not borehole near line.

**15:45** Completed BH22-01 to BH22-05 for horizontal delineation.
- BH22-01 stepped out to BH22-06.
- BH22-04 stepped out to BH22-07, then stepped out to BH22-09.
- BH22-05 stepped out to BH22-08, then stepped out to BH22-10

**15:45** Completed vertical delineation BH22-11, 12, and 13.

## Next Steps & Recommendations

**1** Create work plan

# Daily Site Visit Report

## Site Photos

**Viewing Direction**: North

Locate sign indicating gas line that seems to go towards well head

**Viewing Direction**: South

BH22-01 and step out BH22-06
Northwest of pump jack

**Viewing Direction**: East

BH22-02 West of pump jack

**Viewing Direction**: Northeast

BH22-03 Southwest of spill near an assumed toe of spill area

# Daily Site Visit Report

**Viewing Direction**: North


BH22-04 —> BH22-07 —> BH22-09
South of pump jack

**Viewing Direction**: West

BH22-05 —> BH22-08 —> BH22-10

**Viewing Direction**: Northeast


BH22-11 Southwest of pump jack

**Viewing Direction**: North


BH22-12 immediately South of pump jack

# Daily Site Visit Report

| **Viewing Direction**: Southeast | **Viewing Direction**: North |
|---|---|
|  |  |
| BH22-13 immediately Northwest of pump jack | Rough sketch of site and borehole locations |
| **Viewing Direction**: North | **Viewing Direction**: North |
|  |  |
| Field screen form | Sign description |

# Daily Site Visit Report

| **Viewing Direction**: South | **Viewing Direction**: North |
|---|---|
|  |  |
| Small dip in pad where what seems to be unmarked line | CST-Berger blind sweep line locator |
| **Viewing Direction**: Northeast | **Viewing Direction**: North |
|  |  |
| Assumed spill area | West side of pump jack |

# Daily Site Visit Report

**Viewing Direction**: East

North side of pump jack

**Viewing Direction**: South

East side of pump jack

**Viewing Direction**: Southwest

South of pump jack

# Daily Site Visit Report

## Daily Site Visit Signature

**Inspector:** Austin Harris

**Signature:** 

Signature

# Daily Site Visit Report

| | | | |
|---|---|---|---|
| Client: | Devon Energy Corporation | Inspection Date: | 10/26/2022 |
| Site Location Name: | Mesa Verde 6 Federal 5 | Report Run Date: | 10/26/2022 10:19 PM |
| Client Contact Name: | Wes Matthews | API #: | 30-025-32504 |
| Client Contact Phone #: | (575) 748-0176 | | |
| Unique Project ID | | Project Owner: | |
| Project Reference # | | Project Manager: | |

## Summary of Times

| | |
|---|---|
| Arrived at Site | 10/26/2022 8:00 AM |
| Departed Site | 10/26/2022 3:27 PM |

## Field Notes

**10:00** Confirmation sampling of excavation area

**11:27** Operator on site to assist with any areas that potentially need slightly more excavation

**15:28** Samples collected from base and walls from all of excavation. Field screening completed for tph and chlorides

## Next Steps & Recommendations

1. Draft closure report
2. Wait for lab analysis
3. Backfill
4. Submit final report for closure

# Daily Site Visit Report

## Site Photos

**Viewing Direction**: Northeast

Final excavation

**Viewing Direction**: South

Final excavation

**Viewing Direction**: Southwest

Final excavation

**Viewing Direction**: West

Final excavation

# Daily Site Visit Report

**Viewing Direction**: North

Final excavation

**Viewing Direction**: Northwest

Final excavation

**Viewing Direction**: North

Final excavation

**Viewing Direction**: North

Final excavation

# Daily Site Visit Report

| **Viewing Direction**: Northwest | **Viewing Direction**: East |
|---|---|
|  |  |
| Final excavation | Final excavation |
| **Viewing Direction**: Northeast | **Viewing Direction**: East |
|  |  |
| Final excavation | Final excavation |

# Daily Site Visit Report

**Viewing Direction**: South

Final excavation

**Viewing Direction**: Southeast

Final excavation

**Viewing Direction**: West

Final excavation

# Daily Site Visit Report

## Daily Site Visit Signature

**Inspector:** Monica Peppin

**Signature:**

# ATTACHMENT 5

# OSE POD Location Map


11/24/2024, 7:25:20 PM

GIS WATERS PODs
- Active
- Pending
- Plugged

OSE District Boundary

Water Right Regulations
- Closure Area
- Artesian Planning Area

New Mexico State Trust Lands
- Subsurface Estate
- Both Estates

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Esri, HERE, iPC, Esri, HERE, Garmin, iPC, Maxar

Online web user

This is an unofficial map from the OSE's online application.

# Water Column/Average Depth to Water

| (A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) | (R=POD has been replaced, O=orphaned, C=the file is closed) | | | (quarters are smallest to largest) | | | | | | (NAD83 UTM in meters) | | | | (In feet) | (In feet) | (In feet) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **POD Number** | **Code** | **Sub basin** | **County** | **Q64** | **Q16** | **Q4** | **Sec** | **Tws** | **Range** | **X** | **Y** | **Map** | **Distance** | **Well Depth** | **Depth Water** | **Water Column** |
| C 04775 POD1 | | CUB | LE | SE | SE | SE | 06 | 24S | 32E | 621789.3 | 3567860.4 | | 920 | 105 | | |
| C 03555 POD1 | | C | LE | NE | NE | NW | 05 | 24S | 32E | 622748.5 | 3569233.6 | | 1485 | 600 | 380 | 220 |
| C 04672 POD 1 | | CUB | ED | NE | NW | SE | 01 | 24S | 31E | 619762.2 | 3568286.5 | | 1655 | 110 | | |
| C 04712 POD1 | | CUB | LE | NW | SE | NW | 31 | 23S | 32E | 620917.2 | 3570289.2 | | 1671 | 55 | | |
| | | | | | | | | | | | | | | | Average Depth to Water: **380 feet** | |
| | | | | | | | | | | | | | | | Minimum Depth: **380 feet** | |
| | | | | | | | | | | | | | | | Maximum Depth: **380 feet** | |

**Record Count:** 4

**UTM Filters (in meters):**
**Easting:** 621370
**Northing:** 3568680
**Radius:** 002000

*** UTM location was derived from PLSS - see Help**

# 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 Nbr | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y | Map |
|---|---|---|---|---|---|---|---|---|---|---|
| NA | C 04775 POD1 | SE | SE | SE | 06 | 24S | 32E | 621789.3 | 3567860.4 | |

*** UTM location was derived from PLSS - see Help**

| | | | | | |
|---|---|---|---|---|---|
| **Driller License:** | 1833 | **Driller Company:** | VISION RESOURCES, INC | | |
| **Driller Name:** | JASON MALEY | | | | |
| **Drill Start Date:** | 2023-12-14 | **Drill Finish Date:** | 2023-12-14 | **Plug Date:** | 2023-12-21 |
| **Log File Date:** | 2024-01-12 | **PCW Rcv Date:** | | **Source:** | |
| **Pump Type:** | | **Pipe Discharge Size:** | | **Estimated Yield:** | |
| **Casing Size:** | | **Depth Well:** | 105 | **Depth Water:** | |

# Water Right Summary

get image list

| | | | | |
|---|---|---|---|---|
| **WR File Number:** | C 04775 | **Subbasin:** | CUB | **Cross Reference:** |
| **Primary Purpose:** | MON MONITORING WELL | | | |
| **Primary Status:** | PMT Permit | | | |
| **Total Acres:** | | **Subfile:** | | **Header:** |
| **Total Diversion:** | 0.000 | **Cause/Case:** | | |
| **Owner:** | DEVON ENERGY RESOURCES | | | |
| **Contact:** | DALE WOODALL | | | |

## Documents on File

(acre-feet per annum)

| Transaction Images | Trn # | Doc | File/Act | Status 1 | Status 2 | Transaction Desc. | From/To | Acres | Diversion | Consumptive |
|---|---|---|---|---|---|---|---|---|---|---|
| get images | 751179 | EXPL | 2023-09-19 | PMT | APR | C-4775 POD1 | T | 0.000 | 0.000 | |

## Current Points of Diversion

| POD Number | Well Tag | Source | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y | Map | Other Location Desc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 04775 POD1 | NA | | SE | SE | SE | 06 | 24S | 32E | 621789.3 | 3567860.4 | | |

*** UTM location was derived from PLSS - see Help**

## Source

| Acres | Diversion | CU | Use | Priority | Source | Description |
|---|---|---|---|---|---|---|
| 0.000 | 0.000 | | MON | | GW | |

# WELL RECORD & LOG

mesa Verde bfed.

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

### 1. GENERAL AND WELL LOCATION

| OSE POD NO. (WELL NO.) | WELL TAG ID NO. | OSE FILE NO(S). |
|---|---|---|
| ~~C-4775~~ POD1 | NA | C04775 |

| WELL OWNER NAME(S) | PHONE (OPTIONAL) |
|---|---|
| Devon Energy Resources | |

| WELL OWNER MAILING ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| 205 E. Bender Road # 150 | Hobbs | NM | 88240 |

| WELL LOCATION (FROM GPS) | | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|---|
| | LATITUDE | 32 | 14 | 26.8944 | N |
| | LONGITUDE | -103 | 42 | 26.1864 | W |

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

### 2. DRILLING & CASING INFORMATION

| LICENSE NO. | NAME OF LICENSED DRILLER | NAME OF WELL DRILLING COMPANY |
|---|---|---|
| 1833 | Jason Maley | Vision Resources |

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 12-14-23 | 12-14-23 | 105' | 105' | Dry |

COMPLETED WELL IS: ☐ ARTESIAN *add Centralizer info below ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): Dry

DATE STATIC MEASURED: 12-18-23

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| 0 | 95' | 6" | 2" PVC SCH40 | Thread | 2" | SCH40 | N/A |
| 95' | 105' | 6" | 2" PVC SCH40 | Thread | 2" | SCH40 | .05 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

OSE DII JAN 12 2024 PM1:53

### 3. ANNULAR MATERIAL

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM. (inches) | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below) | AMOUNT (cubic feet) | METHOD OF PLACEMENT |
|---|---|---|---|---|---|
| | | | None Pulled and Plugged | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

| FILE NO. C-4775-POD1 | POD NO. 1 | TRN NO. 751179 | |
|---|---|---|---|
| LOCATION Expl 24.32.06.444 | | WELL TAG ID NO. | PAGE 1 OF 2 |

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units) | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0 | 10' | 10' | Red coarse sand | Y ✓N | |
| 10' | 30' | 20' | Tan Fine sand wih coarse rock | Y ✓N | |
| 30' | 40' | 10' | Red sand with white caliche | Y ✓N | |
| 40' | 60' | 20' | Tan sand with white caliche | Y ✓N | |
| 60' | 80' | 20' | Red sand with small rock | Y ✓N | |
| 80' | 105' | 25' | Tan fine sand with caliche | Y ✓N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY: Dry

TOTAL ESTIMATED WELL YIELD (gpm): 0

**5. TEST; RIG SUPERVISION**

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

OSE DII JAN 12 2024 PM1:53

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

**6. SIGNATURE**

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jason Maley — 1/10/24

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 09/22/2022)

| FILE NO. C-4775-POD 1 | POD NO. 1 | TRN NO. 751179 |
|---|---|---|
| LOCATION Exp 24 32.06.444 | WELL TAG ID NO. — | PAGE 2 OF 2 |

Mike A. Hamman, P.E.
State Engineer

well Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

**STATE OF NEW MEXICO**
**OFFICE OF THE STATE ENGINEER**

Trn Nbr: 751179
File Nbr: C 04775
Well File Nbr: C 04775 POD1

Jan. 12, 2024

DALE WOODALL
DEVON ENERGY RESOURCES
205 E BENDER ROAD #150
HOBBS, NM 88240

Greetings:

The above numbered permit was issued in your name on 09/19/2023.

The Well Record was received in this office on 01/12/2024, stating that it had been completed on 12/14/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/18/2024.

If you have any questions, please feel free to contact us.

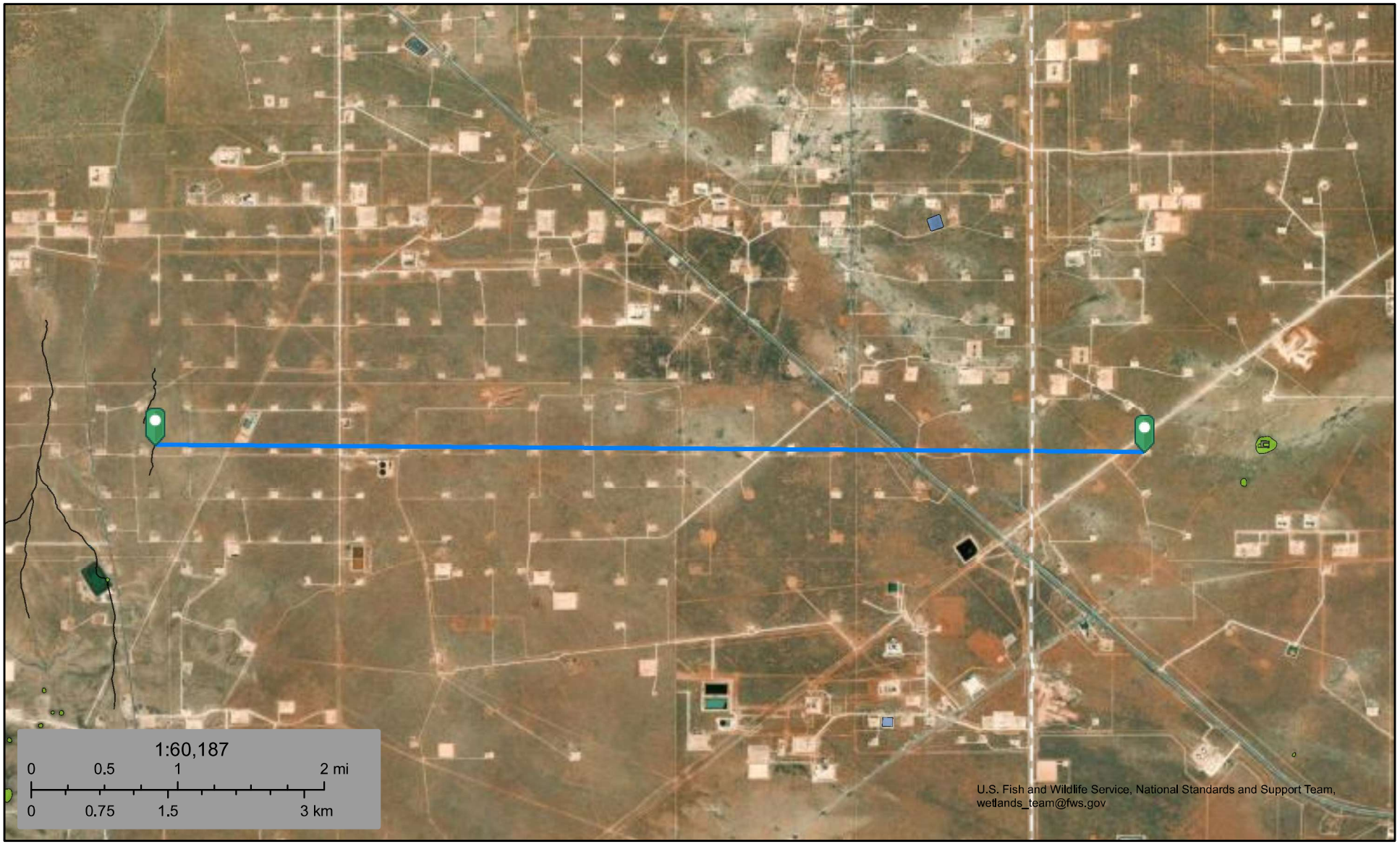
Sincerely,

Maret Thompson
(575)622-6521

drywell

U.S. Fish and Wildlife Service
National Wetlands Inventory

# Intermittent 30,182 feet




November 25, 2024

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service

# National Wetlands Inventory

## Pond 35,747 feet


November 25, 2024

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

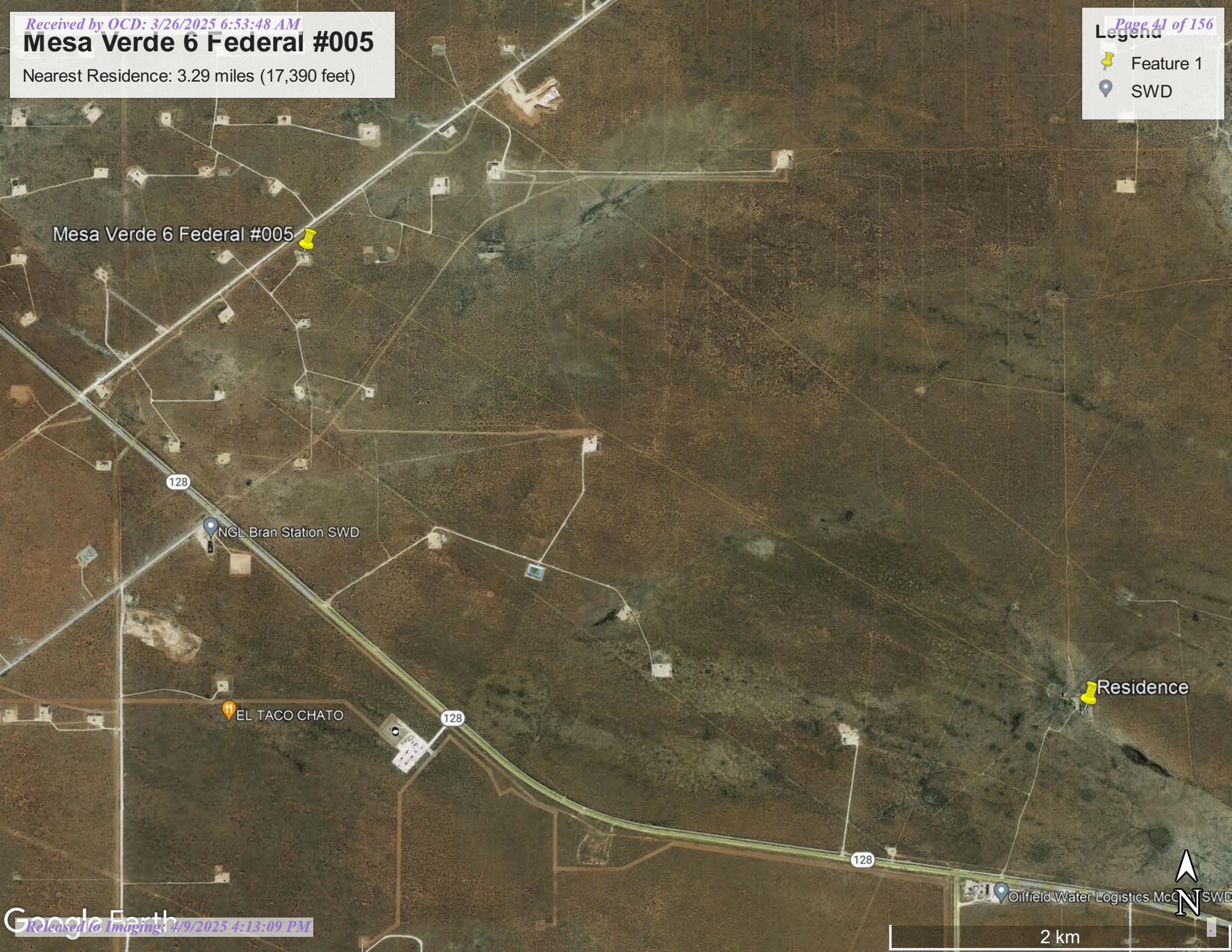
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

# Mesa Verde 6 Federal #005

Nearest Residence: 3.29 miles (17,390 feet)





# Active & Inactive Points of Diversion

(with Ownership Information)

| | | (acre ft per annum) | | | | (R=POD has been replaced and no longer serves this file, C=the file is closed) | | | | (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) | | | | | | (NAD83 UTM in meters) | | | (meters) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WR File Nbr | Sub basin | Use | Diversion | Owner | County | POD Number | Well Tag | Code | Grant | Source | q64 | q16 | q4 | Sec | Tws | Range | X | Y | Map | Distance |
| C 04775 | CUB | MON | 0.000 | DEVON ENERGY RESOURCES | LE | C 04775 POD1 | NA | | | | SE | SE | SE | 06 | 24S | 32E | 621789.3 | 3567860.4 | | 920.6 |
| C 03555 | C | STK | 3.000 | NGL NORTH RANCH LLC | LE | C 03555 POD1 | NA | | | Shallow | NE | NE | NW | 05 | 24S | 32E | 622748.5 | 3569233.6 | | 1,485.5 |
| C 04672 | CUB | EXP | 0.000 | OXY USA INC. | ED | C 04672 POD 1 | NA | | | | NE | NW | SE | 01 | 24S | 31E | 619762.2 | 3568286.5 | | 1,655.3 |
| C 04712 | CUB | MON | 0.000 | HARVARD PETROLEUM COMPANY LLC | LE | C 04712 POD1 | NA | | | | NW | SE | NW | 31 | 23S | 32E | 620917.2 | 3570289.2 | | 1,671.7 |

**Record Count:** 4

**Filters Applied:**

**UTM Filters (in meters):**
**Easting:** 621370
**Northing:** 3568680
**Radius:** 002000

**Sorted By:** Distance

*** UTM location was derived from PLSS - see Help**

# 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 Nbr | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y | Map |
|---|---|---|---|---|---|---|---|---|---|---|
| NA | C 03555 POD1 | NE | NE | NW | 05 | 24S | 32E | 622748.5 | 3569233.6 | |

*** UTM location was derived from PLSS - see Help**

| | | | | | |
|---|---|---|---|---|---|
| **Driller License:** | 1654 | **Driller Company:** | NOT WORKING FOR HIRE--SIRMAN DRILLING AND CONSTRUC | | |
| **Driller Name:** | JOHN SIRMAN | | | | |
| **Drill Start Date:** | 2013-10-20 | **Drill Finish Date:** | 2013-10-21 | **Plug Date:** | |
| **Log File Date:** | 2013-11-07 | **PCW Rcv Date:** | | **Source:** | Shallow |
| **Pump Type:** | | **Pipe Discharge Size:** | | **Estimated Yield:** | 5 |
| **Casing Size:** | 6.00 | **Depth Well:** | 600 | **Depth Water:** | 380 |

## Water Bearing Stratifications:

| Top | Bottom | Description |
|---|---|---|
| 475 | 550 | Sandstone/Gravel/Conglomerate |

## Casing Perforations:

| Top | Bottom |
|---|---|
| 460 | 520 |

# Water Right Summary

get image list

| | | | | |
|---|---|---|---|---|
| **WR File Number:** | C 03555 | **Subbasin:** | C | **Cross Reference:** |
| **Primary Purpose:** | STK 72-12-1 LIVESTOCK WATERING | | | |
| **Primary Status:** | PMT Permit | | | |
| **Total Acres:** | | **Subfile:** | | **Header:** |
| **Total Diversion:** | 3.000 | **Cause/Case:** | | |
| **Owner:** | NGL NORTH RANCH LLC | | | |
| **Contact:** | JIM WINTER | | | |

## Documents on File

(acre-feet per annum)

| Transaction Images | Trn # | Doc | File/Act | Status 1 | Status 2 | Transaction Desc. | From/To | Acres | Diversion | Consumptive |
|---|---|---|---|---|---|---|---|---|---|---|
| get images | 755958 | COWNF | 2024-01-31 | CHG | PRC | C 03555 | T | | 0.000 | |
| get images | 677211 | UWL | 2020-08-06 | UWL | ACC | C 03555 | T | | 0.000 | |
| get images | 633172 | COWNF | 2018-09-17 | CHG | PRC | C 03555 | T | | 0.000 | |
| get images | 534311 | 72121 | 2013-09-19 | PMT | LOG | C 03555 | T | | 3.000 | |
| get images | 506470 | 72121 | 2012-06-29 | EXP | EXP | C 03555 | T | | 3.000 | |

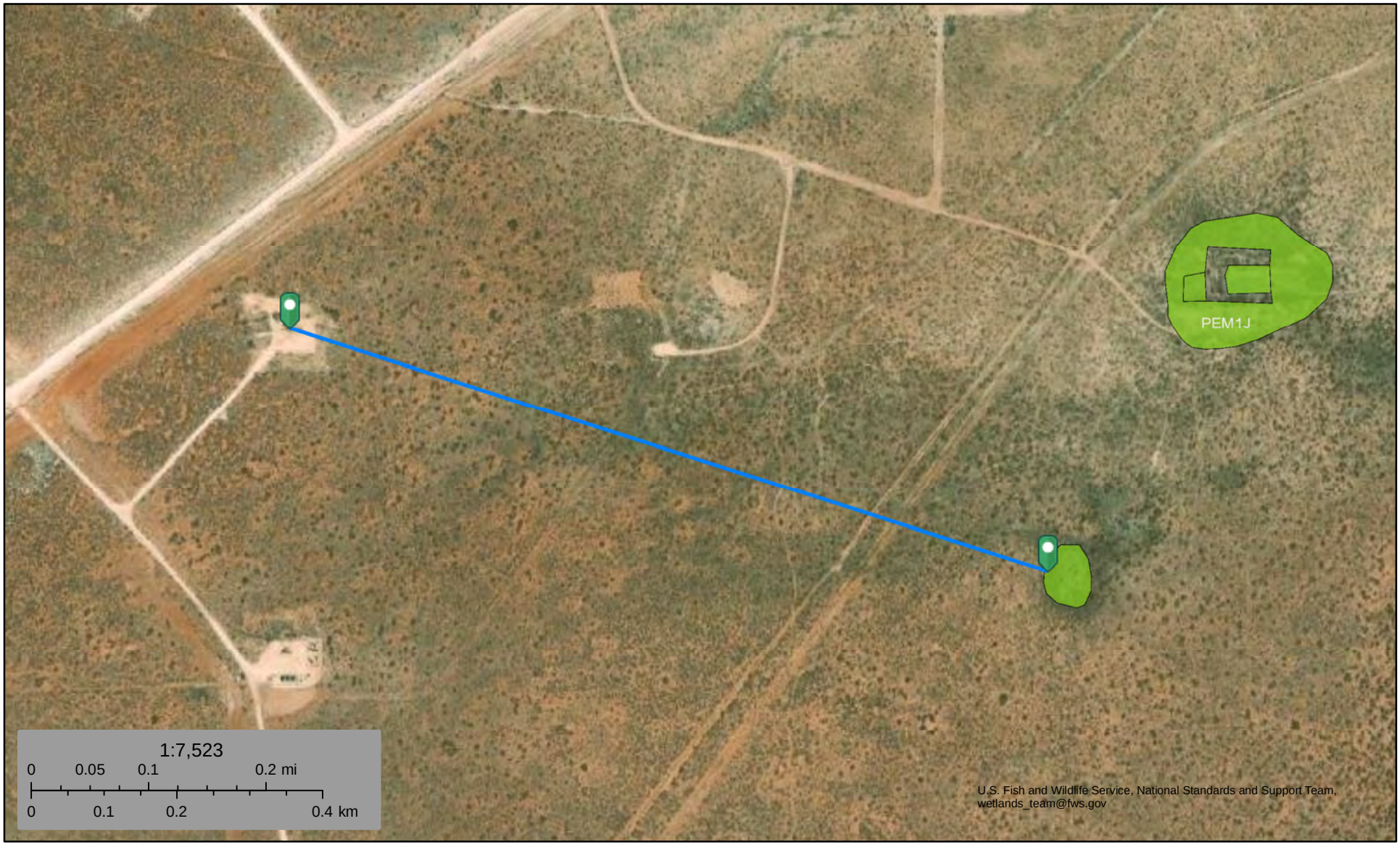
## Current Points of Diversion

| POD Number | Well Tag | Source | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y | Map | Other Location Desc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 03555 POD1 | NA | Shallow | NE | NE | NW | 05 | 24S | 32E | 622748.5 | 3569233.6 | | |

*** UTM location was derived from PLSS - see Help**

U.S. Fish and Wildlife Service
National Wetlands Inventory

# Mesa Verde 6 Federal 5 Wetland




October 18, 2022

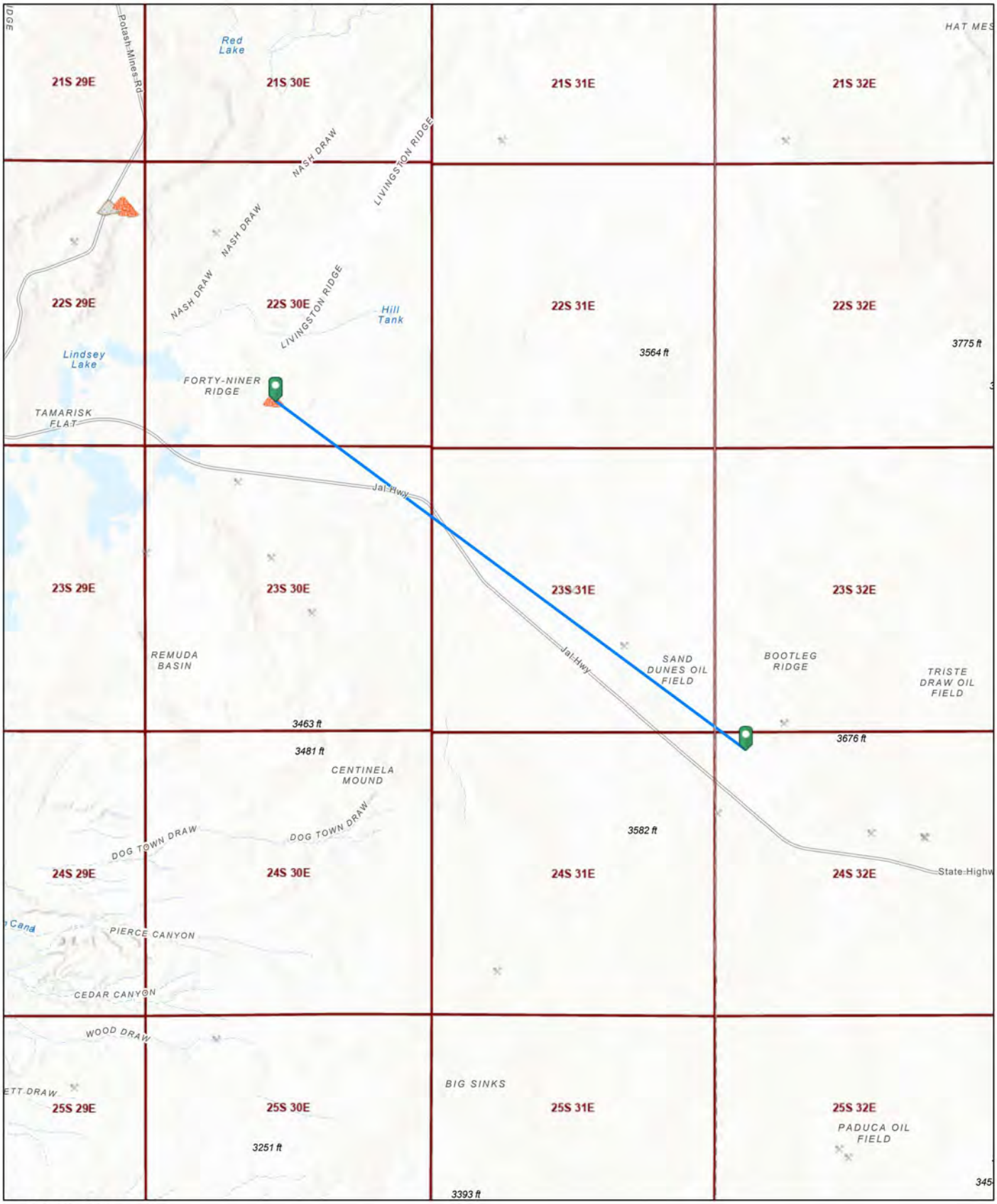
**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

# Potash Mine 65,532 feet






11/24/2024, 6:35:15 PM

Registered Mines

- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Potash
- Salt
- PLSS Townships

1:144,448

0 1.25 2.5 5 mi

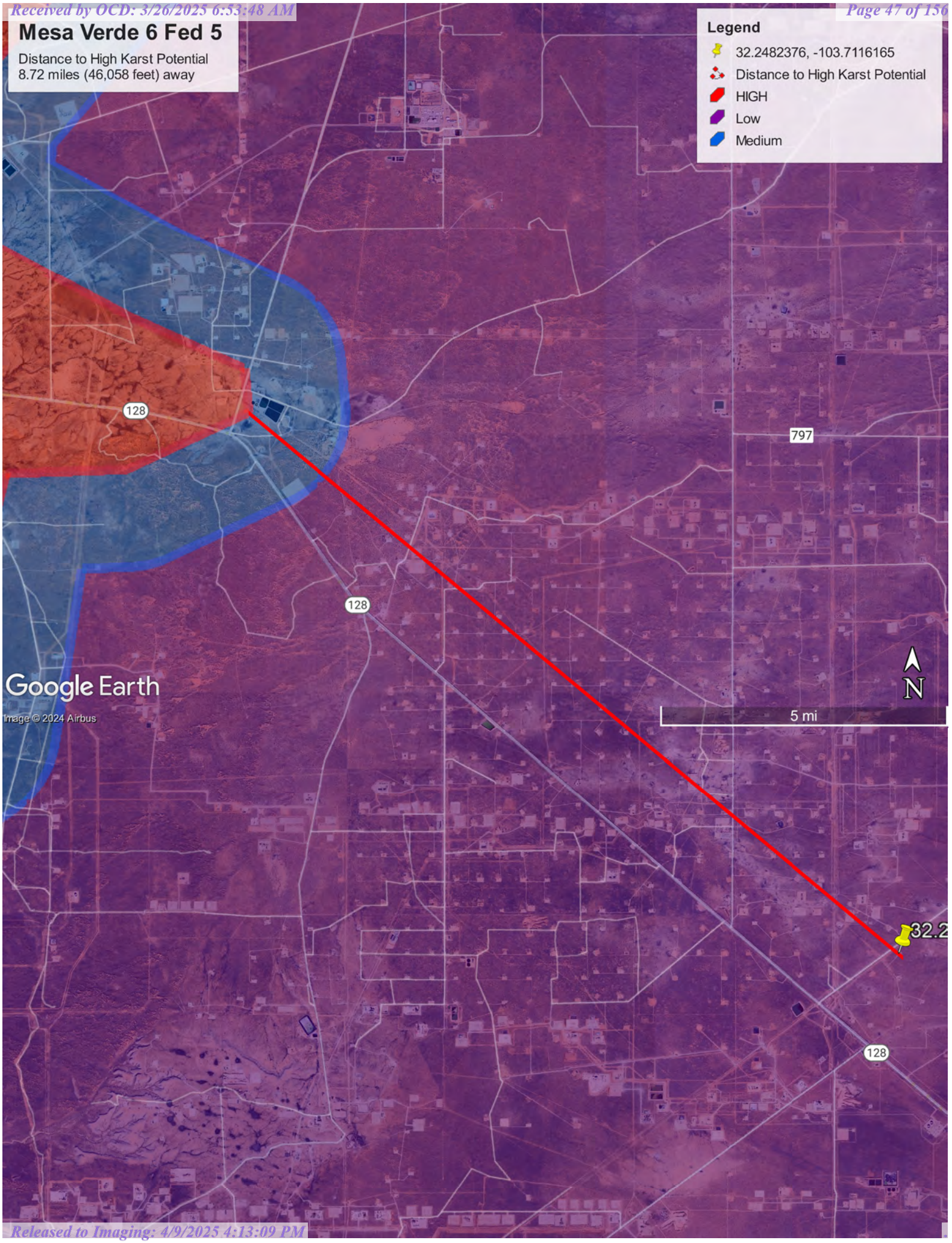
0 2.25 4.5 9 km

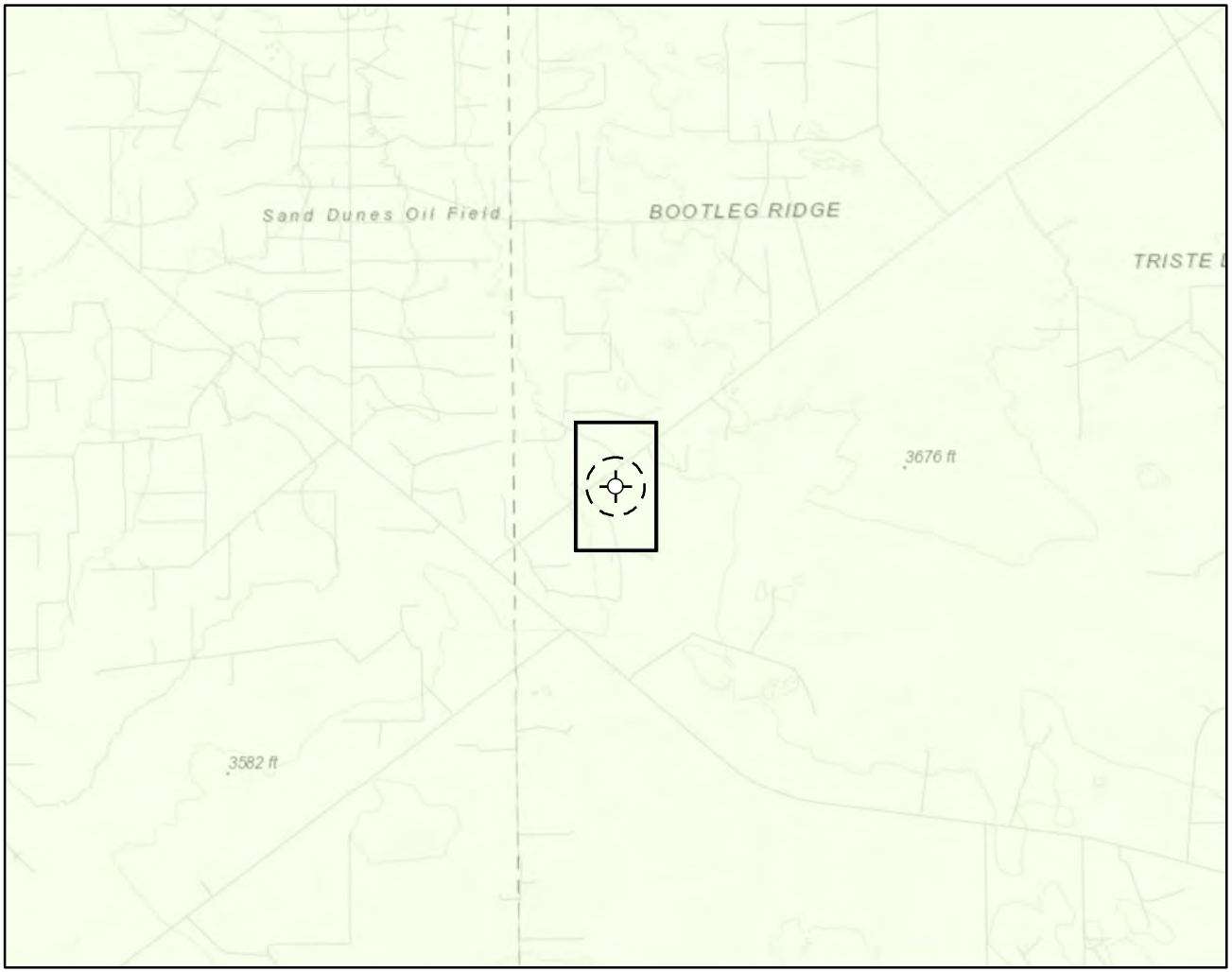
Esri, NASA, NGA, USGS, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, BLM

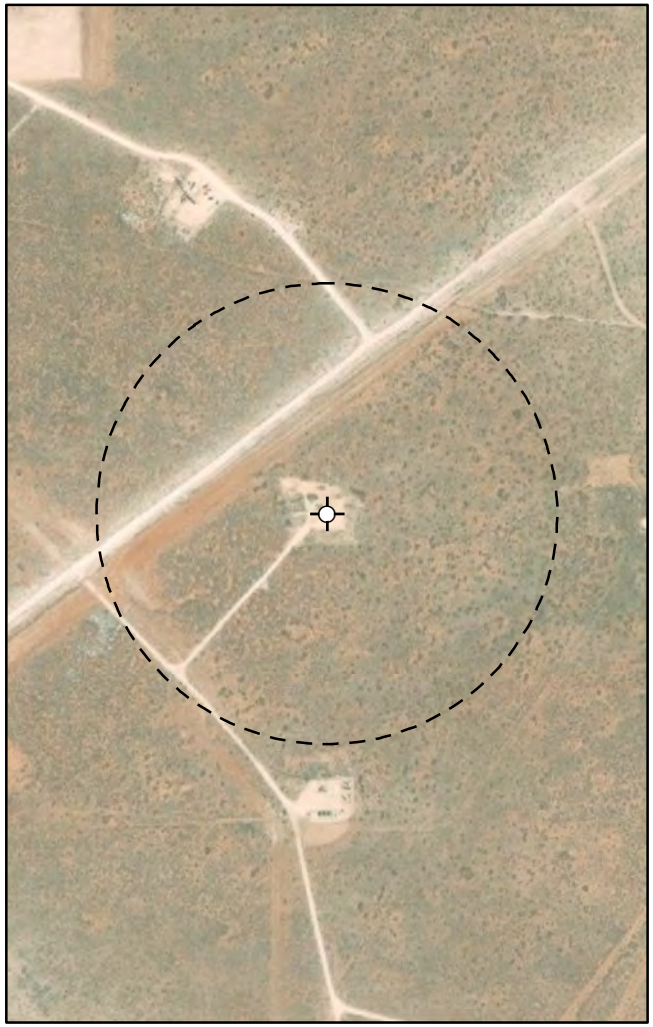


EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)


Mesa Verde 6 Fed 5
Distance to High Karst Potential
8.72 miles (46,058 feet) away
Legend
32.2482376, -103.7116165
Distance to High Karst Potential
HIGH
Low
Medium
128
797
128
128
Google Earth
Image © 2024 Airbus
N
5 mi
32.2



**Karst Potential**

- Critical
- High
- Medium
- Low

Site Location

Site Buffer ( 1,000 ft. )

**Overview Map**

0 0.25 0.5 1 mi

**Detail Map**

0 150 300 600 ft.

VERTEX

Map Center:
Lat/Long: 32.248091, -103.711481

NAD 1983 UTM Zone 13N
Date: Nov 01/22

N

**Karst Potential Map**
**Mesa Verde 6 Federal 5**

FIGURE:
**X**

devon

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Inset Map, ESRI 20XX; Overview Map: ESRI World Topographic. Karst potential data sourced from Rosswell Field Office, Bureau of Land Management, 2020 or United States Department of the Interior, Bureau of Land Management. (2018). Karst Potential.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Devon Energy Corporation\2021\21E-028160030 - Mesa Verde 6 Fed 5\Figure X Karst Potential Map Mesa Verde 6 Federal 5.mxd

# National Flood Hazard Layer FIRMette

FEMA

103°43'1"W 32°15'9"N


0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°42'23"W 32°14'38"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

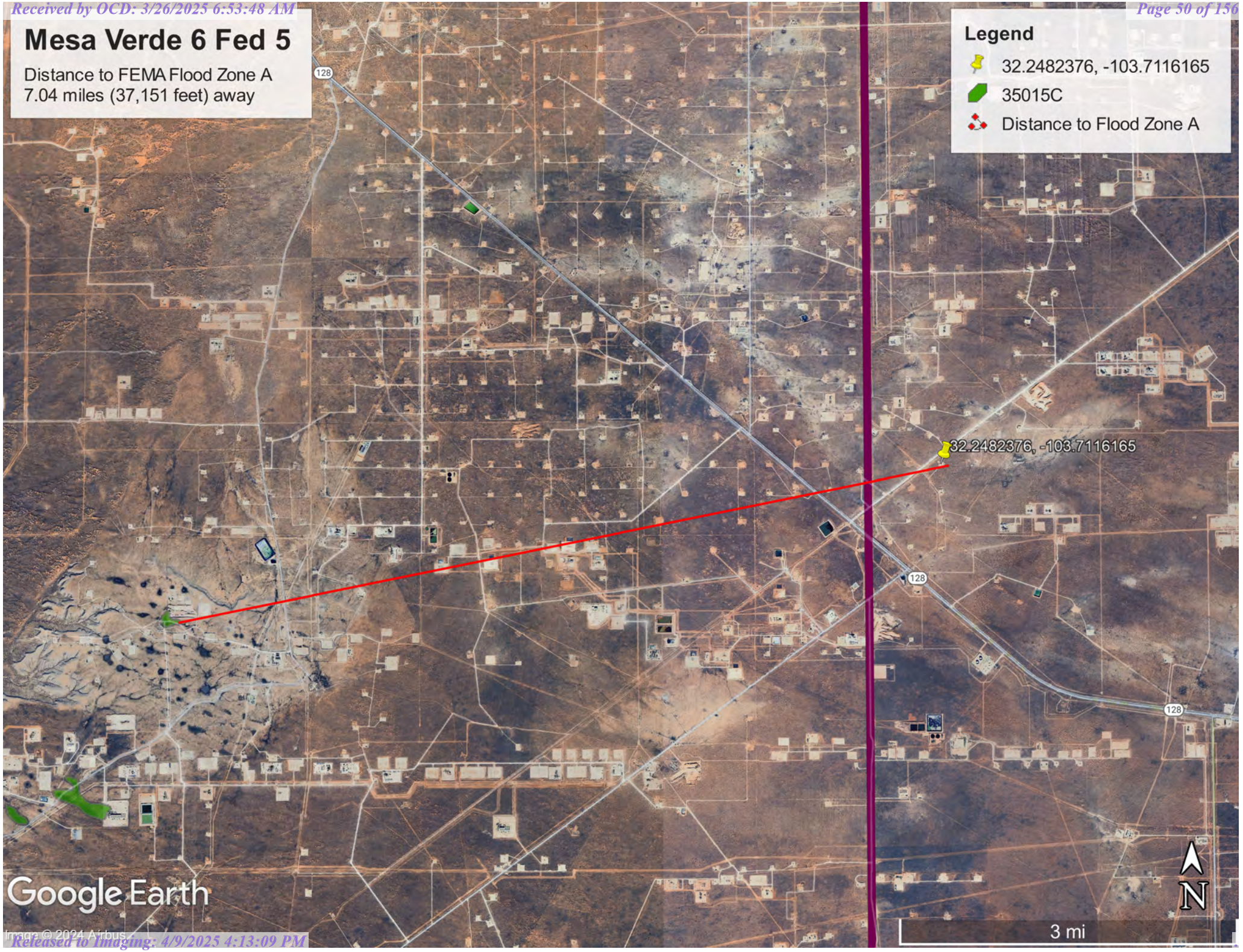
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/18/2022 at 1:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.


Mesa Verde 6 Fed 5
Distance to FEMA Flood Zone A
7.04 miles (37,151 feet) away
Legend
32.2482376, -103.7116165
35015C
Distance to Flood Zone A
32.2482376, -103.7116165
128
128
128
Google Earth
Image © 2024 Airbus
N
3 mi

United States Department of Agriculture

NRCS

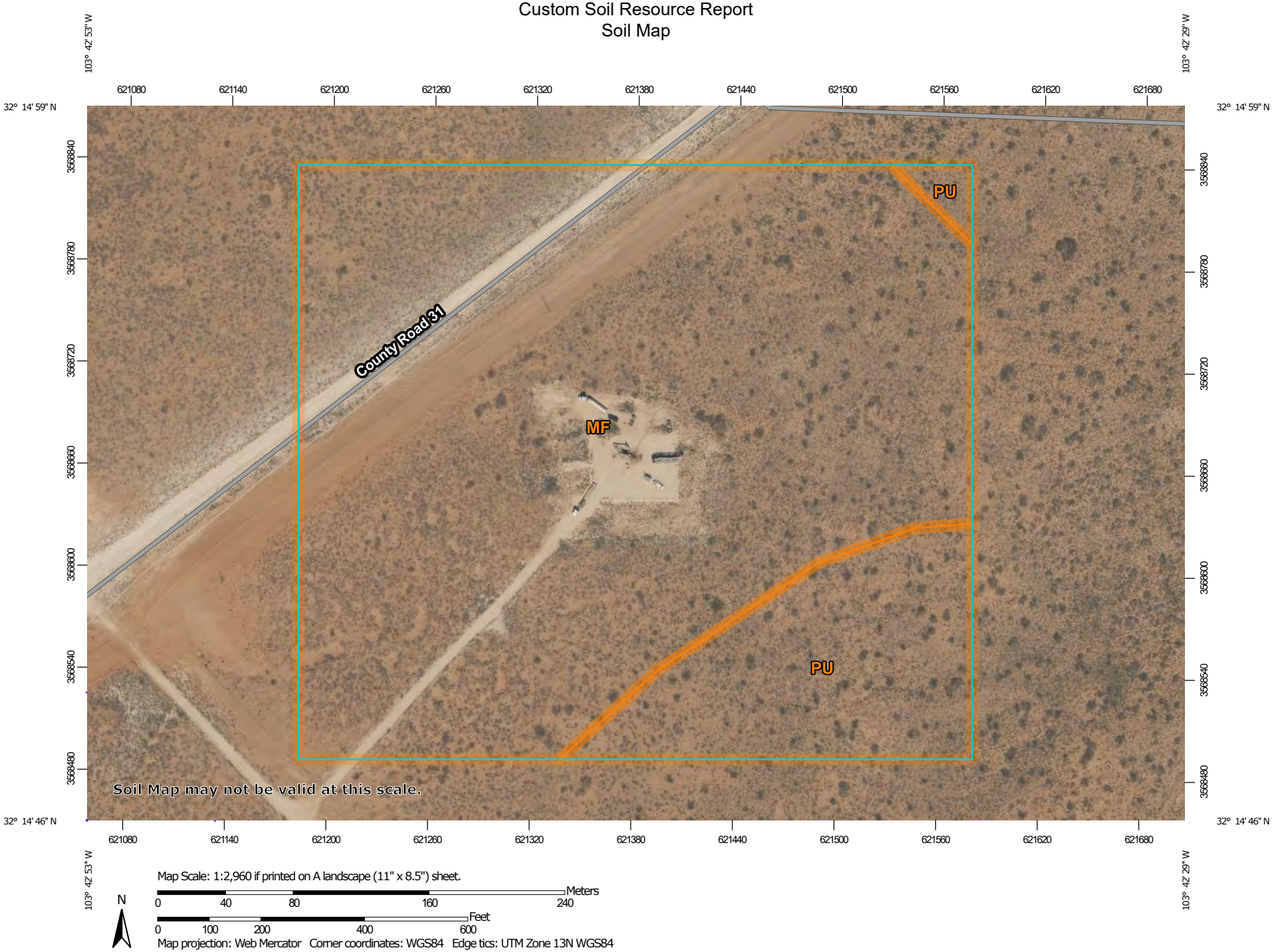
Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Lea County, New Mexico


October 18, 2022

# Custom Soil Resource Report
## Soil Map



## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 19, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| MF | Maljamar and Palomas fine sands, 0 to 3 percent slopes | 28.9 | 83.9% |
| PU | Pyote and Maljamar fine sands | 5.6 | 16.1% |
| **Totals for Area of Interest** | | **34.5** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Lea County, New Mexico

## MF—Maljamar and Palomas fine sands, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* dmqb
*Elevation:* 3,000 to 3,900 feet
*Mean annual precipitation:* 10 to 15 inches
*Mean annual air temperature:* 60 to 62 degrees F
*Frost-free period:* 190 to 205 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Maljamar and similar soils:* 46 percent
*Palomas and similar soils:* 44 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Maljamar

#### Setting

*Landform:* Plains
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Sandy eolian deposits derived from sedimentary rock

#### Typical profile

*A - 0 to 24 inches:* fine sand
*Bt - 24 to 50 inches:* sandy clay loam
*Bkm - 50 to 60 inches:* cemented material

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* 40 to 60 inches to petrocalcic
*Drainage class:* Well drained
*Runoff class:* Very low
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Low (about 5.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 7e
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* B
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

### Description of Palomas

#### Setting

*Landform:* Plains
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Alluvium derived from sandstone

#### Typical profile

*A - 0 to 16 inches:* fine sand
*Bt - 16 to 60 inches:* sandy clay loam
*Bk - 60 to 66 inches:* sandy loam

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Low
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 45 percent
*Gypsum, maximum content:* 1 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Moderate (about 7.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* B
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

### Minor Components

#### Kermit

*Percent of map unit:* 5 percent
*Ecological site:* R070BC022NM - Sandhills
*Hydric soil rating:* No

#### Wink

*Percent of map unit:* 5 percent
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

## PU—Pyote and Maljamar fine sands

### Map Unit Setting

*National map unit symbol:* dmqq
*Elevation:* 3,000 to 3,900 feet
*Mean annual precipitation:* 10 to 12 inches
*Mean annual air temperature:* 60 to 62 degrees F
*Frost-free period:* 190 to 205 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Pyote and similar soils:* 46 percent
*Maljamar and similar soils:* 44 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Pyote

#### Setting

*Landform:* Plains
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Sandy eolian deposits derived from sedimentary rock

#### Typical profile

*A - 0 to 30 inches:* fine sand
*Bt - 30 to 60 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Negligible
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Gypsum, maximum content:* 1 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Low (about 5.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 6e
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* A

*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

### Description of Maljamar

#### Setting

*Landform:* Plains
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Sandy eolian deposits derived from sedimentary rock

#### Typical profile

*A - 0 to 24 inches:* fine sand
*Bt - 24 to 50 inches:* sandy clay loam
*Bkm - 50 to 60 inches:* cemented material

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* 40 to 60 inches to petrocalcic
*Drainage class:* Well drained
*Runoff class:* Very low
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Gypsum, maximum content:* 1 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Low (about 5.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 6e
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* B
*Ecological site:* R070BD003NM - Loamy Sand
*Hydric soil rating:* No

### Minor Components

#### Kermit

*Percent of map unit:* 10 percent
*Ecological site:* R070BC022NM - Sandhills
*Hydric soil rating:* No

USDA Natural Resources Conservation Service

# Ecological site R070BD003NM
# Loamy Sand

Accessed: 11/08/2022

## General information

**Provisional**. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

**Figure 1. Mapped extent**

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

## Associated sites

| | |
|---|---|
| R070BD004NM | **Sandy**<br>Sandy |
| R070BD005NM | **Deep Sand**<br>Deep Sand |

**Table 1. Dominant plant species**

| | |
|---|---|
| Tree | Not specified |
| Shrub | Not specified |
| Herbaceous | Not specified |

## Physiographic features

This site is on uplands, plains, dunes, fan piedmonts and in inter dunal areas. The parent material consists of mixed alluvium and or eolian sands derived from sedimentary rock. Slope range on this site range from 0 to 9 percent with the average of 5 percent.

Low stabilized dunes may occur occasionally on this site. Elevations range from 2,800 to 5,000 feet.

**Table 2. Representative physiographic features**

| | |
|---|---|
| Landforms | (1) Fan piedmont<br>(2) Alluvial fan<br>(3) Dune |
| Elevation | 2,800–5,000 ft |
| Slope | 0–9% |
| Aspect | Aspect is not a significant factor |

## Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity-short duration thunderstorms.
Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes.

The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.
The average frost-free season is 207 to 220 days. The last killing frost being late March or early April and the first killing frost being in later October or early November.
Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest from January through June, which accelerates soil drying during a critical period for cool season plant growth.

Climate data was obtained from http://www.wrcc.sage.dri.edu/summary/climsmnm.html web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

**Table 3. Representative climatic features**

| | |
|---|---|
| Frost-free period (average) | 221 days |
| Freeze-free period (average) | 240 days |
| Precipitation total (average) | 13 in |

## Influencing water features

This site is not influenced from water from wetlands or streams.

## Soil features

Soils are moderately deep or very deep. Surface textures are loamy fine sand, fine sandy loam, loamy very fine sand or gravelly sandy loam.

Subsurface is a loamy fine sand, coarse sandy loam, fine sandy loam or loam that averages less than 18 percent clay and less than 15 percent carbonates.

Substratum is a fine sandy loam or gravelly fine sandy loam with less than 15 percent gravel and with less than 40 percent calcium carbonate. Some layers high in lime or with caliche fragments may occur at depths of 20 to 30 inches.

These soils, if unprotected by plant cover and organic residue, become wind blown and low hummocks are formed.

Minimum and maximum values listed below represent the characteristic soils for this site.

Characteristic soils are:
Maljamar
Berino
Parjarito
Palomas
Wink
Pyote

**Table 4. Representative soil features**

| | |
|---|---|
| Surface texture | (1) Fine sand<br>(2) Fine sandy loam<br>(3) Loamy fine sand |
| Family particle size | (1) Sandy |
| Drainage class | Well drained to somewhat excessively drained |
| Permeability class | Moderate to moderately rapid |

| | |
|---|---|
| Soil depth | 40–72 in |
| Surface fragment cover <=3" | 0–10% |
| Surface fragment cover >3" | 0% |
| Available water capacity (0-40in) | 5–7 in |
| Calcium carbonate equivalent (0-40in) | 3–40% |
| Electrical conductivity (0-40in) | 2–4 mmhos/cm |
| Sodium adsorption ratio (0-40in) | 0–2 |
| Soil reaction (1:1 water) (0-40in) | 6.6–8.4 |
| Subsurface fragment volume <=3" (Depth not specified) | 4–12% |
| Subsurface fragment volume >3" (Depth not specified) | 0% |

## Ecological dynamics

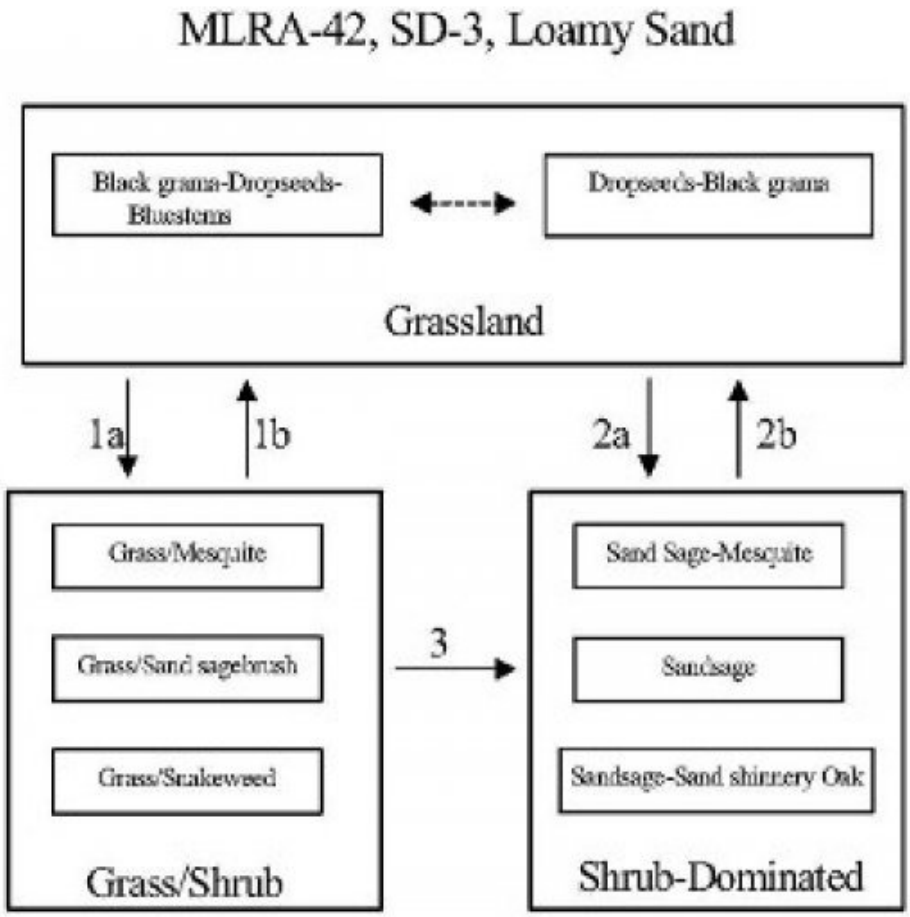
Overview

The Loamy Sand site intergrades with the Deep Sand and Sandy sites (SD-3). These sites can be differentiated by surface soil texture and depth to a textural change. Loamy Sand and Deep Sand sites have coarse textured (sands and loamy sand) surface soils while Sandy sites have moderately coarse textured (sandy loam and fine sandy loam) surfaces. Although Loamy Sand and Deep Sand sites have similar surface textures, the depth to a textural change is different—Loamy Sand sub-surface textures typically increase in clay at approximately 20 to 30 inches, and Deep Sand sites not until around 40 inches.

The historic plant community of Loamy Sand sites is dominated by black grama (*Bouteloua eriopoda*), dropseeds (*Sporobolus flexuosus*, *S. contractus*, *S. cryptandrus*), and bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), with scattered shinnery oak ( *Quercus havardii*) and sand sage (*Artemisia filifolia*). Perennial and annual forb abundance and distribution are dependent on precipitation. Litter and to a lesser extent, bare ground, are a significant proportion of ground cover while grasses compose the remainder. Decreases in black grama indicate a transition to either a grass/shrub or shrub-dominated state. The grass/shrub state is composed of grasses/honey mesquite (*Prosopis glandulosa*), grasses/broom snakeweed ( *Gutierrezia sarothrae*), or grasses/sand sage. The shrub-dominated state occurs after a severe loss of grass cover and a prevalence of sand sage with secondary shinnery oak and mesquite. Heavy grazing intensity and/or drought are influential drivers in decreasing black grama and bluestems and subsequently increasing shrub cover, erosion, and bare patches. Historical fire suppression also encourages shrub pervasiveness and a competitive advantage over grass species (McPherson 1995). Brush and grazing management, however, may reverse grass/shrub and shrub-dominated states toward the grassland-dominated historic plant community.

## State and transition model

**Plant Communities and Transitional Pathways (diagram):**




1a. Drought, over grazing, fire suppression.
1b. Brush control, prescribed grazing

2.a Severe loss of grass cover, fire suppression, erosion.
2b. Brush control, seeding, prescribed grazing.

3. Continued loss of grass cover, erosion.

**Figure 4.**

## State 1
## Historic Climax Plant Community

## Community 1.1
## Historic Climax Plant Community

Grassland: The historic plant community is a uniformly distributed grassland dominated by black grama, dropseeds,

and bluestems. Sand sage and shinnery oak are evenly dispersed throughout the grassland due to the coarse soil surface texture. Perennial and annual forbs are common but their abundance and distribution are reflective of precipitation. Bluestems initially, followed by black grama, decrease with drought and heavy grazing intensity. Historical fire frequency is unknown but likely occurred enough to remove small shrubs to the competitive advantage of grass species. Fire suppression, drought conditions, and excessive grazing drive most grass species out of competition with shrub species. Diagnosis: Grassland dominated by black grama, dropseeds, and bluestems. Shrubs, such as sand sage, shinnery oak, and mesquite are dispersed throughout the grassland. Forbs are present and populations fluctuate with precipitation variability.

**Table 5. Annual production by plant type**

| Plant Type | Low (Lb/Acre) | Representative Value (Lb/Acre) | High (Lb/Acre) |
|---|---|---|---|
| Grass/Grasslike | 442 | 833 | 1224 |
| Forb | 110 | 208 | 306 |
| Shrub/Vine | 98 | 184 | 270 |
| **Total** | **650** | **1225** | **1800** |

**Table 6. Ground cover**

| | |
|---|---|
| Tree foliar cover | 0% |
| Shrub/vine/liana foliar cover | 0% |
| Grass/grasslike foliar cover | 28% |
| Forb foliar cover | 0% |
| Non-vascular plants | 0% |
| Biological crusts | 0% |
| Litter | 50% |
| Surface fragments >0.25" and <=3" | 0% |
| Surface fragments >3" | 0% |
| Bedrock | 0% |
| Water | 0% |
| Bare ground | 22% |

**Figure 6. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - Warm season plant community .**

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 3 | 5 | 10 | 10 | 25 | 30 | 12 | 5 | 0 | 0 |

## State 2
## Grass/Shrub

### Community 2.1
### Grass/Shrub


Grass/Shrub State: The grass/shrub state is dominated by communities of grasses/mesquite, grasses/snakeweed, or grasses/sand sage. Decreases in black grama and bluestem species lead to an increase in bare patches and mesquite which further competes with grass species. An increase of dropseeds and threeawns occurs. Grass distribution becomes more patchy with an absence or severe decrease in black grama and bluestems. Mesquite provides nitrogen and soil organic matter to co-dominant grasses (Ansley and Jacoby 1998, Ansley et al. 1998). Mesquite mortality when exposed to fire is low due to aggressive resprouting abilities. Herbicide application combined with subsequent prescribed fire may be more effective in mesquite reduction (Britton and Wright 1971). Diagnosis: This state is dominated by an increased abundance of communities including grass/mesquite, grass/snakeweed, or grass/sand sage. Dropseeds and threeawns have a patchy distribution. Transition to Grass/Shrub State (1a): The historic plant community begins to shift toward the grass/shrub state as drivers such as drought, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by a decrease in black grama with a subsequent increase of dropseeds, threeawns, mesquite, and snakeweed. Snakeweed has been documented to outcompete black grama especially under conditions of fire suppression and drought (McDaniel et al. 1984). Key indicators of approach to transition: • Loss of black grama cover • Surface soil erosion • Bare patch expansion • Increased dropseed/threeawn and mesquite, snakeweed, or sand sage abundances Transition to Historic Plant Community (1b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community.

## State 3
## Shrub Dominated

### Community 3.1
### Shrub Dominated

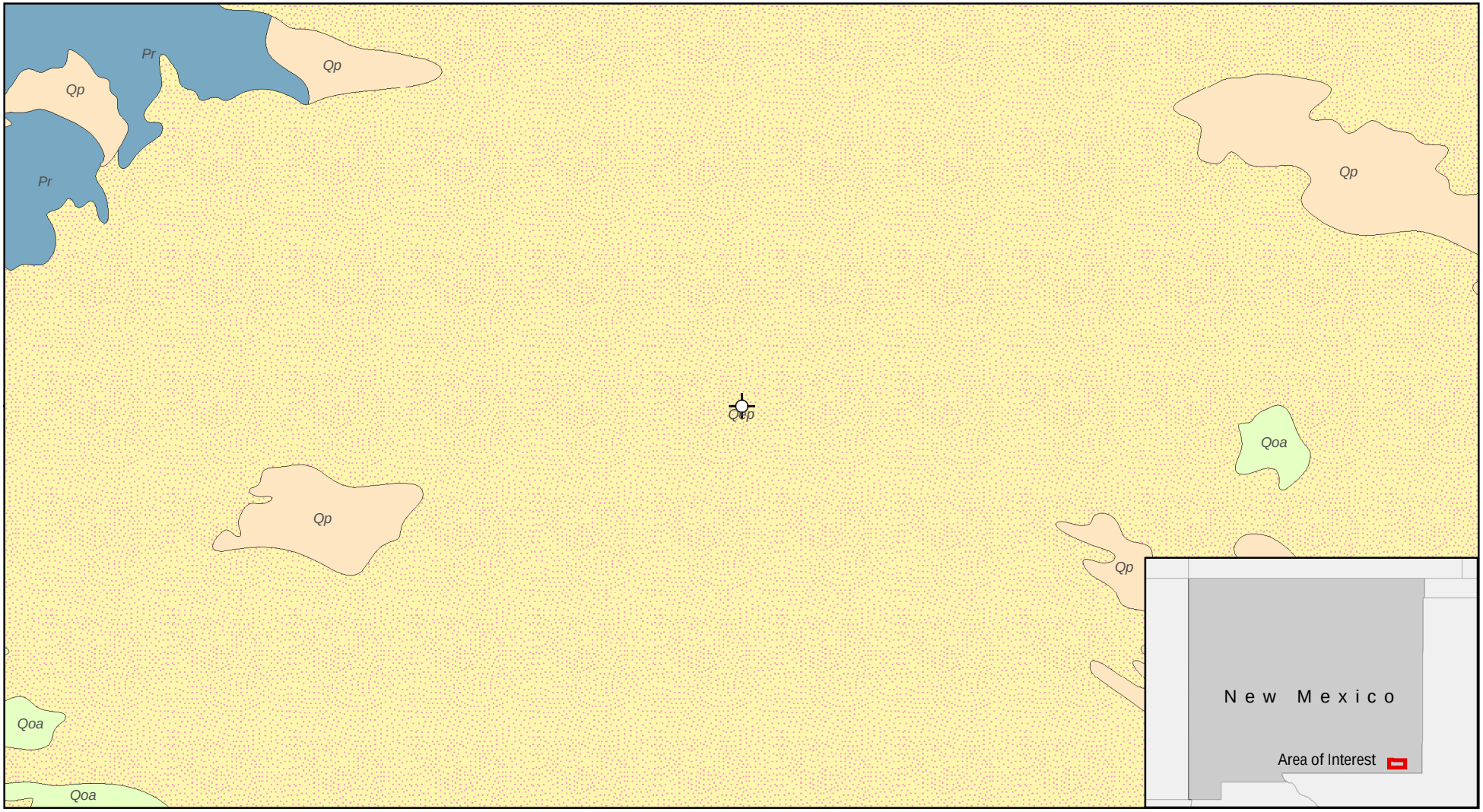
Shrub-Dominated State: The shrub-dominated state results from a severe loss of grass cover. This state's primary species is sand sage. Shinnery oak and mesquite also occur; however, grass cover is limited to intershrub distribution. Sand sage stabilizes light sandy soils from wind erosion, which enhances protected grass/forb cover (Davis and Bonham 1979). However, shinnery oak also responds to the sandy soils with dense stands due to an

aggressive rhizome system. Shinnery oak's extensive root system promotes competitive exclusion of grasses and forbs. Sand sage, shinnery oak, and mesquite can be controlled with herbicide (Herbel et al. 1979, Pettit 1986). Transition to Shrub-Dominated (2a): Severe loss of grass species with increased erosion and fire suppression will result in a transition to a shrub-dominated state with sand sage, Shin oak, and honey mesquite directly from the grassland-dominated state. Key indicators of approach to transition: • Severe loss of grass species cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite abundance Transition to Historic Plant Community (2b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community. In addition, seeding with native grass species will augment the transition to a grassland-dominated state. Transition to Shrub-Dominated (3): If the grass/shrub site continues to lose grass cover with soil erosion, the site will transition to a shrub-dominated state with sand sage, shinnery oak, and honey mesquite. Key indicators of approach to transition: • Continual loss of dropseeds/threeawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/dropseed/threeawn and mesquite/snakeweed abundance

## Additional community tables

**Table 7. Community 1.1 plant community composition**

| Group | Common Name | Symbol | Scientific Name | Annual Production (Lb/Acre) | Foliar Cover (%) |
|---|---|---|---|---|---|
| **Grass/Grasslike** | | | | | |
| 1 | **Warm Season** | | | 61–123 | |
| | little bluestem | SCSC | *Schizachyrium scoparium* | 61–123 | – |
| 2 | **Warm Season** | | | 37–61 | |
| | sand bluestem | ANHA | *Andropogon hallii* | 37–61 | – |
| 3 | **Warm Season** | | | 37–61 | |
| | cane bluestem | BOBA3 | *Bothriochloa barbinodis* | 37–61 | – |
| | silver bluestem | BOSA | *Bothriochloa saccharoides* | 37–61 | – |
| 4 | **Warm Season** | | | 123–184 | |
| | black grama | BOER4 | *Bouteloua eriopoda* | 123–184 | – |
| | bush muhly | MUPO2 | *Muhlenbergia porteri* | 123–184 | – |
| 5 | **Warm Season** | | | 123–184 | |
| | thin paspalum | PASE5 | *Paspalum setaceum* | 123–184 | – |
| | plains bristlegrass | SEVU2 | *Setaria vulpiseta* | 123–184 | – |
| | fringed signalgrass | URCI | *Urochloa ciliatissima* | 123–184 | – |
| 6 | **Warm Season** | | | 123–184 | |
| | spike dropseed | SPCO4 | *Sporobolus contractus* | 123–184 | – |
| | sand dropseed | SPCR | *Sporobolus cryptandrus* | 123–184 | – |
| | mesa dropseed | SPFL2 | *Sporobolus flexuosus* | 123–184 | – |
| 7 | **Warm Season** | | | 61–123 | |
| | hooded windmill grass | CHCU2 | *Chloris cucullata* | 61–123 | – |
| | Arizona cottontop | DICA8 | *Digitaria californica* | 61–123 | – |
| 9 | **Other Perennial Grasses** | | | 37–61 | |
| | Grass, perennial | 2GP | *Grass, perennial* | 37–61 | – |
| **Shrub/Vine** | | | | | |
| 8 | **Warm Season** | | | 37–61 | |
| | New Mexico feathergrass | HENE5 | *Hesperostipa neomexicana* | 37–61 | – |
| | giant dropseed | SPGI | *Sporobolus giganteus* | 37–61 | – |
| 10 | **Shrub** | | | 61–123 | |




Site Location

**Lithologic Contacts**

[contact] lithologic

**Lithologic Units**

Pr

Qep

Qoa

Qp

To

VERTEX

0 1.25 2.5 Miles

Map Center:
Lat/Long: 32.248128, -103.711559

NAD 1983 UTM Zone 13N

Date: Nov 01/22

N

**New Mexico Geology**
**Mesa Verde 6 Federal 5**

FIGURE:

**G**

eog resources

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Geology data sourced from New Mexico Bureau of Geology & Mineral Resources, Bureau of Land Management.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Devon Energy Corporation\2021\21E-028160030 - Mesa Verde 6 Fed 5\Figure G Geologic Map Mesa Verde 6 Federal 5.mxd

# ATTACHMENT 6

Gmail

**Dhugal Hanton <vertexresourcegroupusa@gmail.com>**

# 48 hr Notification confirmatory sampling

2 messages

**Dhugal Hanton** <vertexresourcegroupusa@gmail.com> Fri, Oct 21, 2022 at 5:05 PM
To: "CFO_Spill, BLM_NM" <blm_nm_cfo_spill@blm.gov>

Good afternoon,

Please accept this email as a notification of a confirmatory sampling at Mesa Verde 6 Fed 5 NGRL0927342490

This work will be completed on behalf of Devon Energy Production Company.

On Wednesday, October 26, 2022 at approximately 8:00 a.m., McKitrick Wier will be on site to conduct confirmation sampling. He can be reached at 575-361-9639. If you need directions to the site, please do not hesitate to contact him. If you have any questions or concerns regarding this notification, please give me a call at 346-814-1413

Thank you,
Kent

**Kent Stallings** P.G.
Project Manager

Vertex Resource Services Inc.
3101 Boyd Drive,
Carlsbad, NM 88220

**P 575.725.5001**
**C 346.814.1413**
**F**

www.vertex.ca



**Dhugal Hanton** <vertexresourcegroupusa@gmail.com> Wed, Oct 26, 2022 at 8:55 AM
Draft To: mpeppin@vertex.ca

[Quoted text hidden]

Gmail **Dhugal Hanton <vertexresourcegroupusa@gmail.com>**

# 48 hour confirmation sampling notice

2 messages

**Dhugal Hanton** <vertexresourcegroupusa@gmail.com> Tue, Oct 25, 2022 at 8:37 AM
To: "CFO_Spill, BLM_NM" <blm_nm_cfo_spill@blm.gov>

Please accept this email as a notification of a confirmatory sampling at Mesa Verde 6 Fed 5 NGRL0927342490

This work will be completed on behalf of Devon Energy Production Company.

On Thursday, October 27, 2022 and Friday, October 28, 2022 at approximately 8:00 a.m., McKitrick Wier will be on site to conduct confirmation sampling. He can be reached at 575-361-9639. If you need directions to the site, please do not hesitate to contact him. If you have any questions or concerns regarding this notification, please give me a call at 346-814-1413

Thank you,
Kent

**Kent Stallings** P.G.
Project Manager

Vertex Resource Services Inc.
3101 Boyd Drive,
Carlsbad, NM 88220

**P 575.725.5001**
**C 346.814.1413**
**F**

www.vertex.ca



**Dhugal Hanton** <vertexresourcegroupusa@gmail.com> Tue, Nov 8, 2022 at 9:18 AM
To: mpeppin@vertex.ca

[Quoted text hidden]

# ATTACHMENT 7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

*Hall Environmental Analysis Laboratory*
*4901 Hawkins NE*
*Albuquerque, NM 87109*
*TEL: 505-345-3975 FAX: 505-345-4107*
*Website: clients.hallenvironmental.com*

February 23, 2022

Brandon Schafer

Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX

RE: Mesa Verde 6 Fed 5 OrderNo.: 2202641

Dear Brandon Schafer:

Hall Environmental Analysis Laboratory received 11 sample(s) on 2/12/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc.
**Client Sample ID:** BH22-02 0.5'
**Project:** Mesa Verde 6 Fed 5
**Collection Date:** 2/9/2022 9:00:00 AM
**Lab ID:** 2202641-001 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 2/18/2022 3:21:11 AM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 2/18/2022 3:21:11 AM |
| Surr: DNOP | 86.6 | 51.1-141 | | %Rec | 1 | 2/18/2022 3:21:11 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 2/16/2022 1:39:00 AM |
| Surr: BFB | 97.6 | 70-130 | | %Rec | 1 | 2/16/2022 1:39:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 2/16/2022 1:39:00 AM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 2/16/2022 1:39:00 AM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 2/16/2022 1:39:00 AM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 2/16/2022 1:39:00 AM |
| Surr: 4-Bromofluorobenzene | 84.8 | 70-130 | | %Rec | 1 | 2/16/2022 1:39:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 420 | 60 | | mg/Kg | 20 | 2/18/2022 11:19:12 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-03 0.5'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 9:10:00 AM
**Lab ID:** 2202641-002 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 2/18/2022 3:56:51 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 2/18/2022 3:56:51 PM |
| Surr: DNOP | 103 | 51.1-141 | | %Rec | 1 | 2/18/2022 3:56:51 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 5.0 | | mg/Kg | 1 | 2/16/2022 1:59:00 AM |
| Surr: BFB | 101 | 70-130 | | %Rec | 1 | 2/16/2022 1:59:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 2/16/2022 1:59:00 AM |
| Toluene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 1:59:00 AM |
| Ethylbenzene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 1:59:00 AM |
| Xylenes, Total | ND | 0.10 | | mg/Kg | 1 | 2/16/2022 1:59:00 AM |
| Surr: 4-Bromofluorobenzene | 88.8 | 70-130 | | %Rec | 1 | 2/16/2022 1:59:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 130 | 60 | | mg/Kg | 20 | 2/18/2022 11:56:13 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-06 0.5'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 9:30:00 AM
**Lab ID:** 2202641-003 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | 10 | 9.7 | | mg/Kg | 1 | 2/18/2022 3:41:44 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 2/18/2022 3:41:44 AM |
| Surr: DNOP | 58.6 | 51.1-141 | | %Rec | 1 | 2/18/2022 3:41:44 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 5.0 | | mg/Kg | 1 | 2/16/2022 2:18:00 AM |
| Surr: BFB | 101 | 70-130 | | %Rec | 1 | 2/16/2022 2:18:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 2/16/2022 2:18:00 AM |
| Toluene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 2:18:00 AM |
| Ethylbenzene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 2:18:00 AM |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 2/16/2022 2:18:00 AM |
| Surr: 4-Bromofluorobenzene | 84.9 | 70-130 | | %Rec | 1 | 2/16/2022 2:18:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 69 | 61 | | mg/Kg | 20 | 2/19/2022 12:08:33 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-09 0.5'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 9:40:00 AM
**Lab ID:** 2202641-004 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.3 | | mg/Kg | 1 | 2/18/2022 3:51:58 AM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 2/18/2022 3:51:58 AM |
| Surr: DNOP | 56.3 | 51.1-141 | | %Rec | 1 | 2/18/2022 3:51:58 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 2/16/2022 2:38:00 AM |
| Surr: BFB | 102 | 70-130 | | %Rec | 1 | 2/16/2022 2:38:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 2/16/2022 2:38:00 AM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 2/16/2022 2:38:00 AM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 2/16/2022 2:38:00 AM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 2/16/2022 2:38:00 AM |
| Surr: 4-Bromofluorobenzene | 88.3 | 70-130 | | %Rec | 1 | 2/16/2022 2:38:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 170 | 60 | | mg/Kg | 20 | 2/19/2022 12:20:54 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc.
**Client Sample ID:** BH22-10 0.5'
**Project:** Mesa Verde 6 Fed 5
**Collection Date:** 2/9/2022 9:50:00 AM
**Lab ID:** 2202641-005 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 2/18/2022 4:02:12 AM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 2/18/2022 4:02:12 AM |
| Surr: DNOP | 74.6 | 51.1-141 | | %Rec | 1 | 2/18/2022 4:02:12 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 2/16/2022 3:37:00 AM |
| Surr: BFB | 95.4 | 70-130 | | %Rec | 1 | 2/16/2022 3:37:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 2/16/2022 3:37:00 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 2/16/2022 3:37:00 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 2/16/2022 3:37:00 AM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 2/16/2022 3:37:00 AM |
| Surr: 4-Bromofluorobenzene | 83.8 | 70-130 | | %Rec | 1 | 2/16/2022 3:37:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 320 | 60 | | mg/Kg | 20 | 2/19/2022 12:33:15 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-11 0.5'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 11:00:00 AM
**Lab ID:** 2202641-006 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | 210 | 9.6 | | mg/Kg | 1 | 2/18/2022 4:12:27 AM |
| Motor Oil Range Organics (MRO) | 170 | 48 | | mg/Kg | 1 | 2/18/2022 4:12:27 AM |
| Surr: DNOP | 89.4 | 51.1-141 | | %Rec | 1 | 2/18/2022 4:12:27 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 2/16/2022 3:57:00 AM |
| Surr: BFB | 95.0 | 70-130 | | %Rec | 1 | 2/16/2022 3:57:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 2/16/2022 3:57:00 AM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 2/16/2022 3:57:00 AM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 2/16/2022 3:57:00 AM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 2/16/2022 3:57:00 AM |
| Surr: 4-Bromofluorobenzene | 82.9 | 70-130 | | %Rec | 1 | 2/16/2022 3:57:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **LRN** |
| Chloride | 4900 | 150 | | mg/Kg | 50 | 2/21/2022 3:59:14 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc.
**Client Sample ID:** BH22-11 1.0'
**Project:** Mesa Verde 6 Fed 5
**Collection Date:** 2/9/2022 11:30:00 AM
**Lab ID:** 2202641-007 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.6 | | mg/Kg | 1 | 2/18/2022 4:22:45 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 2/18/2022 4:22:45 AM |
| Surr: DNOP | 87.0 | 51.1-141 | | %Rec | 1 | 2/18/2022 4:22:45 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 2/16/2022 4:16:00 AM |
| Surr: BFB | 102 | 70-130 | | %Rec | 1 | 2/16/2022 4:16:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 2/16/2022 4:16:00 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 2/16/2022 4:16:00 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 2/16/2022 4:16:00 AM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 2/16/2022 4:16:00 AM |
| Surr: 4-Bromofluorobenzene | 85.3 | 70-130 | | %Rec | 1 | 2/16/2022 4:16:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 520 | 60 | | mg/Kg | 20 | 2/19/2022 12:57:57 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-12 0.5'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 12:00:00 PM
**Lab ID:** 2202641-008 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | 32 | 9.8 | | mg/Kg | 1 | 2/18/2022 4:33:11 AM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 2/18/2022 4:33:11 AM |
| Surr: DNOP | 71.4 | 51.1-141 | | %Rec | 1 | 2/18/2022 4:33:11 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 5.0 | | mg/Kg | 1 | 2/16/2022 4:36:00 AM |
| Surr: BFB | 95.8 | 70-130 | | %Rec | 1 | 2/16/2022 4:36:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 2/16/2022 4:36:00 AM |
| Toluene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 4:36:00 AM |
| Ethylbenzene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 4:36:00 AM |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 2/16/2022 4:36:00 AM |
| Surr: 4-Bromofluorobenzene | 84.2 | 70-130 | | %Rec | 1 | 2/16/2022 4:36:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 1100 | 59 | | mg/Kg | 20 | 2/19/2022 1:10:18 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-12 1.0'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 12:30:00 PM
**Lab ID:** 2202641-009 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.5 | | mg/Kg | 1 | 2/18/2022 4:43:41 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 2/18/2022 4:43:41 AM |
| Surr: DNOP | 80.2 | 51.1-141 | | %Rec | 1 | 2/18/2022 4:43:41 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 2/16/2022 4:56:00 AM |
| Surr: BFB | 96.4 | 70-130 | | %Rec | 1 | 2/16/2022 4:56:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 2/16/2022 4:56:00 AM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 2/16/2022 4:56:00 AM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 2/16/2022 4:56:00 AM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 2/16/2022 4:56:00 AM |
| Surr: 4-Bromofluorobenzene | 83.0 | 70-130 | | %Rec | 1 | 2/16/2022 4:56:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 200 | 60 | | mg/Kg | 20 | 2/19/2022 1:47:20 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-13 0.5'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 1:00:00 PM
**Lab ID:** 2202641-010 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | 200 | 9.4 | | mg/Kg | 1 | 2/18/2022 4:54:14 AM |
| Motor Oil Range Organics (MRO) | 190 | 47 | | mg/Kg | 1 | 2/18/2022 4:54:14 AM |
| Surr: DNOP | 70.0 | 51.1-141 | | %Rec | 1 | 2/18/2022 4:54:14 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 5.0 | | mg/Kg | 1 | 2/16/2022 5:16:00 AM |
| Surr: BFB | 93.6 | 70-130 | | %Rec | 1 | 2/16/2022 5:16:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 2/16/2022 5:16:00 AM |
| Toluene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 5:16:00 AM |
| Ethylbenzene | ND | 0.050 | | mg/Kg | 1 | 2/16/2022 5:16:00 AM |
| Xylenes, Total | ND | 0.10 | | mg/Kg | 1 | 2/16/2022 5:16:00 AM |
| Surr: 4-Bromofluorobenzene | 82.6 | 70-130 | | %Rec | 1 | 2/16/2022 5:16:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **LRN** |
| Chloride | 5200 | 300 | | mg/Kg | 100 | 2/21/2022 4:11:38 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

**Analytical Report**
Lab Order **2202641**
Date Reported: **2/23/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. **Client Sample ID:** BH22-13 1.0'
**Project:** Mesa Verde 6 Fed 5 **Collection Date:** 2/9/2022 1:30:00 PM
**Lab ID:** 2202641-011 **Matrix:** SOIL **Received Date:** 2/12/2022 8:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 2/18/2022 5:04:51 AM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 2/18/2022 5:04:51 AM |
| Surr: DNOP | 108 | 51.1-141 | | %Rec | 1 | 2/18/2022 5:04:51 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **RAA** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 2/16/2022 5:35:00 AM |
| Surr: BFB | 92.7 | 70-130 | | %Rec | 1 | 2/16/2022 5:35:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **RAA** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 2/16/2022 5:35:00 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 2/16/2022 5:35:00 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 2/16/2022 5:35:00 AM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 2/16/2022 5:35:00 AM |
| Surr: 4-Bromofluorobenzene | 79.5 | 70-130 | | %Rec | 1 | 2/16/2022 5:35:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **MRA** |
| Chloride | 520 | 60 | | mg/Kg | 20 | 2/19/2022 2:12:02 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Estimated value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of range due to dilution or matrix interference | | |

# QC SUMMARY REPORT
## Hall Environmental Analysis Laboratory, Inc.

WO#: **2202641**
***23-Feb-22***

**Client:** Vertex Resources Services, Inc.
**Project:** Mesa Verde 6 Fed 5

Sample ID: **MB-65654** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **65654** RunNo: **85952**
Prep Date: **2/18/2022** Analysis Date: **2/18/2022** SeqNo: **3027713** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | ND | 30 | | | | | | | | |

Sample ID: **LCS-65654** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **65654** RunNo: **85952**
Prep Date: **2/18/2022** Analysis Date: **2/18/2022** SeqNo: **3027714** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 90.5 | 90 | 110 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT
## Hall Environmental Analysis Laboratory, Inc.

WO#: **2202641**
***23-Feb-22***

**Client:** Vertex Resources Services, Inc.
**Project:** Mesa Verde 6 Fed 5

Sample ID: **LCS-65570** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **65570** RunNo: **85916**
Prep Date: **2/16/2022** Analysis Date: **2/17/2022** SeqNo: **3025512** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 57 | 10 | 50.00 | 0 | 114 | 68.9 | 135 | | | |
| Surr: DNOP | 4.1 | | 5.000 | | 82.1 | 51.1 | 141 | | | |

Sample ID: **MB-65570** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **65570** RunNo: **85916**
Prep Date: **2/16/2022** Analysis Date: **2/17/2022** SeqNo: **3025517** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 8.9 | | 10.00 | | 89.4 | 51.1 | 141 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT
## Hall Environmental Analysis Laboratory, Inc.

WO#: **2202641**
***23-Feb-22***

**Client:** Vertex Resources Services, Inc.
**Project:** Mesa Verde 6 Fed 5

Sample ID: **lcs-65538** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **65538** RunNo: **85851**
Prep Date: **2/14/2022** Analysis Date: **2/15/2022** SeqNo: **3023048** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 26 | 5.0 | 25.00 | 0 | 103 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 110 | 70 | 130 | | | |

Sample ID: **mb-65538** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **65538** RunNo: **85851**
Prep Date: **2/14/2022** Analysis Date: **2/15/2022** SeqNo: **3023049** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 930 | | 1000 | | 93.4 | 70 | 130 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT
## Hall Environmental Analysis Laboratory, Inc.

WO#: **2202641**
***23-Feb-22***

**Client:** Vertex Resources Services, Inc.
**Project:** Mesa Verde 6 Fed 5

| Sample ID: **lcs-65538** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **65538** | RunNo: **85851** |
| Prep Date: **2/14/2022** | Analysis Date: **2/15/2022** | SeqNo: **3023101** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.94 | 0.025 | 1.000 | 0 | 94.1 | 80 | 120 | | | |
| Toluene | 0.93 | 0.050 | 1.000 | 0 | 93.5 | 80 | 120 | | | |
| Ethylbenzene | 0.94 | 0.050 | 1.000 | 0 | 93.5 | 80 | 120 | | | |
| Xylenes, Total | 2.8 | 0.10 | 3.000 | 0 | 92.4 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.84 | | 1.000 | | 83.9 | 70 | 130 | | | |

| Sample ID: **mb-65538** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **65538** | RunNo: **85851** |
| Prep Date: **2/14/2022** | Analysis Date: **2/15/2022** | SeqNo: **3023102** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 0.80 | | 1.000 | | 80.1 | 70 | 130 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of range due to dilution or matrix interference |
| B | Analyte detected in the associated Method Blank |
| E | Estimated value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

HALL ENVIRONMENTAL ANALYSIS LABORATORY

*Hall Environmental Analysis Laboratory*
*4901 Hawkins NE*
*Albuquerque, NM 87109*
*TEL: 505-345-3975 FAX: 505-345-4107*
*Website: clients.hallenvironmental.com*

# Sample Log-In Check List

Client Name: Vertex Resources Services, Inc.

Work Order Number: 2202641

RcptNo: 1

Received By: Isaiah Ortiz 2/12/2022 8:55:00 AM I-OK

Completed By: Isaiah Ortiz 2/12/2022 10:06:28 AM I-OK

Reviewed By: IM 02/12/2022

## Chain of Custody

| | | | |
|---|---|---|---|
| 1. Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. How was the sample delivered? | Courier | | |

## Log In

| | | | |
|---|---|---|---|
| 3. Was an attempt made to cool the samples? | Yes ☑ | No ☐ | NA ☐ |
| 4. Were all samples received at a temperature of >0° C to 6.0°C | Yes ☑ | No ☐ | NA ☐ |
| 5. Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 6. Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes ☑ | No ☐ | |
| 8. Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 9. Received at least 1 vial with headspace <1/4" for AQ VOA? | Yes ☐ | No ☐ | NA ☑ |
| 10. Were any sample containers received broken? | Yes ☐ | No ☑ | |
| 11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) | Yes ☑ | No ☐ | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 13. Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 14. Were all holding times able to be met? (If no, notify customer for authorization.) | Yes ☑ | No ☐ | |

NO

# of preserved bottles checked for pH: 2/12/22 (<2 or >12 unless noted)

Adjusted?

Checked by:

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | 3.1 | Good | Not Present | | | |
| 2 | 3.2 | Good | Not Present | | | |

# Chain-of-Custody Record

Client: Vertex

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5-DAY
☑ Standard ☒ Rush

Project Name: Mesa Verde 6 Fed 5

Project #: 21E-02816-30

Project Manager: Brandon Schafer

Sampler: AH

On Ice: ☒ Yes ☐ No

# of Coolers: 2 3.1°C ±0

Cooler Temp(including CF): 3.2°C ±0 (°C)


HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107


**Analysis Request**

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 2202641 | BTEX / MTBE / TMB's (8021) | TPH: 8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-9-22 | 0900 | Soil | BH22-02 0.5' | Glass Jar | ICE | 001 | ✓ | ✓ | | | | | ✓ | | | |
| | 0910 | | BH22-03 0.5' | | | 002 | | | | | | | | | | |
| | 0930 | | BH22-06 0.5' | | | 003 | | | | | | | | | | |
| | 0940 | | BH22-09 0.5' | | | 004 | | | | | | | | | | |
| | 0950 | | BH22-10 0.5' | | | 005 | | | | | | | | | | |
| | 1100 | | BH22-11 0.5' | | | 006 | | | | | | | | | | |
| | 1130 | | BH22-11 1.0' | | | 007 | | | | | | | | | | |
| | 1200 | | BH22-12 0.5' | | | 008 | | | | | | | | | | |
| | 1230 | | BH22-12 1.0' | | | 009 | | | | | | | | | | |
| | 1300 | | BH22-13 0.5' | | | 010 | | | | | | | | | | |
| ✓ | 1330 | ✓ | BH22-13 1.0' | ✓ | ✓ | 011 | ✓ | ✓ | | | | | ✓ | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| | | | [signature] | | 2/11/22 | 1200 |
| Date: 2/11/22 | Time: 1900 | Relinquished by: [signature] | Received by: [signature] | Via: Courier | Date 2/12/22 | Time 0855 |

Remarks: CC: Brandon Schafer

HALL ENVIRONMENTAL ANALYSIS LABORATORY

*Hall Environmental Analysis Laboratory*
*4901 Hawkins NE*
*Albuquerque, NM 87109*
*TEL: 505-345-3975 FAX: 505-345-4107*
*Website: www.hallenvironmental.com*

November 08, 2022

Kent Stallings

Devon Energy
6488 Seven Rivers Highway
Artesia, NM 88210
TEL: (505) 350-1336
FAX:

RE: Mesa Verde 6 Federal 5 OrderNo.: 2210E19

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 42 sample(s) on 10/28/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-01 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 8:30:00 AM
**Lab ID:** 2210E19-001 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 7:20:24 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/2/2022 7:20:24 PM |
| Surr: DNOP | 112 | 21-129 | | %Rec | 1 | 11/2/2022 7:20:24 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 12:55:32 PM |
| Surr: BFB | 99.0 | 37.7-212 | | %Rec | 1 | 11/1/2022 12:55:32 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 12:55:32 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 12:55:32 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 12:55:32 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 12:55:32 PM |
| Surr: 4-Bromofluorobenzene | 101 | 70-130 | | %Rec | 1 | 11/1/2022 12:55:32 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 59 | | mg/Kg | 20 | 11/2/2022 9:17:52 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-02 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 8:35:00 AM
**Lab ID:** 2210E19-002 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 2:40:44 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/1/2022 2:40:44 PM |
| Surr: DNOP | 107 | 21-129 | | %Rec | 1 | 11/1/2022 2:40:44 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 1:18:54 PM |
| Surr: BFB | 92.7 | 37.7-212 | | %Rec | 1 | 11/1/2022 1:18:54 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 11/1/2022 1:18:54 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 1:18:54 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 1:18:54 PM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 11/1/2022 1:18:54 PM |
| Surr: 4-Bromofluorobenzene | 99.2 | 70-130 | | %Rec | 1 | 11/1/2022 1:18:54 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/2/2022 9:30:16 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-03 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 8:40:00 AM
**Lab ID:** 2210E19-003 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | 28 | 14 | | mg/Kg | 1 | 11/1/2022 3:12:58 PM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 11/1/2022 3:12:58 PM |
| Surr: DNOP | 104 | 21-129 | | %Rec | 1 | 11/1/2022 3:12:58 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 11/1/2022 2:29:10 PM |
| Surr: BFB | 91.7 | 37.7-212 | | %Rec | 1 | 11/1/2022 2:29:10 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/1/2022 2:29:10 PM |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 11/1/2022 2:29:10 PM |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 11/1/2022 2:29:10 PM |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 11/1/2022 2:29:10 PM |
| Surr: 4-Bromofluorobenzene | 95.8 | 70-130 | | %Rec | 1 | 11/1/2022 2:29:10 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 160 | 60 | | mg/Kg | 20 | 11/2/2022 9:42:41 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-04 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 8:45:00 AM
**Lab ID:** 2210E19-004 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | 20 | 14 | | mg/Kg | 1 | 11/1/2022 3:23:46 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 11/1/2022 3:23:46 PM |
| Surr: DNOP | 127 | 21-129 | | %Rec | 1 | 11/1/2022 3:23:46 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 2:52:44 PM |
| Surr: BFB | 92.1 | 37.7-212 | | %Rec | 1 | 11/1/2022 2:52:44 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 2:52:44 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 2:52:44 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 2:52:44 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 2:52:44 PM |
| Surr: 4-Bromofluorobenzene | 98.1 | 70-130 | | %Rec | 1 | 11/1/2022 2:52:44 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 240 | 60 | | mg/Kg | 20 | 11/2/2022 10:19:56 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-05 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 8:50:00 AM
**Lab ID:** 2210E19-005 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 3:34:55 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/1/2022 3:34:55 PM |
| Surr: DNOP | 109 | 21-129 | | %Rec | 1 | 11/1/2022 3:34:55 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 3:16:13 PM |
| Surr: BFB | 90.9 | 37.7-212 | | %Rec | 1 | 11/1/2022 3:16:13 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 11/1/2022 3:16:13 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 3:16:13 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 3:16:13 PM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 11/1/2022 3:16:13 PM |
| Surr: 4-Bromofluorobenzene | 97.2 | 70-130 | | %Rec | 1 | 11/1/2022 3:16:13 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/2/2022 10:32:20 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-06 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 8:55:00 AM
**Lab ID:** 2210E19-006 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 3:45:43 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/1/2022 3:45:43 PM |
| Surr: DNOP | 110 | 21-129 | | %Rec | 1 | 11/1/2022 3:45:43 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/1/2022 3:39:50 PM |
| Surr: BFB | 93.5 | 37.7-212 | | %Rec | 1 | 11/1/2022 3:39:50 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 3:39:50 PM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 3:39:50 PM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 3:39:50 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 3:39:50 PM |
| Surr: 4-Bromofluorobenzene | 99.8 | 70-130 | | %Rec | 1 | 11/1/2022 3:39:50 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 250 | 60 | | mg/Kg | 20 | 11/2/2022 10:44:45 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-07 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:00:00 AM
**Lab ID:** 2210E19-007 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 3:56:32 PM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 11/1/2022 3:56:32 PM |
| Surr: DNOP | 99.6 | 21-129 | | %Rec | 1 | 11/1/2022 3:56:32 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 4:03:29 PM |
| Surr: BFB | 89.7 | 37.7-212 | | %Rec | 1 | 11/1/2022 4:03:29 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 4:03:29 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 4:03:29 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 4:03:29 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 4:03:29 PM |
| Surr: 4-Bromofluorobenzene | 95.7 | 70-130 | | %Rec | 1 | 11/1/2022 4:03:29 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 100 | 60 | | mg/Kg | 20 | 11/2/2022 10:57:10 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-08 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:05:00 AM
**Lab ID:** 2210E19-008 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 4:07:29 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/1/2022 4:07:29 PM |
| Surr: DNOP | 105 | 21-129 | | %Rec | 1 | 11/1/2022 4:07:29 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 4:27:06 PM |
| Surr: BFB | 90.7 | 37.7-212 | | %Rec | 1 | 11/1/2022 4:27:06 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 4:27:06 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 4:27:06 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 4:27:06 PM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 11/1/2022 4:27:06 PM |
| Surr: 4-Bromofluorobenzene | 96.7 | 70-130 | | %Rec | 1 | 11/1/2022 4:27:06 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 160 | 60 | | mg/Kg | 20 | 11/2/2022 11:09:34 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-09 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:10:00 AM
**Lab ID:** 2210E19-009 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 4:29:03 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 11/1/2022 4:29:03 PM |
| Surr: DNOP | 96.1 | 21-129 | | %Rec | 1 | 11/1/2022 4:29:03 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/1/2022 4:50:39 PM |
| Surr: BFB | 83.6 | 37.7-212 | | %Rec | 1 | 11/1/2022 4:50:39 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 4:50:39 PM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 4:50:39 PM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 4:50:39 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 4:50:39 PM |
| Surr: 4-Bromofluorobenzene | 88.8 | 70-130 | | %Rec | 1 | 11/1/2022 4:50:39 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 120 | 59 | | mg/Kg | 20 | 11/2/2022 11:21:58 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-10 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:15:00 AM
**Lab ID:** 2210E19-010 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 4:39:59 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/1/2022 4:39:59 PM |
| Surr: DNOP | 103 | 21-129 | | %Rec | 1 | 11/1/2022 4:39:59 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 5:14:15 PM |
| Surr: BFB | 85.2 | 37.7-212 | | %Rec | 1 | 11/1/2022 5:14:15 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/1/2022 5:14:15 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 5:14:15 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 5:14:15 PM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 11/1/2022 5:14:15 PM |
| Surr: 4-Bromofluorobenzene | 90.7 | 70-130 | | %Rec | 1 | 11/1/2022 5:14:15 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 9:31:27 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-11 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:20:00 AM
**Lab ID:** 2210E19-011 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 4:50:54 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/1/2022 4:50:54 PM |
| Surr: DNOP | 99.0 | 21-129 | | %Rec | 1 | 11/1/2022 4:50:54 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 5:37:51 PM |
| Surr: BFB | 89.9 | 37.7-212 | | %Rec | 1 | 11/1/2022 5:37:51 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 11/1/2022 5:37:51 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 5:37:51 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 5:37:51 PM |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 11/1/2022 5:37:51 PM |
| Surr: 4-Bromofluorobenzene | 95.1 | 70-130 | | %Rec | 1 | 11/1/2022 5:37:51 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 10:08:40 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-12 1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:25:00 AM
**Lab ID:** 2210E19-012 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 5:01:47 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/1/2022 5:01:47 PM |
| Surr: DNOP | 106 | 21-129 | | %Rec | 1 | 11/1/2022 5:01:47 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/1/2022 6:01:26 PM |
| Surr: BFB | 84.9 | 37.7-212 | | %Rec | 1 | 11/1/2022 6:01:26 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 6:01:26 PM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 6:01:26 PM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 6:01:26 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 6:01:26 PM |
| Surr: 4-Bromofluorobenzene | 91.1 | 70-130 | | %Rec | 1 | 11/1/2022 6:01:26 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 360 | 60 | | mg/Kg | 20 | 11/3/2022 10:45:53 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-13 3'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:30:00 AM
**Lab ID:** 2210E19-013 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 5:12:40 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/1/2022 5:12:40 PM |
| Surr: DNOP | 97.7 | 21-129 | | %Rec | 1 | 11/1/2022 5:12:40 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/1/2022 11:55:00 AM |
| Surr: BFB | 113 | 37.7-212 | | %Rec | 1 | 11/1/2022 11:55:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 11:55:00 AM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 11:55:00 AM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 11:55:00 AM |
| Xylenes, Total | ND | 0.096 | | mg/Kg | 1 | 11/1/2022 11:55:00 AM |
| Surr: 4-Bromofluorobenzene | 125 | 70-130 | | %Rec | 1 | 11/1/2022 11:55:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 59 | | mg/Kg | 20 | 11/3/2022 10:58:17 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-14 3'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:35:00 AM
**Lab ID:** 2210E19-014 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 5:23:32 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/1/2022 5:23:32 PM |
| Surr: DNOP | 96.7 | 21-129 | | %Rec | 1 | 11/1/2022 5:23:32 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 12:54:00 PM |
| Surr: BFB | 102 | 37.7-212 | | %Rec | 1 | 11/1/2022 12:54:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/1/2022 12:54:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 12:54:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 12:54:00 PM |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 11/1/2022 12:54:00 PM |
| Surr: 4-Bromofluorobenzene | 130 | 70-130 | | %Rec | 1 | 11/1/2022 12:54:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 11:35:30 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-15 3'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:40:00 AM
**Lab ID:** 2210E19-015 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 5:34:22 PM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 11/1/2022 5:34:22 PM |
| Surr: DNOP | 96.4 | 21-129 | | %Rec | 1 | 11/1/2022 5:34:22 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 11/1/2022 1:53:00 PM |
| Surr: BFB | 95.5 | 37.7-212 | | %Rec | 1 | 11/1/2022 1:53:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/1/2022 1:53:00 PM |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 11/1/2022 1:53:00 PM |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 11/1/2022 1:53:00 PM |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 11/1/2022 1:53:00 PM |
| Surr: 4-Bromofluorobenzene | 126 | 70-130 | | %Rec | 1 | 11/1/2022 1:53:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 11:47:53 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-16 2.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:45:00 AM
**Lab ID:** 2210E19-016 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 5:45:13 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 11/1/2022 5:45:13 PM |
| Surr: DNOP | 99.4 | 21-129 | | %Rec | 1 | 11/1/2022 5:45:13 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 2:13:00 PM |
| Surr: BFB | 98.9 | 37.7-212 | | %Rec | 1 | 11/1/2022 2:13:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 2:13:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 2:13:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 2:13:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 2:13:00 PM |
| Surr: 4-Bromofluorobenzene | 125 | 70-130 | | %Rec | 1 | 11/1/2022 2:13:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 12:00:18 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-17 2.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:50:00 AM
**Lab ID:** 2210E19-017 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 5:56:04 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 11/1/2022 5:56:04 PM |
| Surr: DNOP | 108 | 21-129 | | %Rec | 1 | 11/1/2022 5:56:04 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 2:32:00 PM |
| Surr: BFB | 103 | 37.7-212 | | %Rec | 1 | 11/1/2022 2:32:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 2:32:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 2:32:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 2:32:00 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 2:32:00 PM |
| Surr: 4-Bromofluorobenzene | 126 | 70-130 | | %Rec | 1 | 11/1/2022 2:32:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 12:12:42 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-18 2.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 9:55:00 AM
**Lab ID:** 2210E19-018 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 6:06:53 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 11/1/2022 6:06:53 PM |
| Surr: DNOP | 98.8 | 21-129 | | %Rec | 1 | 11/1/2022 6:06:53 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/1/2022 2:52:00 PM |
| Surr: BFB | 94.9 | 37.7-212 | | %Rec | 1 | 11/1/2022 2:52:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 2:52:00 PM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 2:52:00 PM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 2:52:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 2:52:00 PM |
| Surr: 4-Bromofluorobenzene | 124 | 70-130 | | %Rec | 1 | 11/1/2022 2:52:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 150 | 60 | | mg/Kg | 20 | 11/3/2022 12:25:06 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-19 2.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 10:00:00 AM
**Lab ID:** 2210E19-019 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 6:17:41 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/1/2022 6:17:41 PM |
| Surr: DNOP | 106 | 21-129 | | %Rec | 1 | 11/1/2022 6:17:41 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 3:12:00 PM |
| Surr: BFB | 99.5 | 37.7-212 | | %Rec | 1 | 11/1/2022 3:12:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 3:12:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 3:12:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 3:12:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 3:12:00 PM |
| Surr: 4-Bromofluorobenzene | 126 | 70-130 | | %Rec | 1 | 11/1/2022 3:12:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 12:37:30 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-20 2'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 10:05:00 AM
**Lab ID:** 2210E19-020 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/1/2022 6:28:30 PM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 11/1/2022 6:28:30 PM |
| Surr: DNOP | 111 | 21-129 | | %Rec | 1 | 11/1/2022 6:28:30 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 3:32:00 PM |
| Surr: BFB | 100 | 37.7-212 | | %Rec | 1 | 11/1/2022 3:32:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 11/1/2022 3:32:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 3:32:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 3:32:00 PM |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 11/1/2022 3:32:00 PM |
| Surr: 4-Bromofluorobenzene | 129 | 70-130 | | %Rec | 1 | 11/1/2022 3:32:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 12:49:55 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-21 2'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 10:10:00 AM
**Lab ID:** 2210E19-021 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/1/2022 6:39:18 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/1/2022 6:39:18 PM |
| Surr: DNOP | 109 | 21-129 | | %Rec | 1 | 11/1/2022 6:39:18 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 3:51:00 PM |
| Surr: BFB | 97.0 | 37.7-212 | | %Rec | 1 | 11/1/2022 3:51:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 3:51:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 3:51:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 3:51:00 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 3:51:00 PM |
| Surr: 4-Bromofluorobenzene | 126 | 70-130 | | %Rec | 1 | 11/1/2022 3:51:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 260 | 60 | | mg/Kg | 20 | 11/3/2022 1:02:19 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-22 1'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 10:15:00 AM
**Lab ID:** 2210E19-022 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 7:20:20 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 11/2/2022 7:20:20 PM |
| Surr: DNOP | 98.8 | 21-129 | | %Rec | 1 | 11/2/2022 7:20:20 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/1/2022 4:11:00 PM |
| Surr: BFB | 99.9 | 37.7-212 | | %Rec | 1 | 11/1/2022 4:11:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 4:11:00 PM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 4:11:00 PM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/1/2022 4:11:00 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 4:11:00 PM |
| Surr: 4-Bromofluorobenzene | 124 | 70-130 | | %Rec | 1 | 11/1/2022 4:11:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 120 | 59 | | mg/Kg | 20 | 11/3/2022 1:14:43 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Project:** Mesa Verde 6 Federal 5
**Lab ID:** 2210E19-023 **Matrix:** SOIL

**Client Sample ID:** BS22-23 1'
**Collection Date:** 10/26/2022 10:20:00 AM
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 7:44:42 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 11/2/2022 7:44:42 PM |
| Surr: DNOP | 96.7 | 21-129 | | %Rec | 1 | 11/2/2022 7:44:42 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 4:50:00 PM |
| Surr: BFB | 95.7 | 37.7-212 | | %Rec | 1 | 11/1/2022 4:50:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 4:50:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 4:50:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 4:50:00 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 4:50:00 PM |
| Surr: 4-Bromofluorobenzene | 123 | 70-130 | | %Rec | 1 | 11/1/2022 4:50:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 250 | 61 | | mg/Kg | 20 | 11/3/2022 1:27:07 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** BS22-24 1'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 10:25:00 AM
**Lab ID:** 2210E19-024 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/3/2022 1:25:17 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/3/2022 1:25:17 AM |
| Surr: DNOP | 119 | 21-129 | | %Rec | 1 | 11/3/2022 1:25:17 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 5:10:00 PM |
| Surr: BFB | 95.8 | 37.7-212 | | %Rec | 1 | 11/1/2022 5:10:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 5:10:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 5:10:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 5:10:00 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 5:10:00 PM |
| Surr: 4-Bromofluorobenzene | 123 | 70-130 | | %Rec | 1 | 11/1/2022 5:10:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 270 | 60 | | mg/Kg | 20 | 11/3/2022 2:04:20 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-01 0-1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:00:00 PM
**Lab ID:** 2210E19-025 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/3/2022 1:57:52 AM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/3/2022 1:57:52 AM |
| Surr: DNOP | 95.4 | 21-129 | | %Rec | 1 | 11/3/2022 1:57:52 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 5:29:00 PM |
| Surr: BFB | 97.4 | 37.7-212 | | %Rec | 1 | 11/1/2022 5:29:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 5:29:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 5:29:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 5:29:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 5:29:00 PM |
| Surr: 4-Bromofluorobenzene | 125 | 70-130 | | %Rec | 1 | 11/1/2022 5:29:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 130 | 61 | | mg/Kg | 20 | 11/3/2022 2:16:44 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-02 0-1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:05:00 PM
**Lab ID:** 2210E19-026 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/3/2022 2:08:41 AM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 11/3/2022 2:08:41 AM |
| Surr: DNOP | 95.0 | 21-129 | | %Rec | 1 | 11/3/2022 2:08:41 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 5:49:00 PM |
| Surr: BFB | 98.1 | 37.7-212 | | %Rec | 1 | 11/1/2022 5:49:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 11/1/2022 5:49:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 5:49:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 5:49:00 PM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 11/1/2022 5:49:00 PM |
| Surr: 4-Bromofluorobenzene | 127 | 70-130 | | %Rec | 1 | 11/1/2022 5:49:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 2:29:09 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-03 0-1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:10:00 PM
**Lab ID:** 2210E19-027 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/3/2022 2:19:29 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/3/2022 2:19:29 AM |
| Surr: DNOP | 98.1 | 21-129 | | %Rec | 1 | 11/3/2022 2:19:29 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 6:09:00 PM |
| Surr: BFB | 101 | 37.7-212 | | %Rec | 1 | 11/1/2022 6:09:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 11/1/2022 6:09:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 6:09:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 6:09:00 PM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 11/1/2022 6:09:00 PM |
| Surr: 4-Bromofluorobenzene | 128 | 70-130 | | %Rec | 1 | 11/1/2022 6:09:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 75 | 60 | | mg/Kg | 20 | 11/3/2022 2:41:34 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-04 0-3'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:15:00 PM
**Lab ID:** 2210E19-028 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/3/2022 2:30:16 AM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 11/3/2022 2:30:16 AM |
| Surr: DNOP | 94.1 | 21-129 | | %Rec | 1 | 11/3/2022 2:30:16 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 6:28:00 PM |
| Surr: BFB | 97.6 | 37.7-212 | | %Rec | 1 | 11/1/2022 6:28:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 6:28:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 6:28:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 6:28:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 6:28:00 PM |
| Surr: 4-Bromofluorobenzene | 129 | 70-130 | | %Rec | 1 | 11/1/2022 6:28:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 77 | 60 | | mg/Kg | 20 | 11/3/2022 2:53:58 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-05 0-2.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:20:00 PM
**Lab ID:** 2210E19-029 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/3/2022 2:41:01 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/3/2022 2:41:01 AM |
| Surr: DNOP | 101 | 21-129 | | %Rec | 1 | 11/3/2022 2:41:01 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 6:48:00 PM |
| Surr: BFB | 104 | 37.7-212 | | %Rec | 1 | 11/1/2022 6:48:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 6:48:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 6:48:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 6:48:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 6:48:00 PM |
| Surr: 4-Bromofluorobenzene | 129 | 70-130 | | %Rec | 1 | 11/1/2022 6:48:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **NAI** |
| Chloride | 78 | 59 | | mg/Kg | 20 | 11/3/2022 3:06:23 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-06 0-2.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:25:00 PM
**Lab ID:** 2210E19-030 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/3/2022 2:51:45 AM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 11/3/2022 2:51:45 AM |
| Surr: DNOP | 87.5 | 21-129 | | %Rec | 1 | 11/3/2022 2:51:45 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 11/1/2022 7:08:00 PM |
| Surr: BFB | 97.8 | 37.7-212 | | %Rec | 1 | 11/1/2022 7:08:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/1/2022 7:08:00 PM |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 11/1/2022 7:08:00 PM |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 11/1/2022 7:08:00 PM |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 11/1/2022 7:08:00 PM |
| Surr: 4-Bromofluorobenzene | 126 | 70-130 | | %Rec | 1 | 11/1/2022 7:08:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 170 | 60 | | mg/Kg | 20 | 11/3/2022 11:29:08 AM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-07 0-2'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:30:00 PM
**Lab ID:** 2210E19-031 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/3/2022 3:02:28 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/3/2022 3:02:28 AM |
| Surr: DNOP | 91.7 | 21-129 | | %Rec | 1 | 11/3/2022 3:02:28 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 7:27:00 PM |
| Surr: BFB | 93.7 | 37.7-212 | | %Rec | 1 | 11/1/2022 7:27:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 7:27:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 7:27:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 7:27:00 PM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/1/2022 7:27:00 PM |
| Surr: 4-Bromofluorobenzene | 126 | 70-130 | | %Rec | 1 | 11/1/2022 7:27:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 71 | 60 | | mg/Kg | 20 | 11/3/2022 12:06:10 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-08 0-1'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:35:00 PM
**Lab ID:** 2210E19-032 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **DGH** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/3/2022 3:13:10 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/3/2022 3:13:10 AM |
| Surr: DNOP | 94.9 | 21-129 | | %Rec | 1 | 11/3/2022 3:13:10 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 7:47:00 PM |
| Surr: BFB | 95.7 | 37.7-212 | | %Rec | 1 | 11/1/2022 7:47:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 7:47:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 7:47:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 7:47:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 7:47:00 PM |
| Surr: 4-Bromofluorobenzene | 124 | 70-130 | | %Rec | 1 | 11/1/2022 7:47:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 71 | 60 | | mg/Kg | 20 | 11/3/2022 1:07:54 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-09 0-1'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:40:00 PM
**Lab ID:** 2210E19-033 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 11:56:46 AM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/2/2022 11:56:46 AM |
| Surr: DNOP | 83.0 | 21-129 | | %Rec | 1 | 11/2/2022 11:56:46 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/1/2022 9:44:00 PM |
| Surr: BFB | 101 | 37.7-212 | | %Rec | 1 | 11/1/2022 9:44:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 9:44:00 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 9:44:00 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/1/2022 9:44:00 PM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 11/1/2022 9:44:00 PM |
| Surr: 4-Bromofluorobenzene | 128 | 70-130 | | %Rec | 1 | 11/1/2022 9:44:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 110 | 61 | | mg/Kg | 20 | 11/3/2022 1:20:14 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-10 0-1'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:45:00 PM
**Lab ID:** 2210E19-034 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/2/2022 1:07:51 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/2/2022 1:07:51 PM |
| Surr: DNOP | 86.5 | 21-129 | | %Rec | 1 | 11/2/2022 1:07:51 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 10:44:00 PM |
| Surr: BFB | 98.8 | 37.7-212 | | %Rec | 1 | 11/1/2022 10:44:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/1/2022 10:44:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 10:44:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 10:44:00 PM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/1/2022 10:44:00 PM |
| Surr: 4-Bromofluorobenzene | 129 | 70-130 | | %Rec | 1 | 11/1/2022 10:44:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 82 | 60 | | mg/Kg | 20 | 11/3/2022 1:32:35 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-11 0-2'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:50:00 PM
**Lab ID:** 2210E19-035 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/2/2022 1:31:30 PM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 11/2/2022 1:31:30 PM |
| Surr: DNOP | 78.1 | 21-129 | | %Rec | 1 | 11/2/2022 1:31:30 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/1/2022 11:42:00 PM |
| Surr: BFB | 99.2 | 37.7-212 | | %Rec | 1 | 11/1/2022 11:42:00 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/1/2022 11:42:00 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 11:42:00 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/1/2022 11:42:00 PM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 11/1/2022 11:42:00 PM |
| Surr: 4-Bromofluorobenzene | 126 | 70-130 | | %Rec | 1 | 11/1/2022 11:42:00 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 180 | 60 | | mg/Kg | 20 | 11/3/2022 1:44:55 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-12 0-2.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 1:55:00 PM
**Lab ID:** 2210E19-036 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 1:55:06 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/2/2022 1:55:06 PM |
| Surr: DNOP | 83.2 | 21-129 | | %Rec | 1 | 11/2/2022 1:55:06 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/2/2022 12:02:00 AM |
| Surr: BFB | 95.5 | 37.7-212 | | %Rec | 1 | 11/2/2022 12:02:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/2/2022 12:02:00 AM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/2/2022 12:02:00 AM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/2/2022 12:02:00 AM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 11/2/2022 12:02:00 AM |
| Surr: 4-Bromofluorobenzene | 125 | 70-130 | | %Rec | 1 | 11/2/2022 12:02:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 72 | 60 | | mg/Kg | 20 | 11/3/2022 1:57:16 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-13 0-3'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 2:00:00 PM
**Lab ID:** 2210E19-037 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 2:18:47 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 11/2/2022 2:18:47 PM |
| Surr: DNOP | 86.7 | 21-129 | | %Rec | 1 | 11/2/2022 2:18:47 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/2/2022 12:22:00 AM |
| Surr: BFB | 98.1 | 37.7-212 | | %Rec | 1 | 11/2/2022 12:22:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/2/2022 12:22:00 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/2/2022 12:22:00 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/2/2022 12:22:00 AM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 11/2/2022 12:22:00 AM |
| Surr: 4-Bromofluorobenzene | 128 | 70-130 | | %Rec | 1 | 11/2/2022 12:22:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 75 | 61 | | mg/Kg | 20 | 11/3/2022 2:09:36 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-14 0-1.5'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 2:05:00 PM
**Lab ID:** 2210E19-038 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/2/2022 2:42:25 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 11/2/2022 2:42:25 PM |
| Surr: DNOP | 86.7 | 21-129 | | %Rec | 1 | 11/2/2022 2:42:25 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/2/2022 12:41:00 AM |
| Surr: BFB | 96.9 | 37.7-212 | | %Rec | 1 | 11/2/2022 12:41:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/2/2022 12:41:00 AM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/2/2022 12:41:00 AM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/2/2022 12:41:00 AM |
| Xylenes, Total | ND | 0.096 | | mg/Kg | 1 | 11/2/2022 12:41:00 AM |
| Surr: 4-Bromofluorobenzene | 129 | 70-130 | | %Rec | 1 | 11/2/2022 12:41:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 140 | 60 | | mg/Kg | 20 | 11/3/2022 2:21:58 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-15 1.5-3'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 2:10:00 PM
**Lab ID:** 2210E19-039 **Matrix:** SOIL **Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 3:06:05 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/2/2022 3:06:05 PM |
| Surr: DNOP | 85.4 | 21-129 | | %Rec | 1 | 11/2/2022 3:06:05 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 11/2/2022 1:01:00 AM |
| Surr: BFB | 103 | 37.7-212 | | %Rec | 1 | 11/2/2022 1:01:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 11/2/2022 1:01:00 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 11/2/2022 1:01:00 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 11/2/2022 1:01:00 AM |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 11/2/2022 1:01:00 AM |
| Surr: 4-Bromofluorobenzene | 130 | 70-130 | S | %Rec | 1 | 11/2/2022 1:01:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | ND | 60 | | mg/Kg | 20 | 11/3/2022 2:34:19 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Client Sample ID:** WS22-16 2.5-3'
**Project:** Mesa Verde 6 Federal 5
**Collection Date:** 10/26/2022 2:15:00 PM
**Lab ID:** 2210E19-040 **Matrix:** SOIL
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 3:53:36 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 11/2/2022 3:53:36 PM |
| Surr: DNOP | 86.3 | 21-129 | | %Rec | 1 | 11/2/2022 3:53:36 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 11/2/2022 1:21:00 AM |
| Surr: BFB | 102 | 37.7-212 | | %Rec | 1 | 11/2/2022 1:21:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/2/2022 1:21:00 AM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 11/2/2022 1:21:00 AM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 11/2/2022 1:21:00 AM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/2/2022 1:21:00 AM |
| Surr: 4-Bromofluorobenzene | 128 | 70-130 | | %Rec | 1 | 11/2/2022 1:21:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 100 | 60 | | mg/Kg | 20 | 11/3/2022 2:46:40 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Project:** Mesa Verde 6 Federal 5
**Lab ID:** 2210E19-041 **Matrix:** SOIL

**Client Sample ID:** WS22-17 2-2.5'
**Collection Date:** 10/26/2022 2:20:00 PM
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 15 | | mg/Kg | 1 | 11/2/2022 4:17:20 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 11/2/2022 4:17:20 PM |
| Surr: DNOP | 89.3 | 21-129 | | %Rec | 1 | 11/2/2022 4:17:20 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/2/2022 1:41:00 AM |
| Surr: BFB | 102 | 37.7-212 | | %Rec | 1 | 11/2/2022 1:41:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/2/2022 1:41:00 AM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/2/2022 1:41:00 AM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/2/2022 1:41:00 AM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 11/2/2022 1:41:00 AM |
| Surr: 4-Bromofluorobenzene | 129 | 70-130 | | %Rec | 1 | 11/2/2022 1:41:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 170 | 60 | | mg/Kg | 20 | 11/3/2022 2:59:01 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2210E19**
Date Reported: **11/8/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy
**Project:** Mesa Verde 6 Federal 5
**Lab ID:** 2210E19-042 **Matrix:** SOIL

**Client Sample ID:** WS22-18 1-2.5'
**Collection Date:** 10/26/2022 2:25:00 PM
**Received Date:** 10/28/2022 7:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 14 | | mg/Kg | 1 | 11/2/2022 4:41:00 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 11/2/2022 4:41:00 PM |
| Surr: DNOP | 84.3 | 21-129 | | %Rec | 1 | 11/2/2022 4:41:00 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **CCM** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 11/2/2022 2:00:00 AM |
| Surr: BFB | 101 | 37.7-212 | | %Rec | 1 | 11/2/2022 2:00:00 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **CCM** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 11/2/2022 2:00:00 AM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 11/2/2022 2:00:00 AM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 11/2/2022 2:00:00 AM |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 11/2/2022 2:00:00 AM |
| Surr: 4-Bromofluorobenzene | 128 | 70-130 | | %Rec | 1 | 11/2/2022 2:00:00 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** |
| Chloride | 74 | 60 | | mg/Kg | 20 | 11/3/2022 3:36:01 PM |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **MB-71253** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71253** | RunNo: **92306** |
| Prep Date: **11/2/2022** | Analysis Date: **11/2/2022** | SeqNo: **3316177** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | ND | 1.5 | | | | | | | | |

| Sample ID: **LCS-71253** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71253** | RunNo: **92306** |
| Prep Date: **11/2/2022** | Analysis Date: **11/2/2022** | SeqNo: **3316178** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.6 | 90 | 110 | | | |

| Sample ID: **MB-71274** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71274** | RunNo: **92304** |
| Prep Date: **11/3/2022** | Analysis Date: **11/3/2022** | SeqNo: **3316872** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | ND | 1.5 | | | | | | | | |

| Sample ID: **LCS-71274** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71274** | RunNo: **92304** |
| Prep Date: **11/3/2022** | Analysis Date: **11/3/2022** | SeqNo: **3316873** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 15 | 1.5 | 15.00 | 0 | 97.5 | 90 | 110 | | | |

| Sample ID: **MB-71262** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71262** | RunNo: **92326** |
| Prep Date: **11/3/2022** | Analysis Date: **11/3/2022** | SeqNo: **3317584** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | ND | 1.5 | | | | | | | | |

| Sample ID: **LCS-71262** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71262** | RunNo: **92326** |
| Prep Date: **11/3/2022** | Analysis Date: **11/3/2022** | SeqNo: **3317585** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 96.3 | 90 | 110 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **2210E19-002AMS** | SampType: **MS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **BS22-02 1.5'** | Batch ID: **71183** | RunNo: **92232** |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313737** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50 | 14 | 46.43 | 0 | 107 | 36.1 | 154 | | | |
| Surr: DNOP | 5.6 | | 4.643 | | 120 | 21 | 129 | | | |

| Sample ID: **2210E19-002AMSD** | SampType: **MSD** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **BS22-02 1.5'** | Batch ID: **71183** | RunNo: **92232** |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313738** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 49 | 14 | 48.22 | 0 | 101 | 36.1 | 154 | 1.91 | 33.9 | |
| Surr: DNOP | 5.3 | | 4.822 | | 111 | 21 | 129 | 0 | 0 | |

| Sample ID: **LCS-71183** | SampType: **LCS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71183** | RunNo: **92232** |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313758** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 49 | 15 | 50.00 | 0 | 97.3 | 64.4 | 127 | | | |
| Surr: DNOP | 5.5 | | 5.000 | | 111 | 21 | 129 | | | |

| Sample ID: **MB-71183** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71183** | RunNo: **92232** |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313759** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 10 | | 10.00 | | 100 | 21 | 129 | | | |

| Sample ID: **LCS-71197** | SampType: **LCS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71197** | RunNo: **92257** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3314009** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 38 | 15 | 50.00 | 0 | 76.6 | 64.4 | 127 | | | |
| Surr: DNOP | 3.8 | | 5.000 | | 75.8 | 21 | 129 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **MB-71197** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71197** | RunNo: **92257** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3314010** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 8.3 | | 10.00 | | 83.0 | 21 | 129 | | | |

| Sample ID: **LCS-71182** | SampType: **LCS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71182** | RunNo: **92253** |
| Prep Date: **10/31/2022** | Analysis Date: **11/2/2022** | SeqNo: **3314305** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 58 | 15 | 50.00 | 0 | 116 | 64.4 | 127 | | | |
| Surr: DNOP | 6.4 | | 5.000 | | 128 | 21 | 129 | | | |

| Sample ID: **MB-71182** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71182** | RunNo: **92253** |
| Prep Date: **10/31/2022** | Analysis Date: **11/2/2022** | SeqNo: **3314306** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 10 | | 10.00 | | 102 | 21 | 129 | | | |

| Sample ID: **MB-71206** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71206** | RunNo: **92293** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3315550** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 9.9 | | 10.00 | | 99.2 | 21 | 129 | | | |

| Sample ID: **MB-71206** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71206** | RunNo: **92257** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3315611** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 9.3 | | 10.00 | | 93.4 | 21 | 129 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **MB-71206** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71206** | RunNo: **92296** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3315616** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 8.1 | | 10.00 | | 80.7 | 21 | 129 | | | |

| Sample ID: **MB-71203** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71203** | RunNo: **92296** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3315619** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 7.9 | | 10.00 | | 79.0 | 21 | 129 | | | |

| Sample ID: **LCS-71203** | SampType: **LCS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71203** | RunNo: **92296** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3315620** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 44 | 15 | 50.00 | 0 | 88.1 | 64.4 | 127 | | | |
| Surr: DNOP | 3.7 | | 5.000 | | 74.9 | 21 | 129 | | | |

| Sample ID: **2210E19-033AMS** | SampType: **MS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **WS22-09 0-1'** | Batch ID: **71203** | RunNo: **92296** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3315622** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 43 | 14 | 46.55 | 0 | 91.6 | 36.1 | 154 | | | |
| Surr: DNOP | 3.7 | | 4.655 | | 79.4 | 21 | 129 | | | |

| Sample ID: **2210E19-033AMSD** | SampType: **MSD** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **WS22-09 0-1'** | Batch ID: **71203** | RunNo: **92296** |
| Prep Date: **11/1/2022** | Analysis Date: **11/2/2022** | SeqNo: **3315623** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 44 | 15 | 48.40 | 0 | 90.2 | 36.1 | 154 | 2.45 | 33.9 | |
| Surr: DNOP | 3.8 | | 4.840 | | 78.4 | 21 | 129 | 0 | 0 | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **2210E19-024AMS** | SampType: **MS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **BS22-24 1'** | Batch ID: **71206** | RunNo: **92253** |
| Prep Date: **11/1/2022** | Analysis Date: **11/3/2022** | SeqNo: **3315734** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 46 | 15 | 48.88 | 0 | 93.2 | 36.1 | 154 | | | |
| Surr: DNOP | 5.2 | | 4.888 | | 106 | 21 | 129 | | | |

| Sample ID: **2210E19-024AMSD** | SampType: **MSD** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **BS22-24 1'** | Batch ID: **71206** | RunNo: **92253** |
| Prep Date: **11/1/2022** | Analysis Date: **11/3/2022** | SeqNo: **3315735** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 47 | 14 | 48.31 | 0 | 97.1 | 36.1 | 154 | 2.91 | 33.9 | |
| Surr: DNOP | 5.0 | | 4.831 | | 104 | 21 | 129 | 0 | 0 | |

| Sample ID: **LCS-71206** | SampType: **LCS** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71206** | RunNo: **92253** |
| Prep Date: **11/1/2022** | Analysis Date: **11/3/2022** | SeqNo: **3315786** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 45 | 15 | 50.00 | 0 | 90.7 | 64.4 | 127 | | | |
| Surr: DNOP | 5.2 | | 5.000 | | 105 | 21 | 129 | | | |

| Sample ID: **MB-71206** | SampType: **MBLK** | TestCode: **EPA Method 8015M/D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71206** | RunNo: **92253** |
| Prep Date: **11/1/2022** | Analysis Date: **11/3/2022** | SeqNo: **3315789** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | ND | 15 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 9.4 | | 10.00 | | 93.6 | 21 | 129 | | | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **mb-71164** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **71164** | RunNo: **92213** | | | | | | | |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3311358** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 900 | | 1000 | | 89.8 | 37.7 | 212 | | | |

| Sample ID: **lcs-71164** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **71164** | RunNo: **92213** | | | | | | | |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3311359** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 26 | 5.0 | 25.00 | 0 | 102 | 72.3 | 137 | | | |
| Surr: BFB | 2000 | | 1000 | | 197 | 37.7 | 212 | | | |

| Sample ID: **mb-71192** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **71192** | RunNo: **92243** | | | | | | | |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313120** | Units: **%Rec** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: BFB | 910 | | 1000 | | 91.0 | 37.7 | 212 | | | |

| Sample ID: **lcs-71192** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **71192** | RunNo: **92243** | | | | | | | |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313121** | Units: **%Rec** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: BFB | 1900 | | 1000 | | 189 | 37.7 | 212 | | | |

| Sample ID: **lcs-71167** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **71167** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313873** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 26 | 5.0 | 25.00 | 0 | 104 | 72.3 | 137 | | | |
| Surr: BFB | 2100 | | 1000 | | 213 | 37.7 | 212 | | | S |

| Sample ID: **mb-71167** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **71167** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313874** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 990 | | 1000 | | 98.7 | 37.7 | 212 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **2210E19-013ams** | SampType: **MS** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **BS22-13 3'** | Batch ID: **71167** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313876** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24 | 4.8 | 23.92 | 0 | 101 | 70 | 130 | | | |
| Surr: BFB | 2100 | | 956.9 | | 222 | 37.7 | 212 | | | S |

| Sample ID: **2210E19-013amsd** | SampType: **MSD** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **BS22-13 3'** | Batch ID: **71167** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313877** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24 | 4.8 | 23.76 | 0 | 102 | 70 | 130 | 0.358 | 20 | |
| Surr: BFB | 2100 | | 950.6 | | 221 | 37.7 | 212 | 0 | 0 | S |

| Sample ID: **lcs-71188** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **71188** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313900** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 98.1 | 72.3 | 137 | | | |
| Surr: BFB | 2200 | | 1000 | | 219 | 37.7 | 212 | | | S |

| Sample ID: **mb-71188** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **71188** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313901** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1000 | | 1000 | | 104 | 37.7 | 212 | | | |

| Sample ID: **2210E19-033ams** | SampType: **MS** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **WS22-09 0-1'** | Batch ID: **71188** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313903** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 25 | 4.8 | 23.97 | 0 | 103 | 70 | 130 | | | |
| Surr: BFB | 2100 | | 958.8 | | 224 | 37.7 | 212 | | | S |

| Sample ID: **2210E19-033amsd** | SampType: **MSD** | TestCode: **EPA Method 8015D: Gasoline Range** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **WS22-09 0-1'** | Batch ID: **71188** | RunNo: **92256** | | | | | | | |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313904** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **2210E19-033amsd** | SampType: **MSD** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **WS22-09 0-1'** | Batch ID: **71188** | RunNo: **92256** |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313904** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 24 | 4.8 | 24.02 | 0 | 99.5 | 70 | 130 | 3.67 | 20 | |
| Surr: BFB | 2200 | | 960.6 | | 231 | 37.7 | 212 | 0 | 0 | S |

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **mb-71164** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71164** | RunNo: **92213** |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3311403** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 0.96 | | 1.000 | | 96.0 | 70 | 130 | | | |

| Sample ID: **LCS-71164** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71164** | RunNo: **92213** |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3311404** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.96 | 0.025 | 1.000 | 0 | 95.9 | 80 | 120 | | | |
| Toluene | 0.99 | 0.050 | 1.000 | 0 | 98.5 | 80 | 120 | | | |
| Ethylbenzene | 0.98 | 0.050 | 1.000 | 0 | 98.2 | 80 | 120 | | | |
| Xylenes, Total | 3.0 | 0.10 | 3.000 | 0 | 99.4 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.97 | | 1.000 | | 96.8 | 70 | 130 | | | |

| Sample ID: **lcs-71167** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71167** | RunNo: **92256** |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313947** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.3 | 0.025 | 1.000 | 0 | 129 | 80 | 120 | | | S |
| Toluene | 1.3 | 0.050 | 1.000 | 0 | 128 | 80 | 120 | | | S |
| Ethylbenzene | 1.3 | 0.050 | 1.000 | 0 | 127 | 80 | 120 | | | S |
| Xylenes, Total | 3.8 | 0.10 | 3.000 | 0 | 126 | 80 | 120 | | | S |
| Surr: 4-Bromofluorobenzene | 1.2 | | 1.000 | | 124 | 70 | 130 | | | |

| Sample ID: **mb-71167** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71167** | RunNo: **92256** |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313948** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.2 | | 1.000 | | 125 | 70 | 130 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

| Sample ID: **2210E19-014ams** | SampType: **MS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **BS22-14 3'** | Batch ID: **71167** | RunNo: **92256** |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313952** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.2 | 0.023 | 0.9390 | 0 | 131 | 68.8 | 120 | | | S |
| Toluene | 1.3 | 0.047 | 0.9390 | 0 | 133 | 73.6 | 124 | | | S |
| Ethylbenzene | 1.3 | 0.047 | 0.9390 | 0 | 135 | 72.7 | 129 | | | S |
| Xylenes, Total | 3.8 | 0.094 | 2.817 | 0 | 135 | 75.7 | 126 | | | S |
| Surr: 4-Bromofluorobenzene | 1.2 | | 0.9390 | | 128 | 70 | 130 | | | |

| Sample ID: **2210E19-014amsd** | SampType: **MSD** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **BS22-14 3'** | Batch ID: **71167** | RunNo: **92256** |
| Prep Date: **10/28/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313953** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.2 | 0.023 | 0.9390 | 0 | 130 | 68.8 | 120 | 0.315 | 20 | S |
| Toluene | 1.2 | 0.047 | 0.9390 | 0 | 130 | 73.6 | 124 | 2.36 | 20 | S |
| Ethylbenzene | 1.2 | 0.047 | 0.9390 | 0 | 130 | 72.7 | 129 | 3.94 | 20 | S |
| Xylenes, Total | 3.6 | 0.094 | 2.817 | 0 | 129 | 75.7 | 126 | 4.34 | 20 | S |
| Surr: 4-Bromofluorobenzene | 1.2 | | 0.9390 | | 127 | 70 | 130 | 0 | 0 | |

| Sample ID: **lcs-71188** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **71188** | RunNo: **92256** |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313973** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.3 | 0.025 | 1.000 | 0 | 128 | 80 | 120 | | | S |
| Toluene | 1.3 | 0.050 | 1.000 | 0 | 128 | 80 | 120 | | | S |
| Ethylbenzene | 1.3 | 0.050 | 1.000 | 0 | 128 | 80 | 120 | | | S |
| Xylenes, Total | 3.8 | 0.10 | 3.000 | 0 | 126 | 80 | 120 | | | S |
| Surr: 4-Bromofluorobenzene | 1.3 | | 1.000 | | 128 | 70 | 130 | | | |

| Sample ID: **mb-71188** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **71188** | RunNo: **92256** |
| Prep Date: **10/31/2022** | Analysis Date: **11/1/2022** | SeqNo: **3313974** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.3 | | 1.000 | | 126 | 70 | 130 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2210E19**

***08-Nov-22***

**Client:** Devon Energy

**Project:** Mesa Verde 6 Federal 5

Sample ID: **2210E19-034ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **WS22-10 0-1'** Batch ID: **71188** RunNo: **92256**

Prep Date: **10/31/2022** Analysis Date: **11/1/2022** SeqNo: **3313978** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.3 | 0.024 | 0.9443 | 0 | 135 | 68.8 | 120 | | | S |
| Toluene | 1.3 | 0.047 | 0.9443 | 0 | 136 | 73.6 | 124 | | | S |
| Ethylbenzene | 1.3 | 0.047 | 0.9443 | 0 | 136 | 72.7 | 129 | | | S |
| Xylenes, Total | 3.9 | 0.094 | 2.833 | 0 | 136 | 75.7 | 126 | | | S |
| Surr: 4-Bromofluorobenzene | 1.2 | | 0.9443 | | 130 | 70 | 130 | | | S |

Sample ID: **2210E19-034amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **WS22-10 0-1'** Batch ID: **71188** RunNo: **92256**

Prep Date: **10/31/2022** Analysis Date: **11/1/2022** SeqNo: **3313979** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 1.3 | 0.024 | 0.9434 | 0 | 136 | 68.8 | 120 | 0.897 | 20 | S |
| Toluene | 1.3 | 0.047 | 0.9434 | 0 | 138 | 73.6 | 124 | 0.824 | 20 | S |
| Ethylbenzene | 1.3 | 0.047 | 0.9434 | 0 | 138 | 72.7 | 129 | 1.43 | 20 | S |
| Xylenes, Total | 3.9 | 0.094 | 2.830 | 0 | 138 | 75.7 | 126 | 1.47 | 20 | S |
| Surr: 4-Bromofluorobenzene | 1.2 | | 0.9434 | | 130 | 70 | 130 | 0 | 0 | S |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

HALL ENVIRONMENTAL ANALYSIS LABORATORY

*Hall Environmental Analysis Laboratory*
*4901 Hawkins NE*
*Albuquerque, NM 87109*
*TEL: 505-345-3975 FAX: 505-345-4107*
*Website: www.hallenvironmental.com*

# Sample Log-In Check List

Client Name: Devon Energy | Work Order Number: 2210E19 | RcptNo: 1

Received By: Juan Rojas 10/28/2022 7:15:00 AM

Completed By: Tracy Casarrubias 10/28/2022 7:45:25 AM

Reviewed By: jn 10/28/22

## Chain of Custody

| | | | |
|---|---|---|---|
| 1. Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. How was the sample delivered? | Courier | | |

## Log In

| | | | |
|---|---|---|---|
| 3. Was an attempt made to cool the samples? | Yes ☑ | No ☐ | NA ☐ |
| 4. Were all samples received at a temperature of >0° C to 6.0°C | Yes ☑ | No ☐ | NA ☐ |
| 5. Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 6. Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes ☑ | No ☐ | |
| 8. Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 9. Received at least 1 vial with headspace <1/4" for AQ VOA? | Yes ☐ | No ☐ | NA ☑ |
| 10. Were any sample containers received broken? | Yes ☐ | No ☑ | |
| 11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) | Yes ☑ | No ☐ | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 13. Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 14. Were all holding times able to be met? (If no, notify customer for authorization.) | Yes ☑ | No ☐ | |

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: KPL 10.28.22

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | 0.8 | Good | Yes | | | |

# Chain-of-Custody Record

Client: Devon

D. Woodall / W. Mathews

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day

~~☐~~ Standard ☑ Rush

Project Name: Mesa Verde 6 Federal 5

Project #: 21E-02816

Project Manager: Kent Stallings

Sampler: MJP

On Ice: ~~☐~~ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.9-0.1=0.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 2210E19 | BTEX / MTBE / TMB's (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/26 | 8:30 | Soil | BS22-01 1.5 | 4 oz | ice | 001 | ✓ | ✓ | | | | | ✓ | | | |
| | 8:35 | | BS22-02 1.5 | | | 002 | | | | | | | | | | |
| | 8:40 | | BS22-03 1.5 | | | 003 | | | | | | | | | | |
| | 8:45 | | BS22-04 1.5 | | | 004 | | | | | | | | | | |
| | 8:50 | | BS22-05 1.5 | | | 005 | | | | | | | | | | |
| | 8:55 | | BS22-06 1.5 | | | 006 | | | | | | | | | | |
| | 9:00 | | BS22-07 1.5 | | | 007 | | | | | | | | | | |
| | 9:05 | | BS22-08 1.5 | | | 008 | | | | | | | | | | |
| | 9:10 | | BS22-09 1.5 | | | 009 | | | | | | | | | | |
| | 9:15 | | BS22-10 1.5 | | | 010 | | | | | | | | | | |
| | 9:20 | | BS22-11 1.5 | | | 011 | | | | | | | | | | |
| | 9:25 | | BS22-12 1.5 | | | 012 | | | | | | | | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 10/27/22 | 1100 | | | | 10/27/22 | 1100 |
| 10/27/22 | 1900 | | | Courier | 10/28/22 | 7:15 |

Remarks: CC: M. Puppin

Harvard/Devon No W/O#

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

# Chain-of-Custody Record

Client: Devon

D. Woodall/W. Mathews

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day

☐ Standard ☒ Rush

Project Name: Mesa Verde 6 Federal 5

Project #: 21E-02816

Project Manager: Kent Stalling

Sampler: MJP

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp(Including CF): 0.9+0.1=0.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 2210E19 | BTEX / MTBE / TMB's (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/26 | 9:30 | soil | BS22-13 3' | 4oz | ice | 013 | ✓ | ✓ | | | | | ✓ | | | |
| | 9:35 | | BS22-14 3' | | | 014 | | | | | | | | | | |
| | 9:40 | | BS22-15 3' | | | 015 | | | | | | | | | | |
| | 9:45 | | BS22-16 2.5' | | | 016 | | | | | | | | | | |
| | 9:50 | | BS22-17 2.5' | | | 017 | | | | | | | | | | |
| | 9:55 | | BS22-18 2.5' | | | 018 | | | | | | | | | | |
| | 10:00 | | BS22-19 2.5' | | | 019 | | | | | | | | | | |
| | 10:05 | | BS22-20 2' | | | 020 | | | | | | | | | | |
| | 10:10 | | BS22-21 2' | | | 021 | | | | | | | | | | |
| | 10:15 | | BS22-22 1' | | | 022 | | | | | | | | | | |
| | 10:20 | | BS22-23 1' | | | 023 | | | | | | | | | | |
| | 10:25 | | BS22-24 1' | | | 024 | | | | | | | | | | |

| Date | Time | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 10/27/22 | 1100 | | | | 10/27/22 | 1100 |
| 10/27/22 | 1900 | | | | 10/28/22 | 7:15 |

Remarks: CC: M. Peppin

Devon/Harvard No W/O #

# Chain-of-Custody Record

Client: Devon

D. Woodall / W. Mathews

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day

☑ Standard ☐ Rush

Project Name: Mesa Verde 6 Federal 5

Project #: 21E-02816

Project Manager: Kent Stallings

Sampler: MJP

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.9-0.1 = 0.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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4901 Hawkins NE - Albuquerque, NM 87109

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Analysis Request

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 2210E19 | BTEX MTBE / TMB's (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/26 | 1:00 | Soil | WS22-01 0-1.5 | 4oz | ice | 025 | ✓ | ✓ | | | | | ✓ | | | |
| | 1:05 | | WS22-02 0-1.5 | | | 026 | | | | | | | | | | |
| | 1:10 | | WS22-03 0-1.5 | | | 027 | | | | | | | | | | |
| | 1:15 | | WS22-04 0-3 | | | 028 | | | | | | | | | | |
| | 1:20 | | WS22-05 0-2.5 | | | 029 | | | | | | | | | | |
| | 1:25 | | WS22-06 0-25 | | | 030 | | | | | | | | | | |
| | 1:30 | | WS22-07 0-2 | | | 031 | | | | | | | | | | |
| | 1:35 | | WS22-08 0-1 | | | 032 | | | | | | | | | | |
| | 1:40 | | WS22-09 0-1 | | | 033 | | | | | | | | | | |
| | 1:45 | | WS22-10 0-1 | | | 034 | | | | | | | | | | |
| | 1:50 | | WS22-11 0-2 | | | 035 | | | | | | | | | | |
| | 1:55 | | WS22-12 0-2.5 | | | 036 | | | | | | | | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 10/27/22 | 1100 | | | | 10/27/22 | 1100 |
| 10/27/22 | 1900 | | courier | | 10/28/22 | 7:15 |

Remarks: CC: M. Peppin

Devon/Harvard No W/O#

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

# Chain-of-Custody Record

Client: Devon

D. Woodall / W. Mathews

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day

☐ Standard ☒ Rush

Project Name: Mesa Verde 6 Federal 5

Project #: 21E-02816

Project Manager: Kent Stalling

Sampler: MJP

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Jan 10/28/22

Cooler Temp (including CF): 0.7-0.1 = 0.6 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 22102819 | BTEX MTBE / TMB's (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/26 | 2:00 | soil | WS22-13 0-3 | 4oz | ice | 037 | ✓ | ✓ | | | | | ✓ | | | |
| | 2:05 | | WS22-14 0-1.5 | | | 038 | | | | | | | | | | |
| | 2:10 | | WS22-15 1.5-3 | | | 039 | | | | | | | | | | |
| | 2:15 | | WS22-16 2.5-3 | | | 040 | | | | | | | | | | |
| | 2:20 | | WS22-17 2-2.5 | | | 041 | | | | | | | | | | |
| | 2:25 | | WS22-18 1-2.5 | | | 042 | | | | | | | | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 10/27/22 | 1100 | | | | 10/27/22 | 1100 |
| 10/27/22 | 1900 | | | Courier | 10/28/22 | 7:15 |

Remarks: CC: M. Peppin

Devon/Harvard No w/o #

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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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

QUESTIONS

Action 445494

## QUESTIONS

| | |
|---|---|
| Operator:<br>HARVARD PETROLEUM COMPANY, LLC<br>P.O. Box 936<br>Roswell, NM 88202 | OGRID:<br>10155 |
| | Action Number:<br>445494 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nGRL0927342490** |
| Incident Name | **NGRL0927342490 MESA VERDE 6 FED 5 @ 30-025-32504** |
| Incident Type | **Oil Release** |
| Incident Status | **Remediation Closure Report Received** |
| Incident Well | **[30-025-32504] MESA VERDE 6 FEDERAL #005** |

| **Location of Release Source** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Site Name | Mesa Verde 6 Fed 5 |
| Date Release Discovered | 08/27/2009 |
| Surface Owner | Federal |

| **Incident Details** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Incident Type | Oil Release |
| Did this release result in a fire or is the result of a fire | No |
| Did this release result in any injuries | No |
| Has this release reached or does it have a reasonable probability of reaching a watercourse | No |
| Has this release endangered or does it have a reasonable probability of endangering public health | No |
| Has this release substantially damaged or will it substantially damage property or the environment | No |
| Is this release of a volume that is or may with reasonable probability be detrimental to fresh water | No |

| **Nature and Volume of Release** | |
|---|---|
| *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.* | |
| Crude Oil Released (bbls) Details | Cause: Corrosion \| Flow Line - Production \| Crude Oil \| Released: 1 BBL \| Recovered: 0 BBL \| Lost: 1 BBL. |
| Produced Water Released (bbls) Details | Cause: Corrosion \| Flow Line - Production \| Produced Water \| Released: 4 BBL \| Recovered: 0 BBL \| Lost: 4 BBL. |
| Is the concentration of chloride in the produced water >10,000 mg/l | Yes |
| Condensate Released (bbls) Details | *Not answered.* |
| Natural Gas Vented (Mcf) Details | *Not answered.* |
| Natural Gas Flared (Mcf) Details | *Not answered.* |
| Other Released Details | *Not answered.* |
| Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts) | *Not answered.* |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Nature and Volume of Release (continued)** | |
|---|---|
| Is this a gas only submission (i.e. only significant Mcf values reported) | **More info needed to determine if this will be treated as a "gas only" report.** |
| Was this a major release as defined by Subsection A of 19.15.29.7 NMAC | **No** |
| Reasons why this would be considered a submission for a notification of a major release | *Unavailable.* |
| *With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.* | |

| **Initial Response** | |
|---|---|
| *The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.* | |
| The source of the release has been stopped | True |
| The impacted area has been secured to protect human health and the environment | True |
| Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices | True |
| All free liquids and recoverable materials have been removed and managed appropriately | True |
| If all the actions described above have not been undertaken, explain why | *Not answered.* |
| *Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.* | |

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.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Roni Kidd<br>Title: Business Manager<br>Email: rkidd@buckhornproduction.com<br>Date: 03/25/2025 |

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## QUESTIONS (continued)

| | |
|---|---|
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| | Action Number:<br>445494 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Site Characterization** | |
|---|---|
| *Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs) | Between 100 and 500 (ft.) |
| What method was used to determine the depth to ground water | Direct Measurement |
| Did this release impact groundwater or surface water | No |
| **What is the minimum distance, between the closest lateral extents of the release and the following surface areas:** | |
| A continuously flowing watercourse or any other significant watercourse | Greater than 5 (mi.) |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) | Greater than 5 (mi.) |
| An occupied permanent residence, school, hospital, institution, or church | Between 1 and 5 (mi.) |
| A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes | Between ½ and 1 (mi.) |
| Any other fresh water well or spring | Between ½ and 1 (mi.) |
| Incorporated municipal boundaries or a defined municipal fresh water well field | Greater than 5 (mi.) |
| A wetland | Between ½ and 1 (mi.) |
| A subsurface mine | Greater than 5 (mi.) |
| An (non-karst) unstable area | Greater than 5 (mi.) |
| Categorize the risk of this well / site being in a karst geology | Low |
| A 100-year floodplain | Greater than 5 (mi.) |
| Did the release impact areas not on an exploration, development, production, or storage site | No |

| **Remediation Plan** | |
|---|---|
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| Requesting a remediation plan approval with this submission | Yes |
| *Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.* | |
| Have the lateral and vertical extents of contamination been fully delineated | Yes |
| Was this release entirely contained within a lined containment area | No |
| **Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.) | |
| Chloride (EPA 300.0 or SM4500 Cl B) | 5200 |
| TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M) | 390 |
| GRO+DRO (EPA SW-846 Method 8015M) | 210 |
| BTEX (EPA SW-846 Method 8021B or 8260B) | 0 |
| Benzene (EPA SW-846 Method 8021B or 8260B) | 0 |
| | |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| On what estimated date will the remediation commence | 10/19/2022 |
| On what date will (or did) the final sampling or liner inspection occur | 10/26/2025 |
| On what date will (or was) the remediation complete(d) | 10/26/2022 |
| What is the estimated surface area (in square feet) that will be reclaimed | 4751 |
| What is the estimated volume (in cubic yards) that will be reclaimed | 326 |
| What is the estimated surface area (in square feet) that will be remediated | 4751 |
| What is the estimated volume (in cubic yards) that will be remediated | 326 |
| *These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.* | |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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## QUESTIONS (continued)

| | |
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**QUESTIONS**

| | |
|---|---|
| **Remediation Plan (continued)** | |
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| **This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:** | |
| *(Select all answers below that apply.)* | |
| (Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.) | Yes |
| Which OCD approved facility will be used for **off-site** disposal | R360 ARTESIA LLC LANDFARM [fEEM0112340644] |
| **OR** which OCD approved well (API) will be used for **off-site** disposal | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, out-of-state | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, an NMED facility | *Not answered.* |
| (Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms) | *Not answered.* |
| (In Situ) Soil Vapor Extraction | *Not answered.* |
| (In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.) | *Not answered.* |
| (In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.) | *Not answered.* |
| (In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.) | *Not answered.* |
| Ground Water Abatement pursuant to 19.15.30 NMAC | *Not answered.* |
| OTHER (Non-listed remedial process) | *Not answered.* |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| | |
| 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. | |
| I hereby agree and sign off to the above statement | Name: Roni Kidd<br>Title: Business Manager<br>Email: rkidd@buckhornproduction.com<br>Date: 03/26/2025 |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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## QUESTIONS (continued)

| | |
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**QUESTIONS**

| **Deferral Requests Only**<br>*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.* | |
|---|---|
| Requesting a deferral of the remediation closure due date with the approval of this submission | No |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Sampling Event Information** | |
|---|---|
| Last sampling notification (C-141N) recorded | **445479** |
| Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC | **10/26/2022** |
| What was the (estimated) number of samples that were to be gathered | **42** |
| What was the sampling surface area in square feet | **4751** |

| **Remediation Closure Request** | |
|---|---|
| *Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.* | |
| Requesting a remediation closure approval with this submission | Yes |
| Have the lateral and vertical extents of contamination been fully delineated | **Yes** |
| Was this release entirely contained within a lined containment area | **No** |
| All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion | Yes |
| What was the total surface area (in square feet) remediated | 4751 |
| What was the total volume (cubic yards) remediated | 326 |
| All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene | Yes |
| What was the total surface area (in square feet) reclaimed | 4751 |
| What was the total volume (in cubic yards) reclaimed | 326 |
| Summarize any additional remediation activities not included by answers (above) | Excavation and confirmation sampling. |

*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 (in .pdf format) 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.*

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.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Roni Kidd<br>Title: Business Manager<br>Email: rkidd@buckhornproduction.com<br>Date: 03/25/2025 |

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## QUESTIONS (continued)

| | |
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**QUESTIONS**

| **Reclamation Report** | |
|---|---|
| *Only answer the questions in this group if all reclamation steps have been completed.* | |
| Requesting a reclamation approval with this submission | No |

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## CONDITIONS

| | |
|---|---|
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**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| scwells | Remediation closure approved. | 4/9/2025 |