Incident Number: nAB1703948537, 2RP-4105

Amended Incident Characterization, Remediation, Reclamation, and Revegetation Report

Todd 36 State #001 ROW

Section 26, Township 23 South, Range 31 East

API: 30-015-20341

County: Eddy

Vertex File Number: 25A-01349

Prepared for:

Devon Energy Production Company, LP

Prepared by:

Vertex Resource Services Inc.

Date:

April 2026

Release Assessment and Closure
Todd 36 State #001 ROW
Section 26, Township 23 South, Range 31 East
API: 30-015-20341
County: Eddy

Prepared for:
Devon Energy Production Company, LP
6488 Seven Rivers Highway
Artesia, New Mexico 88210

New Mexico Oil Conservation Division
508 West Texas Avenue
Artesia, New Mexico 88210

Prepared by:
Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad, New Mexico 88220

Katrina Taylor
Katrina Taylor, B.Sc.
ENVIRONMENTAL TECHNICIAN, REPORTING

April 1, 2026
Date

Sally Carttar
Sally Carttar, B.A.
PROJECT MANAGER, REPORT REVIEW

April 21, 2026
Date

Table of Contents

In-text Tables

List of Figures

List of Tables

List of Appendices

1.0 Introduction

Devon Energy Production Company, LP (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct an Incident Characterization, Remediation, Reclamation, and Revegetation Report for a produced water release that occurred on January 28, 2017, in pasture northwest of Todd 36 State #001 API 30-015-20341 (hereafter referred to as the "site"). Devon submitted an initial C-141 Release Notification (Appendix A) to New Mexico Oil Conservation Division (NMOCD) District 2 on January 31, 2017. Incident ID number nAB1703948537, 2RP-4105 was assigned to this incident.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for closure of this release, with the understanding that restoration of the release site will be completed following remediation activities as per NMAC 19.15.29.13.

1.1 Denial of Incident Characterization, Remediation, Reclamation, and Revegetation Report

On March 2, 2026, NMOCD denied application 454283 for the Incident Characterization, Remediation, Reclamation, and Revegetation Report of incidents nAB1703948537 and 2RP-4105. The denial stated the following:

> "*The Remediation Closure - Reclamation -Vegetation Report is Denied. This is an old legacy release that occurred in January 2017. Chlorides most likely moved down the soil column over the years. The OCD requests two boreholes be advanced in the release area in 1-foot increments down to a depth of 10 feet. The first borehole should be advanced near sample point "BS23-13", and the second should be advanced near soil sample location "SS23-01". All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. The question on the Initial C-141 was checked "No" on the part of the form that asks, "Is the concentration of chloride in the produced water >10,000 mg/l?". The OCD Spill Rule says, "if the responsible party contends the fluid is less than 10,000 mg/l, the responsible party must provide current sample results to the division". In this case, we would need to have a physical water sample from the source of the leak analyzed. Please include the lab analytics in your future remediation closure report."*

As corrective actions, Vertex scheduled additional delineation. TP26-01 and TP26-02 were collected near BS26-13 and SS23-01 respectively (Figure 3). Samples from the two boreholes were collected in increments of 1-foot. No exceedances to reclamation closure criteria were observed (Table 3, Appendix E). Over 70% coverage by non-noxious vegetation remained post delineation actives. As such, the release requires no further action.

Given that it is over nine years since the initial C-141 was submitted and Vertex has no knowledge of any historical water data analysis, Vertex is unable to provide current sample results of the release fluid. The fluid should be assumed to be greater than 10,000 mg/L TDS in accordance with 19.15.29. Given that the closure criteria for the release has a depth to groundwater greater than 100 ft bgs, adjusting the fluid to be >10,000 mg/L TDS will have no impact on the previous remediation, reclamation, or revegetation activities.

With the exception of the changes outlined above, the remainder of this Incident Characterization, Remediation, Reclamation, and Revegetation Report remains unchanged from the 454283 submission.

2.0 Incident Description

The release occurred on January 28, 2017, due to a loose bull plug along an injection line to the site saltwater disposal. The incident was reported on January 28, 2017, and involved the release of approximately 70 barrels (bbl) of produced water along the pipeline right-of-way in pasture approximately 0.77 miles northwest of the site. Approximately 2 bbl of free fluid was removed during initial clean-up. Additional details relevant to the release are presented in the C-141 Report.

3.0 Site Characteristics

The site is located approximately 18 miles east-northeast of Malaga, New Mexico (Google Inc., 2025). The legal location for the site is Section 26, Township 23 South and Range 31 East in Eddy County, New Mexico. The release area is located on private property. An aerial photograph and site schematic are presented on Figure 1.

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for salt water transfer and disposal. The following sections specifically describe the release area along or in proximity to the pipeline right-of-way (Figure 1).

The surrounding landscape is associated with plains, alluvial fans, and fan piedmonts with elevations ranging between 3,100 and 4,200 feet. The climate is semiarid with average annual precipitation ranging between 10 and 14 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grasses and shrubs (United States Department of Agriculture, Natural Resources Conservation Service, 2023). Limited to no vegetation is allowed to grow on the compacted production pad, right-of-way and access road.

The surface geology at the site primarily comprises Qep – Eolian and piedmont deposits from the Holocene to middle Pleistocene ages (New Mexico Bureau of Geology and Mineral Resources, 2023) and the soil at the site is characterized as KM – Kermit-Berino fine sands. Additional soil characteristics include drainage class of well to excessive and runoff classes of negligible to low (United States Department of Agriculture, Natural Resources Conservation Service, 2023). The karst geology potential for the site is low (United States Department of the Interior, Bureau of Land Management, 2018).

4.0 Closure Criteria Determination

The nearest well with a depth to groundwater reference is a livestock water well drilled in 2013 and located approximately 0.40 miles west of the site. The recorded depth to groundwater at that location was 430 feet below ground surface (bgs; New Mexico Office of the State Engineer, 2023). Information pertaining to the depth to ground water determination is included in Appendix B.

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is an intermittent stream located approximately 3.95 miles west-southwest of the site (United States

Fish and Wildlife Service, 2023). At the site, there are no continuously 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.

Table 1. Closure Criteria Determination			
Site Name: Todd 36 State #001 ROW			
Spill Coordinates: 32.269610,-103.744095		**X: 618283**	**Y: 3571013**
Site Specific Conditions		**Value**	**Unit**
1	Depth to Groundwater (nearest reference)	**430**	feet
	Distance between release and nearest DTGW reference	**2,093**	feet
		0.40	miles
	Date of nearest DTGW reference measurement	**November 1, 2013**	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	20,886	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	23,837	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	25,934	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**	2,093	feet
	ii) Within 1000 feet of any fresh water well or spring	1,341	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	15,396	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	51,725	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest Medium Karst	27,465	feet
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	29,986	feet
11	Soil Type	Fine sand	
12	Ecological Classification	Deep sand	
13	Geology	Eolian and piedmont deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	>100'	<50' 51-100' >100'

The release area was in pasture and not on an active pad and, therefore, must meet reclamation criteria to meet requirements for incident closure. The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

Table 2. Closure Criteria for Soils to Remediation & Reclamation Standards

	Constituent	Limit
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
DTGW > 100 feet (19.15.29.12)	Chloride	20,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

bgs – below ground surface
DTGW – depth the groundwater
TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics
BTEX – benzene, toluene, ethylbenzene and xylenes

5.0 Remedial Actions Taken

Initial spill inspection and site characterization of the release along the right-of-way was completed by Vertex between October 20, 2022, and April 21, 2023, including vertical and horizontal delineation. Field screening was conducted on 34 samples to determine areas in need of remediation to reclamation standards. Field screening consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and an electroconductivity meter (chloride). The historically impacted area was approximately 2,803 square feet. The daily field reports associated with the site visits are included in Appendix C. Characterization sample locations are presented on Figure 1. Characterization field screening and laboratory results are summarized in Table 3. Characterization laboratory results were all below NMOCD reclamation criteria except the surface sample collected at BH23-05, which exceeded the threshold for total petroleum hydrocarbons.

Confirmatory composite samples were collected from the surface of the historical release area in 200 square foot increments. A total of 15 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Eurofins Laboratory (Formerly Hall Environmental Analysis Laboratory) in Albuquerque, New Mexico, under chain-of-custody protocols. Samples were analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chloride (EPA Method 300.0). Laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix E. Notifications that confirmatory samples were being collected for incident nAB1703948537, 2RP-4105 were provided to the NMOCD on February 13 and April 18, 2023, and are included in Appendix D. Confirmatory sample locations with respect to the historical release area are presented on Figure 2. The samples were labelled with two different prefixes, SS23- and BS23-. There was no differentiation in the sampling, only the labelling. All confirmatory samples collected and analyzed were below closure criteria for the site.

Characterization borehole "BH23-05" at 0 ft bgs was above closure criteria for total petroleum hydrocarbons in October of 2022. Laboratory results from April of 2023 revealed that "BS25-13", which was sampled in the same location as "BH23-05", was below NMOCD strictest criteria for TPH and chloride. This suggests that the hydrocarbons in the soil was naturally attenuated between characterization and confirmation, thus removing the contamination from the environment and making further remediation unnecessary.

All confirmatory samples collected and analyzed were in compliance of remediation and reclamation closure criteria for the site.

6.0 Reclamation Compliance

The release area is in compliance with strictest criteria as evidenced by the confirmation samples, which established that there is no outstanding contamination in the top 4 ft. The remediation did not require excavation, and as such, the site was able to preserve its in situ, non-waste containing, soil. Preservation of the native soil, vegetation, and land use, deemed reclamation activities such as reseeding and contouring unnecessary.

7.0 Revegetation Compliance

A site visit was conducted on May 2, 2025, to establish the area had fully recovered from the disturbance related to the release and subsequent remediation activities (Appendix C). The release area was found to have a strong diversity of native plants that matched the surrounding area. Flora included but was not limited to shimmery oak, yellow plainsman flowers, oerothera flowers, and bee blossom. The density of native flora was in exceedance of the revegetation requirement of greater than 70% of disturbance levels, establishing the incident as in compliance with revegetation standards.

8.0 Closure Request

Vertex recommends no additional remediation, reclamation, or revegetation actions to address the release at Todd 36 State #001 ROW. Laboratory analyses of the final confirmatory samples showed constituent of concern concentration levels below NMOCD reclamation closure criteria for areas where depth to groundwater is greater than 100 feet bgs as shown in Table 2. There are no anticipated risks to human, ecological or hydrological receptors associated with the release sites and the site's vegetation density is above 70% of predisturbance levels.

Vertex requests that this incident (nAB1703948537, 2RP-4105) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 and 19.15.29.13 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 to NMOCD requirements of remediation closure on the January 28, 2017, reclamation standards by May 1, 2023, and revegetation standards by May 2, 2025 release at Todd 36 State #001 ROW.

Based on these findings, Devon Energy Production Company, LP, requests that this release be closed.

Should you have any questions or concerns, please do not hesitate to contact the Project Manager Sally Carttar at 575.361.3561 or SCarttar@vertexresource.com.

9.0 References

Google Inc. (2025). *Google Earth Pro (Version 7.3.3)* [Software]. Retrieved from https://earth.google.com

New Mexico Bureau of Geology and Mineral Resources. (2023). *Interactive Geologic Map*. Retrieved from https://maps.nmt.edu/

New Mexico Office of the State Engineer. (2023). *New Mexico Water Rights Reporting System*. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/

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

United States Department of Agriculture, Natural Resources Conservation Service. (2023). *Web Soil Survey*. Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

United States Department of the Interior, Bureau of Land Management. (2018). *New Mexico Cave/Karst*. Retrieved from https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html

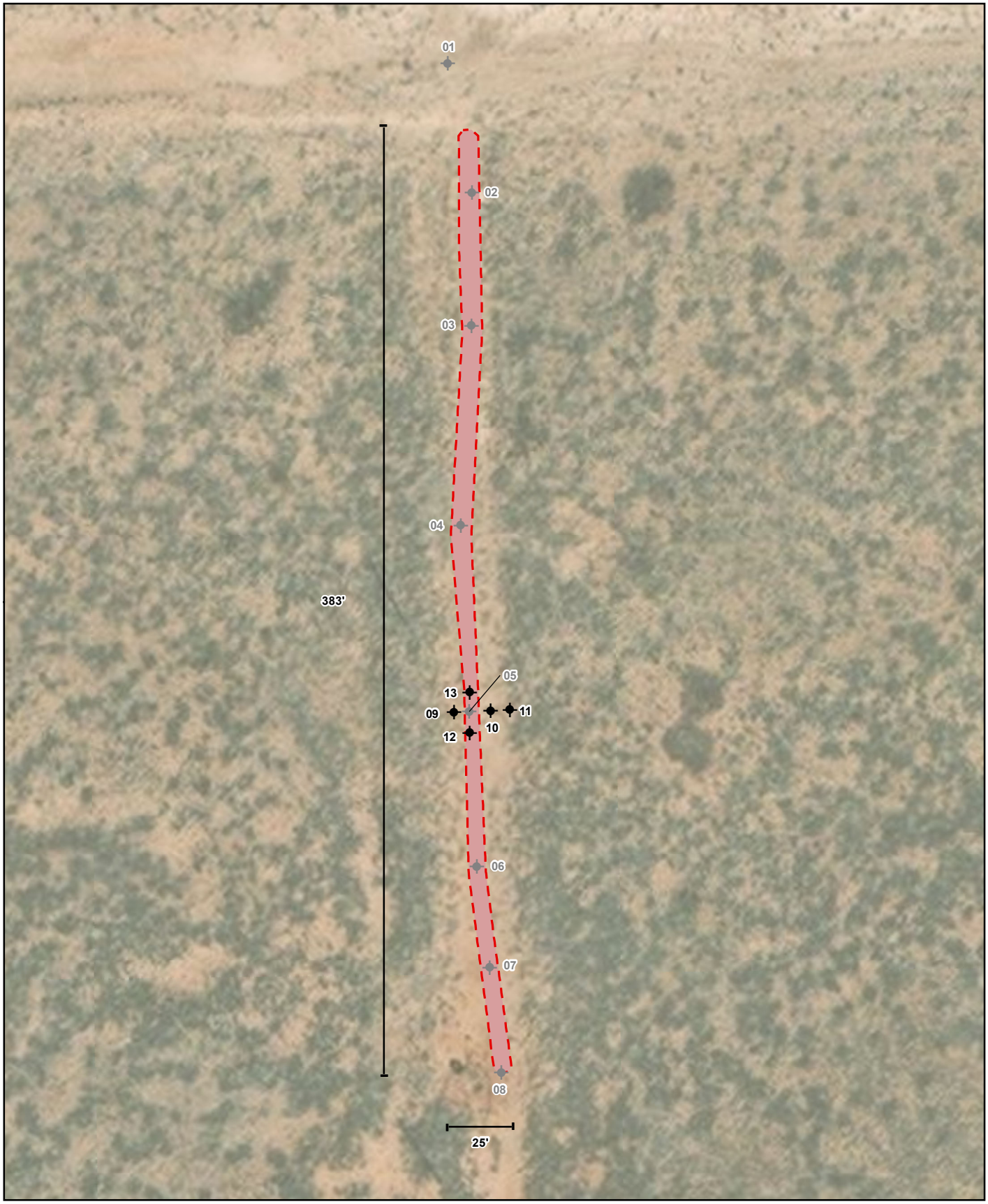
United States Fish and Wildlife Service. (2023). *National Wetland Inventory - Surface Waters and Wetlands*. Retrieved from https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

10.0 Limitations

This report has been prepared for the sole benefit of Devon Energy Production Company, LP. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Inc. (Vertex) and Devon Energy Production Company, LP. 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.

FIGURES



Borehole (Prefixed by "BH23-")

Borehole (Prefixed by "BH22-")

Release Area (~2,803 sq.ft.)

VERTEX

0 5 10 20 ft.

NAD 1983 UTM Zone 13N

Date: Jun 19/23

Map Center:
Lat: 32.270125,
Long:-103.744046

N

Characterization Sampling Site Schematic
Todd 36 State #001 - ROW

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: Georeferenced image from Esri, 2022. Features from GPS. Vertex Professional Services Ltd., 2023.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Devon Energy Corporation\2021\21E-028160022 - Todd 36 State 1\Figure 1 Characterization Sampling Site Schematic_Todd 36 Fed 1_ROW (21E-028160).mxd

VERTEX

0 50 100 ft

NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Map Center:
Lat/Long: 32.270107°N, 103.743997°W

Date: Jun 09/25

N

Confirmation Sampling Site Schematic
Incident ID: nAB1703948537
Todd 36 State #001 - ROW

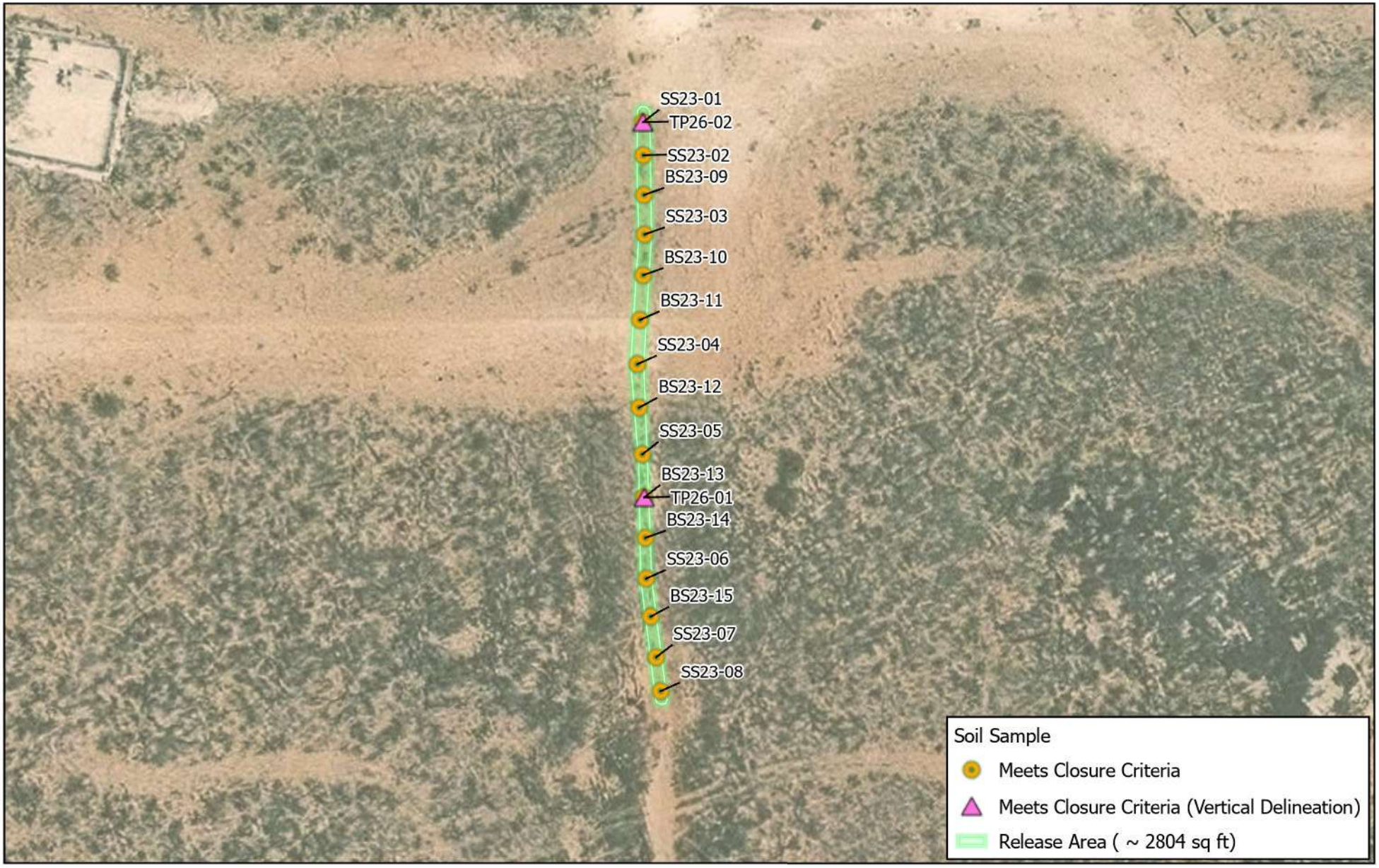
FIGURE: **2**

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: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

VERSATILITY. EXPERTISE.



VERTEX

0 50 100 ft

NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Map Center:
Lat/Long: 32.270077°N, 103.743982°W
Date: Mar 29/26

N

Additional Delineation Schematic
Incident ID: nAB1703948537
Todd 36 State #001 - ROW

FIGURE: 3

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: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

VERSATILITY. EXPERTISE.

TABLES

Client Name: Devon Energy Production Company, LP
Site Name: Todd 36 State #001 ROW
NMOCD Tracking #: nab1703948537
Project #: 25A-01349
Lab Reports: 2210C53 and 2304A16

Table 3. Initial Characterization Laboratory Results - Depth to Groundwater >100 feet bgs

Sample Description			Petroleum Hydrocarbons							Inorganic
			Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH22-01	0	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-02	0	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-03	0	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-04	0	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-05	0*	October 21, 2022	ND	ND	ND	140	120	**140**	**260**	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	83
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	530
BH22-06	0	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	87
BH22-07	0	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-08	0	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	4	October 21, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH23-09	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-10	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-11	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-12	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-13	0	April 21, 2023	ND	ND	ND	9.9	ND	9.9	9.9	ND
	2	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	75

Client Name: Devon Energy Production Company, LP
Site Name: Todd 36 State #001 ROW
NMOCD Tracking #: nab1703948537
Project #: 25A-01349
Lab Reports: 2210C53 and 2304A16

Table 3. Initial Characterization Sample Laboratory Results - Depth to Groundwater >100 feet bgs

Sample Description			Petroleum Hydrocarbons							Inorganic
			Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TP26-01	1	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	ND
	2	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	ND
	3	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	87
	4	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	ND
	5	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	160
	6	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	600
	7	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	420
	8	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	430
	9	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	1900
	10	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	2400
TP26-02	1	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	ND
	2	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	ND
	3	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	ND
	4	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	ND
	5	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	81
	6	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	270
	7	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	3700
	8	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	5800
	9	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	4600
	10	March 18, 2026	ND	ND	ND	ND	ND	ND	ND	4100

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed
"*" See section 5.0 of the report for futher information
Bold and green shaded indicates exceedance outside of NMOCD Reclamation Closure Criteria

Client Name: Devon Energy Production Company, LP
Site Name: Todd 36 State #001 ROW
NMOCD Tracking #: nab1703948537
Project #: 25A-01349
Lab Reports: 2302813 and 2304A17

Table 4. Confirmatory Sample Laboratory Results - Depth to Groundwater >100 feet bgs

Sample Description			Petroleum Hydrocarbons							Inorganic
			Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SS23-01	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
SS23-02	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
SS23-03	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
SS23-04	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
SS23-05	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
SS23-06	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
SS23-07	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
SS23-08	0	February 16, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BS23-09	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BS23-10	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BS23-11	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BS23-12	0	April 21, 2023	ND	ND	ND	18	ND	18	18	ND
BS23-13	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BS23-14	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BS23-15	0	April 21, 2023	ND	ND	ND	ND	ND	ND	ND	ND

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

APPENDIX A - NMOCD C-141 Report

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

State of New Mexico
Energy Minerals and Natural Resources

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

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 01 2017
RECEIVED

Form C-141
Revised August 8, 2011
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1703948537

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production Company 6137	**Contact** Wesley Ryan, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88210	**Telephone No.** 575-390-5436
Facility Name Todd 36 State 1/ Injection line	**Facility Type** Salt Water Disposal

Surface Owner State/Federal	**Mineral Owner** State/Federal	**API No** 30-015-20341

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	36	23S	31E	1980	North	1980	West	Eddy

Latitude: N 32.2626877 **Longitude:** W -103.7336273

NATURE OF RELEASE

Type of Release Produced water	**Volume of Release** 70 BBLS	**Volume Recovered** 2 BBLS
Source of Release Bull plug	**Date and Hour of Occurrence** 1/28/2017 @ 1:30pm	**Date and Hour of Discovery** 1/28/2017 @ 1:30pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** BLM-Shelly Tucker OCD-Mike Bratcher	
By Whom? Wesley Ryan, Production Foreman	**Date and Hour** **BLM-**1/28/2017 @ 7:05pm **OCD-**1/29/2017 @ 8:00am	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse** N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
The bull plug inside the tin horn became loose resulting in a release of 70 BBLS of produced water. The produced water released came from an injection line going to the Todd 36 State 1 SWD. The pumps were turned off and the transfer line was shut in to prevent further release. Repairs are being made to the bull plug in the tin horn.

Describe Area Affected and Cleanup Action Taken.*
Approximately 70 BBLS produced water was released from a bull plug inside the tin horn on the injection line going to the Todd 36 State 1 SWD onto the pasture. The released produced water flowed in a Northern direction away from the tin horn. The approximate size of the release was 100 yards by 8 feet wide. The vacuum truck recovered 2 BBLS produced water. A remediation contractor will be contacted for remediation.

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: Sarah Gallegos-Troublefield	OIL CONSERVATION DIVISION Signed By Mike Bratcher
Printed Name: Sarah Gallegos-Troublefield	Approved by Environmental Specialist:
Title: Field Admin Support	Approval Date: 2/7/17 Expiration Date: N/A
E-mail Address: Sarah.Gallegos-Troublefield@dvn.com	Conditions of Approval: See attached Attached ☒
Date: 1/31/2017 Phone: 575.748.1864	

* Attach Additional Sheets If Necessary

2RP-4105

APPENDIX B – Closure Criteria Research Documentation

OSE POD 0.5 miles

4/9/2025, 7:55:31 AM

GIS WATERS PODs

- Active
- Pending
- Plugged
- OSE District Boundary

Water Right Regulations

- Closure 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

New Mexico Office of the State Engineer

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02348		C	ED	1	4	3	26	23S	31E	617648	3571068	637	700	430	270
C 02258		C	ED		3	2	26	23S	31E	618055	3571853*	870	662		

Average Depth to Water: **430 feet**
Minimum Depth: **430 feet**
Maximum Depth: **430 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 618283 **Northing (Y):** 3571013 **Radius:** 2000

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

6/10/23 5:30 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	C 02348	1	4	3	26	23S	31E	617648	3571068

Driller License:	1654	**Driller Company:**	NOT WORKING FOR HIRE--SIRMAN DRILLING AND CONSTRUC		
Driller Name:					
Drill Start Date:	10/31/2013	**Drill Finish Date:**	11/01/2013	**Plug Date:**	
Log File Date:	11/07/2013	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	10 GPM
Casing Size:	6.00	**Depth Well:**	700 feet	**Depth Water:**	430 feet

Water Bearing Stratifications:	Top	Bottom	Description
	15	125	Sandstone/Gravel/Conglomerate
	315	700	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	560	620
	680	700

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 02348 **Subbasin:** C **Cross Reference:** -

Primary Purpose: STK 72-12-1 LIVESTOCK WATERING

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 3 **Cause/Case:** -

Owner: NGL WATER SOLUTIONS PERMIAN

Contact: R CHARLES WILKIN

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	633178	COWNF	2018-09-17	CHG	PRC	C 02348	T		0	
get images	491413	72121	2011-12-14	PMT	LOG	C 02348: SUBSEQUENT STK PERMIT	T		3	
	422940	COWNF	2009-02-02	CHG	PRC	C 02348	T		0	
	154822	COWNF	1998-09-09	CHG	PRC	C 02348	T	0	0	
	154817	DCL	1998-09-09	DCL	PRC	C 02348	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 02348		Shallow	1	4	3	26	23S	31E	617648	3571068	

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL NEW MEXICO

2013 NOV -7 A 11:11

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): C-2348	OSE FILE NUMBER(S): C-2348
WELL OWNER NAME(S): MARK McCloy - McCloy Ranches	PHONE (OPTIONAL): 432-940-4459
WELL OWNER MAILING ADDRESS: P.O. Box 1076 254 Diamond Rd	CITY: Jal STATE: NM ZIP: 88252

WELL LOCATION (FROM GPS): LATITUDE 32 DEGREES 16 MINUTES 12.91 SECONDS N; LONGITUDE 103 DEGREES 45 MINUTES 03.61 SECONDS 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: Hwy 128 to 18 mm 1 mile N 1 mile west on Red Road

2. DRILLING & CASING INFORMATION

LICENSE NUMBER: 1654	NAME OF LICENSED DRILLER: John Sireman	NAME OF WELL DRILLING COMPANY: Sireman Drilling & Const. LLC
DRILLING STARTED: 10/31/13	DRILLING ENDED: 11/1/13	DEPTH OF COMPLETED WELL (FT): 700'-0
BORE HOLE DEPTH (FT): 700'-0	DEPTH WATER FIRST ENCOUNTERED (FT): 575-~~600~~	STATIC WATER LEVEL IN COMPLETED WELL (FT): 430'-0

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

DRILLING FLUID: ☑ AIR ☐ MUD ☐ ADDITIVES – SPECIFY:

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

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	560	10	PVC	Certa-Lok	6	DR-17	Blnk
560	620	10	PVC	Certa Lok	6	DR-17	.032 Screen
620	680	10	PVC	Certa Lok	6	DR-17	Blank
680	700	10	PVC	Certa Lok	6	DR-17	.032 Screen

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	20	10	3/8 bentonite hole plug	6 bags	gravity
67	700	10	3/8 pea gravel	5 yds	gravity

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
C-2348		491413

LOCATION: C 23S.31E.26.3.4.1 Livestock

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	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	Brown sand	☐ Y ☒ N	
10	15	5	White caliche	☐ Y ☒ N	
15	125	110	Brown Sandstone	☒ Y ☐ N	
125	315	190	Red shale	☐ Y ☒ N	
315	700	385	Red sandstone	☒ Y ☐ N	10
				☐ Y ☐ N	
				☐ Y ☐ N	
				☐ Y ☐ N	
				☐ Y ☐ N	
	700			☐ 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:

TOTAL ESTIMATED WELL YIELD (gpm): 7

STATE ENGINEER OFFICE ROSWELL, NM

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:

none

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

none

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 20 DAYS AFTER COMPLETION OF WELL DRILLING:

John Sirman — John Sirman — 11/3/13

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
C-2348		491413

LOCATION: C — 23S.31E.26.3.4.1 — Livestock

U.S. Fish and Wildlife Service
National Wetlands Inventory

Intermittent 20,886 feet

June 11, 2023

Wetlands_Alaska

- 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.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Pond 23,837 feet

June 11, 2023

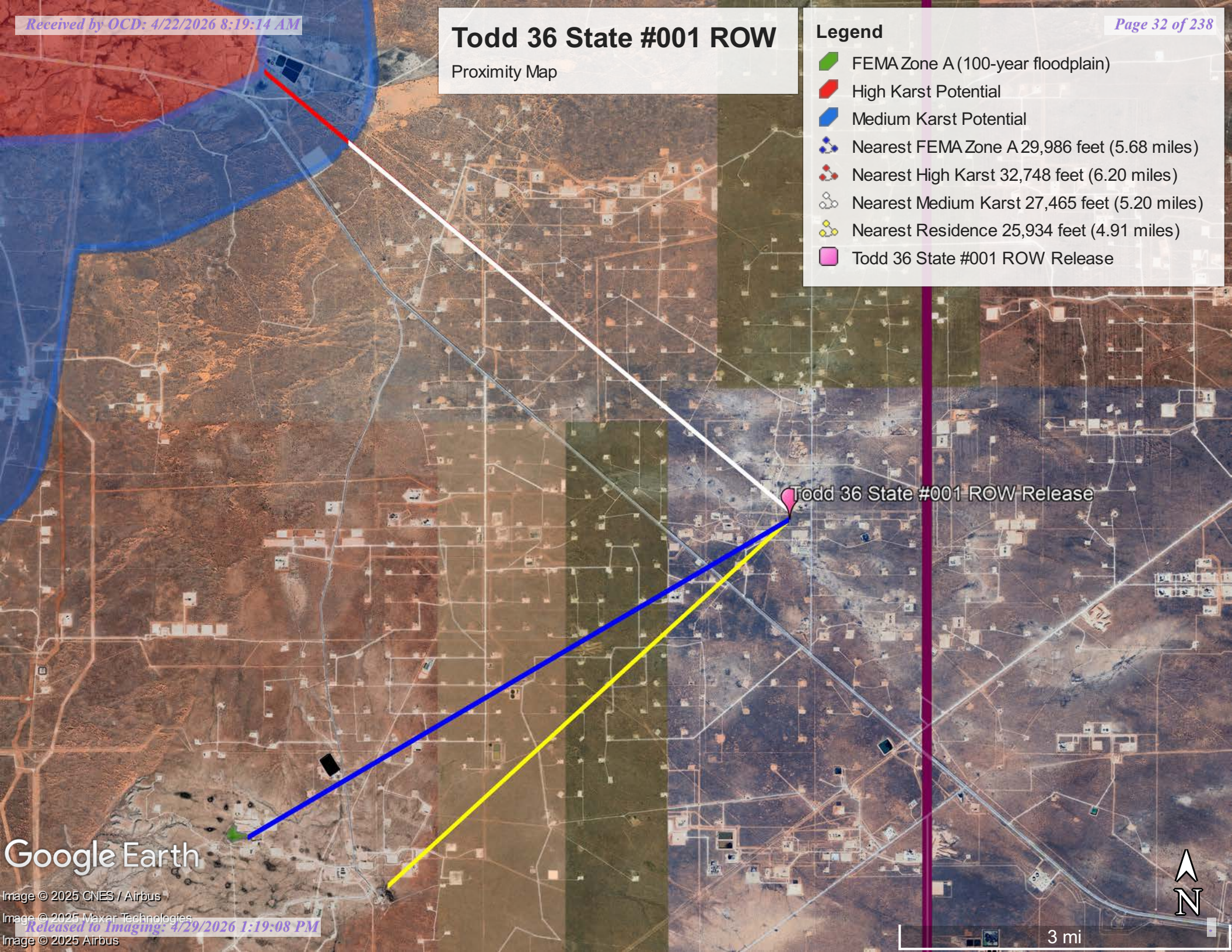
Wetlands_Alaska

- 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.

Todd 36 State #001 ROW

Proximity Map



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 02602	C	SAN	0.000	POGO PRODUCING COMPANY	ED	C 02602						NE	NE	35	23S	31E	618471.0	3570650.0 *		408.8
C 02348	C	STK	3.000	NGL NORTH RANCH LLC A TX LLC	ED	C 02348				Shallow	NW	SE	SW	26	23S	31E	617647.5	3571068.0		637.9
C 02258	C	PRO	0.000	DEVON ENERGY CORP. (NEVADA)	ED	C 02258						SW	NE	26	23S	31E	618055.0	3571853.0 *		870.4
C 04790	CUB	MON	0.000	DEVON ENERGY RESOURCES	ED	C 04790 POD1	NA				SE	SE	SW	25	23S	31E	619309.4	3570904.8		1,032.1
C 04746	CUB	MON	0.000	DEVON ENERGY RESOURCES	ED	C 04746 POD1	NA				SW	SE	SW	36	23S	31E	619225.7	3569417.8		1,852.9

Record Count: 5

Filters Applied:

UTM Filters (in meters):
Easting: 618283
Northing: 3571013
Radius: 002000

Sorted By: Distance

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

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02602		2	2	35	23S	31E	618471	3570650*

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

Driller License: **Driller Company:**

Driller Name:

Drill Start Date: **Drill Finish Date:** **Plug Date:**

Log File Date: **PCW Rcv Date:** **Source:**

Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: **Depth Well:** **Depth Water:**

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

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 02602 **Subbasin:** C **Cross Reference:** -

Primary Purpose: SAN 72-12-1 SANITARY IN CONJUNCTION WITH A COMMERCIAL USE

Primary Status: EXP EXPIRED

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Owner: POGO PRODUCING COMPANY

Contact: JERRY A COOPER

Documents on File

Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	466110	72121	1998-09-15	EXP	EXP	C 02602	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 02602				2	2	35	23S	31E	618471	3570650*	

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02258		3	2	26	23S	31E	618055	3571853*

Driller License:	421	**Driller Company:**	GLENN'S WATER WELL SERVICE		
Driller Name:	CORKY GLENN				
Drill Start Date:	09/18/1992	**Drill Finish Date:**	09/18/1992	**Plug Date:**	
Log File Date:	09/25/1992	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	662 feet	**Depth Water:**	

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

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 02258 **Subbasin:** C **Cross Reference:** -

Primary Purpose: PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Owner: DEVON ENERGY CORP.(NEVADA)

Contact: CHARLES W. HORSMAN

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	469242	72121	1992-05-27	EXP	EXP	C 02258	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 02258			3	2		26	23S	31E	618055	3571853*	

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetland 15,396 feet

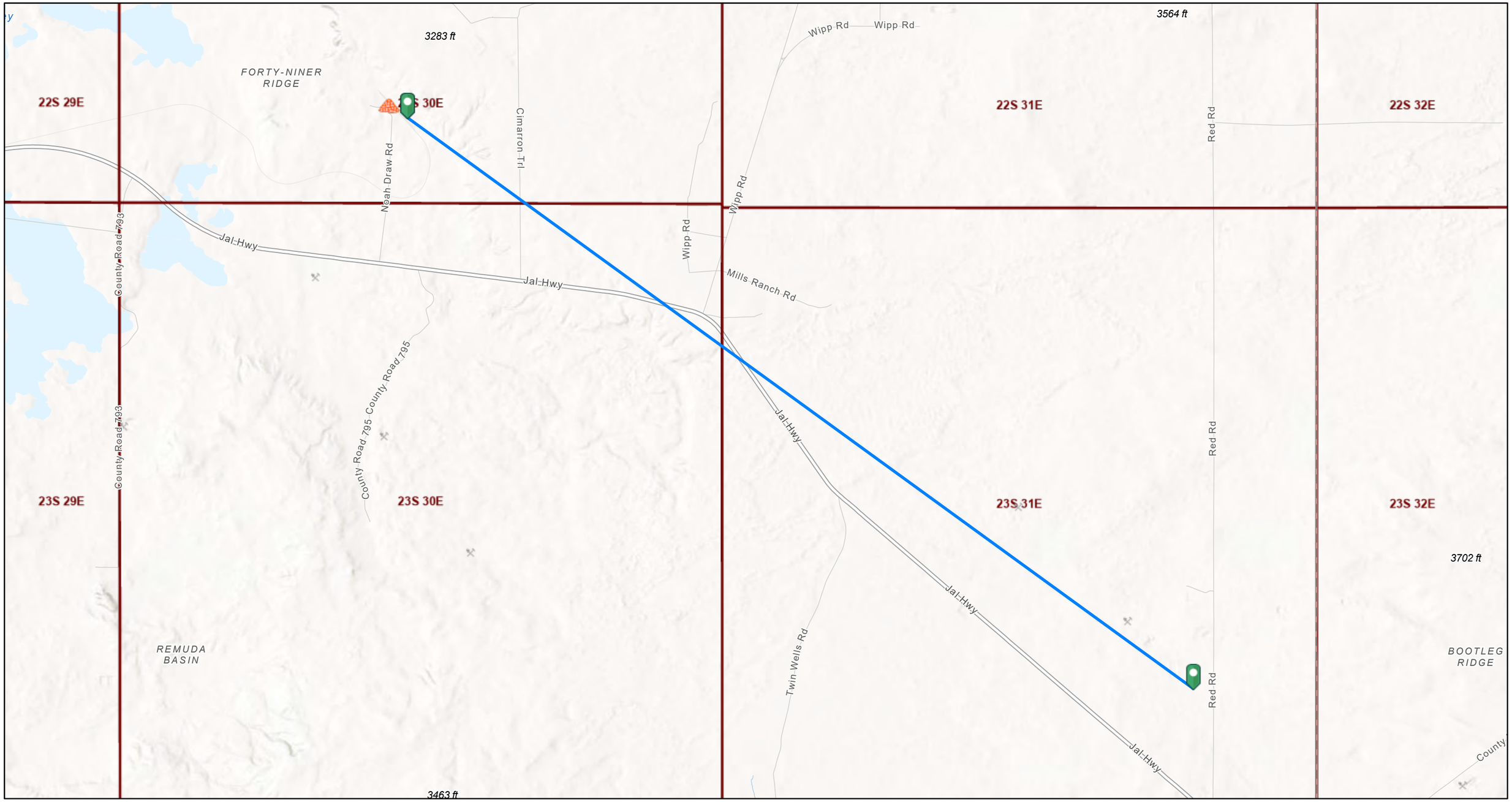
June 11, 2023

Wetlands_Alaska

- 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 51,725 feet



4/9/2025, 8:47:41 AM

1:72,224

Registered Mines

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

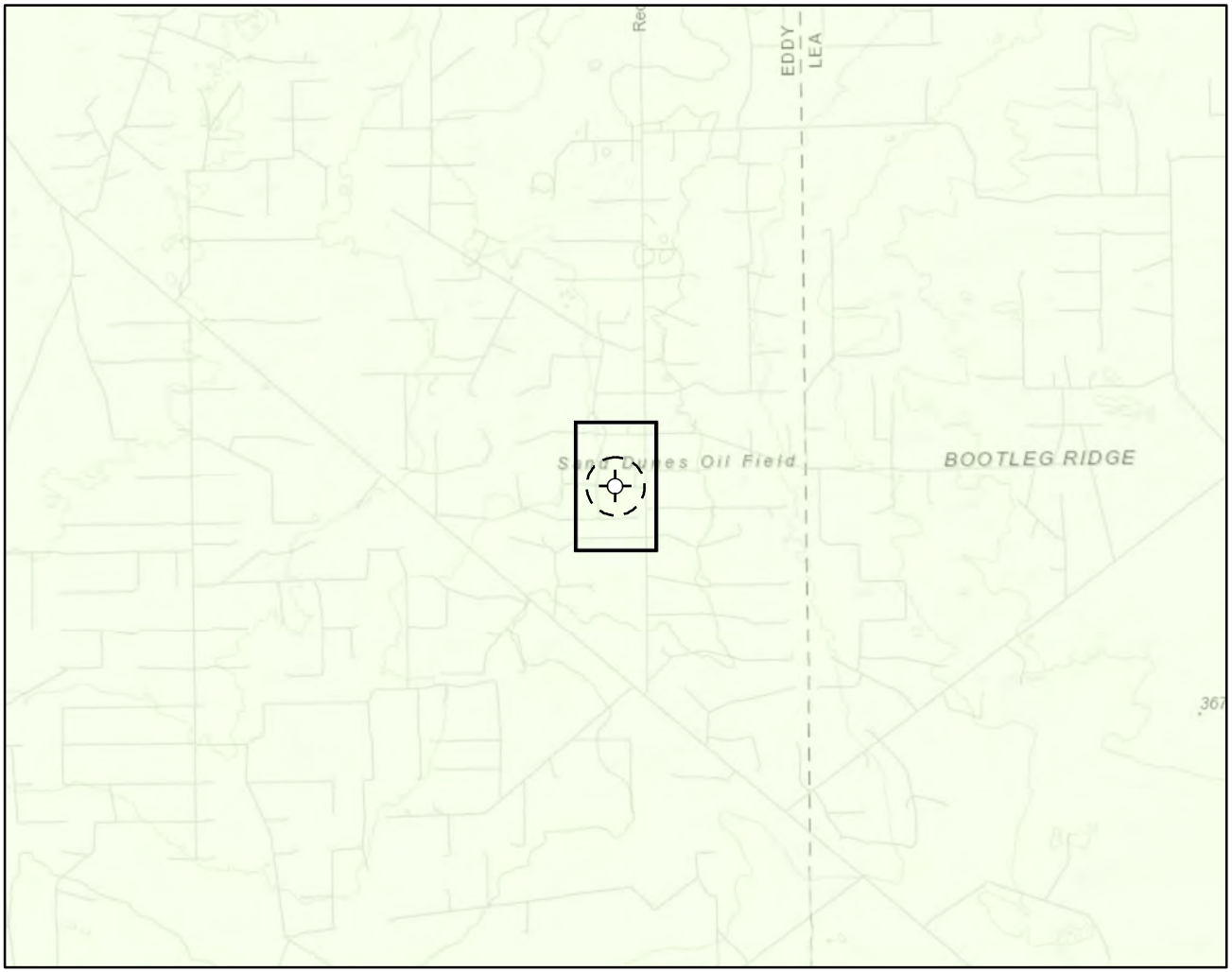
0 0.75 1.5 3 mi

0 1.25 2.5 5 km

Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, BLM

EMNRD MMD GIS Coordinator

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



Karst Potential

- Critical
- High
- Medium
- Low

Site Location

Site Buffer (1,000 sq. ft.)

Overview Map

0 0.25 0.5 1 mi

Detail Map

0 150 300 600 ft.

VERTEX

Map Center:
Lat/Long: 32.271810, -103.744000

NAD 1983 UTM Zone 13N
Date: Apr 21/23

N

Karst Potential
Todd 36 State 1 Right of Way

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 2021; 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: \\vtx-s-fs01.corp.internal\shared\vps\04 - Geomatics\1-Projects_US PROJECTS\Devon Energy Corporation\2022\21E-02816 - Todd 36 State 1 Right of Way\Figure X Karst Potential (21E-02816).mxd

National Flood Hazard Layer FIRMette

FEMA

103°44'57"W 32°16'26"N

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

1:6,000

103°44'20"W 32°15'55"N

Basemap Imagery Source: USGS National Map 2023

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 6/10/2023 at 9:08 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.

United States Department of Agriculture

NRCS

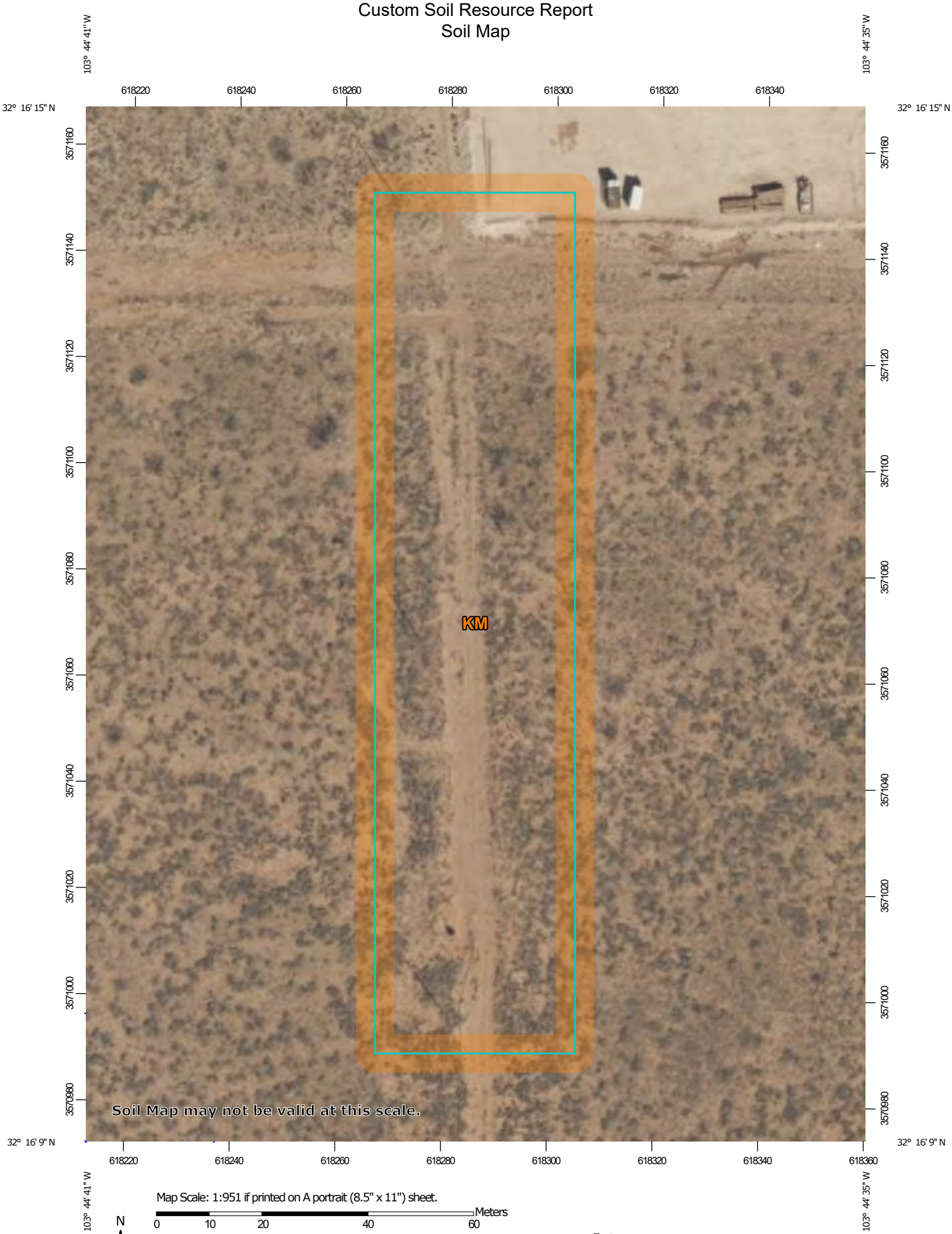
Natural Resources Conservation Service

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 Eddy Area, New Mexico

June 10, 2023

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: Eddy Area, New Mexico
Survey Area Data: Version 18, 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.

Eddy Area, New Mexico

KM—Kermit-Berino fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4q
Elevation: 3,100 to 4,200 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 190 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 50 percent
Berino and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kermit

Setting

Landform: Plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 7 inches: fine sand
H2 - 7 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

Description of Berino

Setting

Landform: Plains, fan piedmonts
Landform position (three-dimensional): Riser

Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 17 inches: fine sand
H2 - 17 to 50 inches: fine sandy loam
H3 - 50 to 58 inches: loamy sand

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: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Active dune land

Percent of map unit: 15 percent
Hydric soil rating: No

USDA Natural Resources Conservation Service

Ecological site R070BD005NM
Deep Sand

Accessed: 06/11/2023

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.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on terraces, Piedmonts, dunes fields, or upland plains. Parent material consists of eolian deposits and alluvium derived from sandstone. Slopes range from 0 to 15 percent, usually less than 5 percent. Low, stabilized hummocks or dunes frequently occur. Elevations range from 2,842 to 4,500 feet.

Table 2. Representative physiographic features

Landforms	(1) Dune (2) Parna dune (3) Terrace
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–4,500 ft
Slope	0–15%
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 is in late March or early April, and the first killing frost is in late October or early November.

Both temperature and moisture favor warm season perennial plant growth. During years of abundant winter and early spring moisture, cool season growth and annual forbs, make up an important component of this site. Strong winds blow from the west 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 deep or very deep. Surface textures are sand loam, fine sand or loamy fine sand, Underlying material textures are loamy fine sand, fine sand, sand or fine sandy loam. Because of the coarse textures and rapid drying of the surface, the soil, if unprotected by plant cover and organic residue, becomes windblown and low hummocks or dunes are formed around shrubs.

Characteristic soils are:
Anthony
Aguena
Kermit
Likes
Pintura
Bluepoint

Table 4. Representative soil features

Surface texture	(1) Sand (2) Fine sand (3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to excessively drained
Permeability class	Moderate to very rapid
Soil depth	60–72 in
Surface fragment cover <=3"	0–5%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	3–5 in
Calcium carbonate equivalent (0-40in)	5–15%
Electrical conductivity (0-40in)	0–4 mmhos/cm
Sodium adsorption ratio (0-40in)	0–2
Soil reaction (1:1 water) (0-40in)	6.6–7.8

Subsurface fragment volume <=3" (Depth not specified)	5–10%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

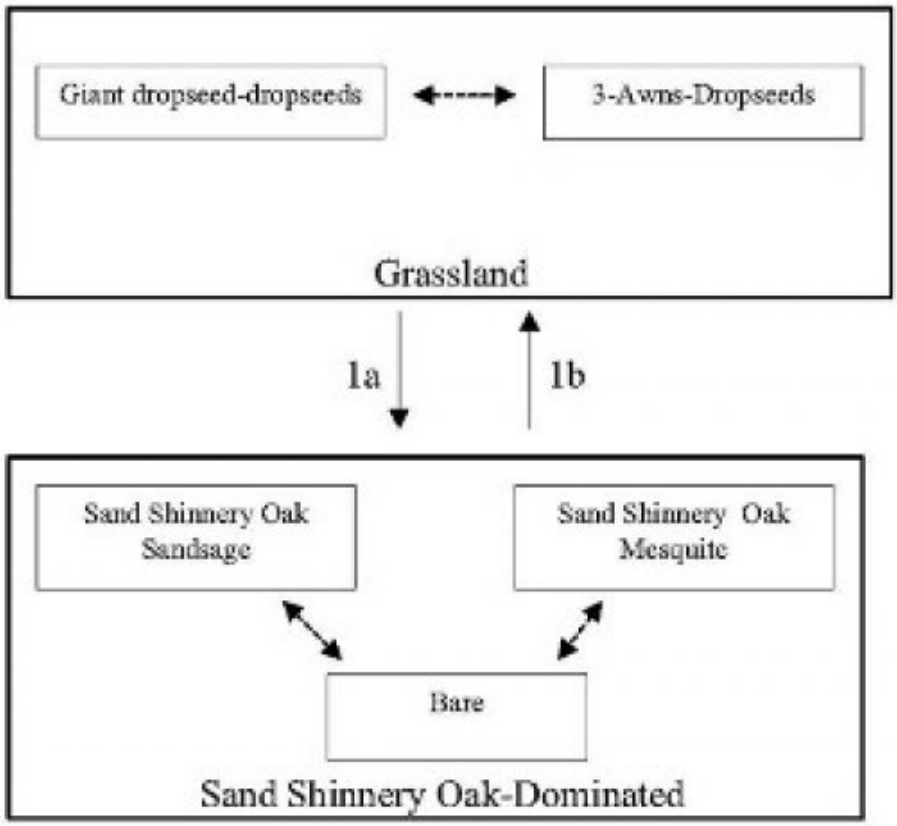
Overview

The Deep Sand site occurs adjacent to and/or intergraded with the Sandhills and Sandy sites (SD-3). The Deep Sand site can be distinguished by slopes less than eight percent (approximately five percent) and textural changes at depths greater than 40 inches. The Deep Sand site has well drained soils with a surface texture of sand or loamy fine sand. The Sandhills site has slopes greater than eight percent and textural depths greater than 60 inches. Conversely, the Sandy site has slopes less than five percent and depths to textural change commonly around 20 inches. The historic plant community of the Deep Sand site is dominated primarily by giant dropseed (*Sporobolus giganteus*) and other dropseeds (*S. flexuosus*, *S. contractus*, *S. cryptandrus*), with scattered shinnery oak (*Quercus havardii*) and soapweed yucca (*Yucca glauca*). Other herbaceous species include threeawns (Aristida spp.), bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), and annual and perennial forbs distributed relative to precipitation occurrences. Bare ground and litter compose a significant proportion of ground cover while grasses are the remainder. Shinnery oak will increase with an associated decrease in dropseed and bluestem abundance possibly due to climatic change, fire suppression, interspecific competition, and excessive grazing. Continued grass cover loss may result in a transition to a shinnery oak dominated state with increases in sand sage (*Artemisia filifolia*) and honey mesquite (*Prosopis glandulosa*). However, brush management may restore the grassland component and reverse the shinnery oak state back toward the historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram)

MLRA-42, SD-3, Deep Sand



1.a Climate, fire suppression, competition, over grazing

1.b Brush control, Prescribed grazing

State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

State Containing Historic Plant Community Grassland: The historic plant community is dominated by giant dropseed, other dropseeds, threeawns, and bluestems. Dominant woody plants include shinnery oak and soapweed yucca. Forb abundance and distribution varies and is dependent on annual rainfall. The Deep Sand site typically exists in sandy plains and dunes (Sosebee 1983). Grass dominance stabilizes the potentially erosive sandy soils. Historical fire suppression, however, may have contributed to increased woody plant abundance, which has reduced grass species. Further, drought conditions compounded with excessive grazing likely has driven most grass species out of competition with shrubs which has resulted in a shinnery oak dominated state with sand sage and mesquite (Young et al. 1948). Diagnosis: Grassland dominated by dropseeds, threeawns, and bluestems. Small shrubs, such as shinnery oak and soapweed yucca, and subshrubs are dispersed throughout the grassland. Other grasses that could appear on this site would include: flatsedge, almejita signalgrass, big bluestem, Indiangrass, fall witchgrass, hairy grama and red lovegrass Other shrubs include: fourwing saltbush, mesquite, ephedra and broom snakeweed. Other forbs include: wooly and scarlet gaura, wooly dalea, phlox heliotrope, scorpionweed, deerstongue, fleabane, nama, hoffmanseggia, lemon beebalm and stickleaf.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	396	858	1320
Shrub/Vine	108	234	360
Forb	96	208	320
Total	**600**	**1300**	**2000**

Table 6. Ground cover

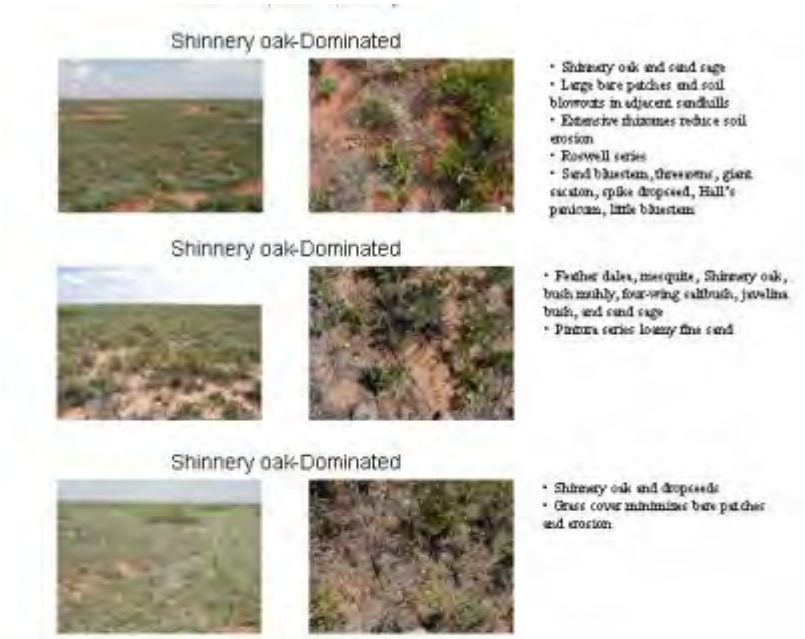
Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-20%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	35-40%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	35-40%

Figure 5. Plant community growth curve (percent production by month). NM2805, HCPC. SD-3 Deep 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
Shinnery Oak Dominated

Community 2.1
Shinnery Oak Dominated



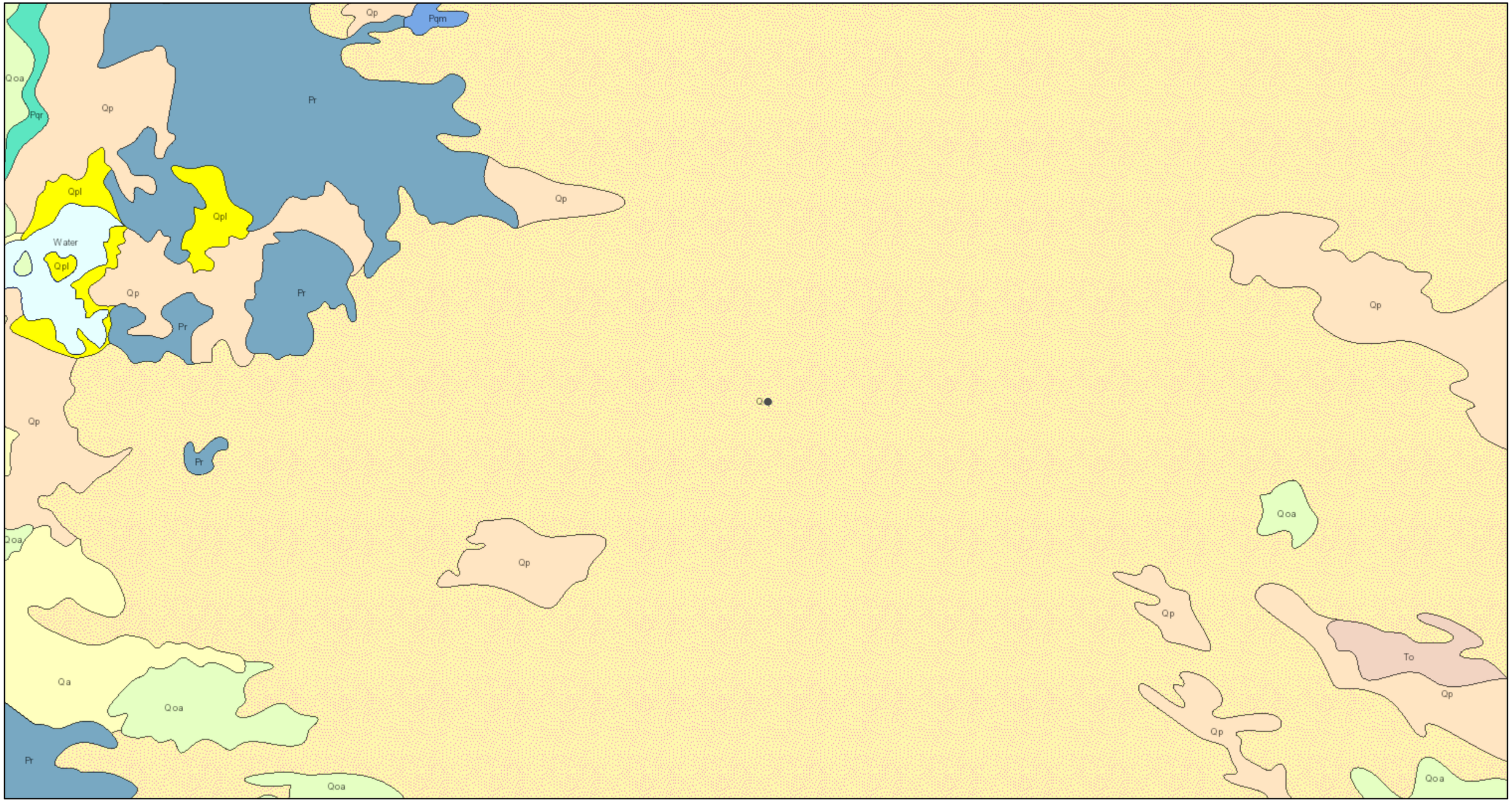
Shinnery Oak Dominated: This state is dominated by shinnery oak with subdominants of sand sage or mesquite. Bare ground is a significant component in this state as well. shinnery oak is characterized by dense stands in sandy soils; however, as clay percentage increases, shinnery oak decreases. Shinnery oak abundance and distribution increase with disturbances, such as excessive grazing and fire, due to an aggressive rhizome system. As shinnery oak abundance increases, an associated increase of mesquite, sand sage, and soapweed yucca also occurs. Shinnery oak's extensive root system allows the oak to competitively exclude grasses and forbs. Sand sage, however, stabilizes light sandy soils from wind erosion and can co-exist with herbaceous species by protecting them in heavily grazed conditions (Davis and Bonham 1979). Shinnery oak has been found primarily in very deep, excessively drained, and rapidly permeable soils. Shinnery oak is associated with landforms which are gently undulating to rolling uplands, very gently sloping to moderately steep slopes, and upland plains, alluvial fans and valley sideslopes. Shinnery oak and sand sage can be controlled with herbicide if applied in the spring with a subsequent rest from grazing (Herbel et al. 1979, Pettit 1986). In addition, repetitive seasons of goat browsing can also reduce shinnery oak abundance. Patches should be maintained during brush control, however, to prevent erosion and to provide wildlife cover and forage. Further, as shinnery oak and other shrubs increase, bare patches and erosion will increase due to a lack of herbaceous ground cover. Diagnosis: Shinnery oak dominated with subdominant sand sage, honey mesquite, and soapweed yucca with increasing frequency and size of bare patches. Transition to Shinnery oak dominated state (1a): The historic plant community begins to shift toward the shinnery oak dominated state as drivers such as climate change, 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 an increase of shrub species abundance and bare patch expansion. Key indicators of approach to transition: • Loss of grass and forb cover • Surface soil erosion • Bare patch expansion • Increased shrub species abundance and composition Transition to Historic Plant Community (1b): The shinnery oak dominated state may transition back toward the historic plant community as new drivers are introduced such as prescribed grazing, brush control, and discontinued drought conditions.

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)

ArcGIS Web Map



6/10/2023, 6:10:33 PM

1:144,448

Lithologic Units

- Playa——Alluvium and evaporite deposits (Holocene)
- Water——Perenial standing water
- Qa——Alluvium (Holocene to upper Pleistocene)
- Ql——Landslide deposits and colluvium (Holocene to Pleistocene) — Landslide deposits on western flanks of Socorro Mountains not shown for clarity
- Qpl——Lacustrine and playa deposits (Holocene) — Includes associated alluvial and eolian deposits of major lake basins
- Qp——Piedmont alluvial deposits (Holocene to lower Pleistocene)
- Qe——Eolian deposits (Holocene to middle Pleistocene)
- Qeg——Gypsiferous eolian deposits (Holocene to middle Pleistocene)

0 1.5 3 6 mi

0 2.5 5 10 km

Esri, NASA, NGA, USGS, NMBGMR, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census

ArcGIS Web AppBuilder

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line

APPENDIX C – Daily Field Reports

Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	10/21/2022
Site Location Name:	Todd 36 State 1	Report Run Date:	10/21/2022 11:47 PM
Client Contact Name:	Wes Matthews	API #:	30-015-20341
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	10/21/2022 9:50 AM
Departed Site	10/21/2022 5:15 PM

Field Notes

10:42 Arrived on site and filled out JSA

Had Halo crew sign JSA and Energy Pros sign JSA

10:44 Held a meeting of safety and expectations for the day.

Waiting for Hydro Vac company (Energy Pros) to day light underground line before I start sampling soil.

12:56 At 12:55 energy pros concluded exposing underground lines

16:10 At 1:20 I had Halo crew start potholing starting with BH22-01 to BH22-08 at 0’ 2’ and 4’

16:11 I grabbed samples from all potholes at 0,2,4’ depths

All samples are field screened on EC

Samples at 4’ depth are run on Petroflag and EC

16:40 All potholes and hydro vac holes have been flagged off

16:40 All samples will be sent to lab

Daily Site Visit Report

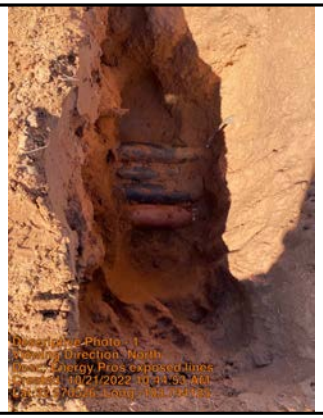
Next Steps & Recommendations

1. Continue soil sampling
2. Excavation

Daily Site Visit Report

Site Photos

Viewing Direction: West



Energy Pros exposed lines

Viewing Direction: North

Overview of site facing north

Viewing Direction: North

All holes from hydro vac and boreholes are flagged off

Viewing Direction: South

Data points on collector

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: North
	
Overview of site facing south	BH22-01 at (0-4')
Viewing Direction: South	**Viewing Direction**: South
	
BH22-02 at (0-4') facing south	BH22-03 at (0-4') facing south

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: South
	
BH22-04 at (0-4') facing south	BH22-05 at (0-4') facing south
Viewing Direction: South	**Viewing Direction**: South
	
BH22-06 at (0-4') facing south	BH22-07 at (0-4') facing south

Daily Site Visit Report

Viewing Direction: South

BH22-08 at (0-4') facing south

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Jacob Reta

Signature:

Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	2/16/2023
Site Location Name:	Todd 36 State 1	Report Run Date:	2/16/2023 11:58 PM
Client Contact Name:	Wes Matthews	API #:	30-015-20341
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	2/16/2023 11:02 AM
Departed Site	2/16/2023 3:30 PM

Field Notes

14:50 Arrived on site and filled out JSA
Site: Todd 36 State 1 “Right of Way”

14:48 Today’s focus is to take confirmation samples

Samples collected
SS23-01 through SS23-08 at 0’ depth

14:50 At 11:20 I began taking confirmation samples

14:51 All samples collected are field screened on EC meter

All samples are clean on Chlorides

14:52 All samples collected are field screened on Petroflag unit

All samples are clean on TPH

14:52 All samples have been Jarred and placed on ice.
Samples will be sent to lab

Daily Site Visit Report

Next Steps & Recommendations

1 Closure

Daily Site Visit Report

Site Photos

Viewing Direction: North	**Viewing Direction**: South
	
Overview of site Facing north	Overview of site Facing South
Viewing Direction: North	**Viewing Direction**: Southeast
	
SS23-08 Facing North	SS23-07 Facing Southeast

Daily Site Visit Report

Viewing Direction: North	**Viewing Direction**: North
	
SS23-06 Facing North	SS23-05 Facing North
Viewing Direction: North	**Viewing Direction**: North
	
SS23-04 Facing North	SS23-03 Facing North

Daily Site Visit Report

Viewing Direction: North	**Viewing Direction**: North
	
SS23-02 Facing North	SS23-01 Facing North

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Jacob Reta

Signature:

Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	4/21/2023
Site Location Name:	Todd 36 State 1	Report Run Date:	4/21/2023 11:49 PM
Client Contact Name:	Wes Matthews	API #:	30-015-20341
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	4/21/2023 6:38 AM
Departed Site	4/21/2023 1:34 PM

Field Notes

6:46 Completed JSA on arrival. On site to complete horizontal delineation and collect confirmation samples.

7:02 Swept borehole locations with magnetic locator prior to ground disturbance.

7:50 Advanced BH23-09, BH23-10, BH23-11, BH23-12, and BH23-13 around BH23-05 for horizontal delineation.

8:11 Swept confirmation sampling areas with magnetic locator prior to ground disturbance.

12:55 Collected confirmation samples BS23-09, BS23-10, BS23-11, BS23-12, BS23-13, BS23-14, and BS23-15 along release area. 5-point composite samples were collected between previously sampled areas.

12:56 Delineation and confirmation sampling complete pending laboratory results.

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: South	**Viewing Direction**: South
	
North of release area facing south along right of way.	On right of way facing south. Collected BS23-12.
Viewing Direction: North	**Viewing Direction**: North
	
On right of way facing north. Collected BS23-13.	On right of way facing north. Collected BS23-14.

Daily Site Visit Report

Viewing Direction: North	**Viewing Direction**: North
	
On right of way facing north. Collected BS23-15.	South of release area facing north along right of way.
Viewing Direction: North	**Viewing Direction**: North
	
West edge of right of way facing north. Advanced BH23-09 west of BH23-05.	On right of way facing north. Advanced BH23-10 east of BH23-05.

Daily Site Visit Report

Viewing Direction: West	**Viewing Direction**: North
	
East edge of right of way facing west. Advanced BH23-11 east of BH23-10.	On right of way facing north. Advanced BH23-12 south of BH23-05.
Viewing Direction: South	**Viewing Direction**: South
	
On right of way facing south. Advanced BH23-13 north of BH23-05.	On right of way facing south. Collected BS23-09.

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: South
	
On right of way facing south. Collected BS23-10.	On right of way facing south. Collected BS23-11.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Lakin Pullman

Signature: 

Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Todd 36 State 1	API #:	30-015-20341
Inspection Date:	5/2/2025		

Summary of Times	
Arrived at Site	5/2/2025 12:30 PM
Departed Site	5/2/2025 1:39 PM

Daily Site Visit Report

Site Sketch

Site Sketch

Daily Site Visit Report

Field Notes

12:41 Examined area of former release. The release, which ran along the west side of the poly line, contained little to no contaminate and was left to naturally attenuate.

13:10 A variety of flora that matches the surrounding area is growing on the former release area

13:11 The area has a greater than 85% native plant coverage

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: South

Looking from the pad to the former release area

Viewing Direction: West

Gypsum Phacelia, yellow plainsman, and other native flower species

Viewing Direction: South

Oerothera flowers across the release area

Viewing Direction: South

Various native docks and shrubs across the release area

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: Northeast
	
Native oak species growing in the release area	Native blanket flower in release area
Viewing Direction: Southeast	**Viewing Direction**: Northeast
	
Native beeblossom in release area	More oak in the release area

Daily Site Visit Report

Viewing Direction: South

Thick coverage of native grasses and flowers in the south section of the release area

Viewing Direction: Northeast

Densely packed flora in the northern section

Viewing Direction: West

More native oak in around the southern tip

Viewing Direction: North

Looking north from the southern tip

Daily Site Visit Report

Viewing Direction: Southwest

Area west of the release area for comparison. The area seems to provide a comparable density and diversity of flora to the release area.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Katrina Taylor

Signature: 
Signature

VERTEX

Daily Field Log

Site: Todd 36 State 1

Client: Devon Energy Production Company

03/18/2026

Location: Right of Way 32.270239°N 103.744100°W

By: Katrina Taylor

Weather	Sunny|Clear|Warm	Contractor	Kelley Oil Field Services
Staff On-site	Katrina Taylor	Contractor Crew	Brice Baylock (Devon) | Fransico and Jess (Kelley)
Staff From Time	07:44	Equipment On Site	Backhoe
Tailgate meeting conducted	Yes	Incident ID Number	

Work Summary:

Collect the two test pits OCD requested in the denial

Time	Observations
08:25:23	Completed saftey paperwork upon arrival
08:25:33	Discussed previously found unmarked fiberglass lines. Showed Brice and Fransico the previous DFRs. The previous report stated the lines were found at 2ft. The choice was made to hand dig in search for the lines.
14:25:46	The two points were collected with a combination of hand digging and hand aguaring due to saftey concerns. Equipment was used to close back all ground disturbance EOD
14:27:46	All samples were field screened for chlorides using EC on location.
14:30:34	Sampling activities caused minimal ground disturbance. The area still represents greater than 70% coverage compared to the surrounding area and is expected to largely recover to pre-sampling activity levels in the upcoming growing season.

Pictures/Attachments

Date:	3/18/2026
Time:	09:14
Notes:	3 poly's and one fiber glass found in the northern area west of the release area laid at 2.5ft and running roughly north-south
Latitude:	32.27047777777778
Longitude:	-103.74413333333334
Direction:	SW

VERTEX

Daily Field Log
Site: Todd 36 State 1
Client: Devon Energy Production Company

Pictures/Attachments

Date: 3/18/2026 Time: 09:15 Notes: 3 poly's and one fiber glass found in the northern area west of the release area laid at 2.5ft and running roughly north-south. Lines had old flags showing it was likely marked 3 years ago. Latitude: 32.27047777777778 Longitude: -103.74413888888888 Direction: W	
Date: 3/18/2026 Time: 09:17 Notes: A single unmarked polyline was hand dug out between the 3 poly lines and the release area. The line was 2ft deep and had old pinflags showing it was marked 3 years ago. The line runs north-south along the release area Latitude: 32.27047777777778 Longitude: -103.74408611111112 Direction: NW	

VERTEX

Daily Field Log

Site: Todd 36 State 1
Client: Devon Energy Production Company

Pictures/Attachments

Date: 3/18/2026 Time: 10:49 Notes: TP26-01 was hand dug and augared Latitude: 32.27001944444444 Longitude: -103.74408611111112 Direction: NE	
Date: 3/18/2026 Time: 10:49 Notes: TP26-01 was hand dug and augared Latitude: 32.27001944444444 Longitude: -103.74409444444444 Direction: N	

VERTEX

Daily Field Log
Site: Todd 36 State 1
Client: Devon Energy Production Company

Pictures/Attachments

Date: 3/18/2026 Time: 10:50 Notes: ROW next to the line and other spots further north made it clear there was unmarked lines near by. A Hydrivac could not access the area so TP26-01 was identified to be unsafe to operate with equipment Latitude: 32.27001944444444 Longitude: -103.74408055555556 Direction: SW	
Date: 3/18/2026 Time: 11:47 Notes: TP26-02 was hand excavated and hand augared to 10ft bgs. Samples were collected every foot. 5 unmarked lines in the area were hand dug out before the determination to proceed without equipment was decided Latitude: 32.270538888888886 Longitude: -103.74407222222223 Direction: N	

VERTEX

Daily Field Log
Site: Todd 36 State 1
Client: Devon Energy Production Company

Pictures/Attachments

Date: 3/18/2026 Time: 14:24 Notes: Overview photo of remediated release area Latitude: 32.270630555555556 Longitude: -103.74411111111111 Direction: NE	
Date: 3/18/2026 Time: 14:25 Notes: TP26-01 was closed in with equipment EOD Latitude: 32.270630555555556 Longitude: -103.74410277777778 Direction: E	

VERTEX

Daily Field Log
Site: Todd 36 State 1
Client: Devon Energy Production Company

Pictures/Attachments

Date: 3/18/2026 Time: 14:32 Notes: Overview of the southern remediated release area Latitude: 32.27017222222222 Longitude: -103.74401944444445 Direction: S	
Date: 3/18/2026 Time: 14:33 Notes: The area of TP26-01 was covered EOD Latitude: 32.27001944444444 Longitude: -103.74413333333334 Direction: S	

APPENDIX D – Notifications

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Thursday, December 8, 2022 2:54 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; spills@slo.state.nm.us
Subject: [EXTERNAL] 48 Hour notice confirmatory sampling

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

nAB1534452923, 2RP-3438, DOR: 12/03/2015

nAB15323346, 2RP-3405, DOR: 11/19/2015

Site Name: Todd 36 State 1

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

On Monday, December 12, 2022, at approximately 8:00 a.m.,Vertex staff will be on site to conduct confirmatory sampling through December 16, 2022 . I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Thank you,

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

Dhugal Hanton <vertexresourcegroupusa@gmail.com> Mon, Feb 13, 2023 at 8:10 AM
To: "Enviro, OCD, EMNRD" <OCD.Enviro@emnrd.nm.gov>

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

nAB1534452923, 2RP-3438, DOR: 12/03/2015

nAB15323346, 2RP-3405, DOR: 11/19/2015

Site Name: Todd 36 State 1

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

From Wednesday February 15 through 17, 2023, at approximately 8:00 a.m.,Vertex staff will be on site to continue to conduct confirmatory sampling. I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Thank you,

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

On Mon, Jan 23, 2023 at 8:08 AM Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov> wrote:

> Kent
>
> Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.
>
> JH
>
> **Jocelyn Harimon** ● Environmental Specialist
>
> Environmental Bureau
>
> EMNRD - Oil Conservation Division
>
> 1220 South St. Francis Drive | Santa Fe, NM 87505
>
> (505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
>
> http:// **www.emnrd.nm.gov**

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Monday, January 23, 2023 7:05 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: Re: [EXTERNAL] 48 Hour notice confirmatory sampling

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

nAB1534452923, 2RP-3438, DOR: 12/03/2015

nAB15323346, 2RP-3405, DOR: 11/19/2015

Site Name: Todd 36 State 1

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

On Wednesday, January 25, 2023, at approximately 8:00 a.m.,Vertex staff will be on site to continue to conduct confirmatory sampling through January 31, 2023. I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Thank you,

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

Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov> Mon, Feb 13, 2023 at 8:50 AM
To: Dhugal Hanton <vertexresourcegroupusa@gmail.com>, "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, "Hamlet, Robert, EMNRD" <Robert.Hamlet@emnrd.nm.gov>

Kent,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

1220 South St. Francis Drive | Santa Fe, NM 87505

(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov

http:// **www.emnrd.nm.gov**

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Monday, February 13, 2023 8:10 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: Re: [EXTERNAL] 48 Hour notice confirmatory sampling

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

nAB1534452923, 2RP-3438, DOR: 12/03/2015

nAB15323346, 2RP-3405, DOR: 11/19/2015

Site Name: Todd 36 State 1

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

From Wednesday February 15 through 17, 2023, at approximately 8:00 a.m.,Vertex staff will be on site to continue to conduct confirmatory sampling. I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Thank you,

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Thursday, December 8, 2022 2:54 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; spills@slo.state.nm.us
Subject: [EXTERNAL] 48 Hour notice confirmatory sampling

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

nAB1534452923, 2RP-3438, DOR: 12/03/2015

nAB15323346, 2RP-3405, DOR: 11/19/2015

Site Name: Todd 36 State 1

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

On Monday, December 12, 2022, at approximately 8:00 a.m.,Vertex staff will be on site to conduct confirmatory sampling through December 16, 2022 . I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Thank you,

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

Dhugal Hanton <vertexresourcegroupusa@gmail.com> Tue, Apr 18, 2023 at 1:00 PM
To: "Enviro, OCD, EMNRD" <OCD.Enviro@emnrd.nm.gov>

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

Site Name: Todd 36 State #001

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

On Friday, April 21, 2023, at approximately 8:00 a.m.,Vertex staff will be on site to conduct confirmatory sampling. I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Thank you,

Kent Stallings P.G.
Project Manager

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

P 575.725.5001
C 346.814.1413

On Tue, Mar 21, 2023 at 8:31 AM Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov> wrote:

> Kent,
>
> Please be aware that notification requirements are **two business days**, per rule. Also, when notifying the OCD of a multiple release sampling please include specific days and times of the sampling for each site. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.
>
> JH
>
> **Jocelyn Harimon** ● Environmental Specialist
>
> Environmental Bureau
>
> EMNRD - Oil Conservation Division
>
> 1220 South St. Francis Drive | Santa Fe, NM 87505
>
> (505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
>
> http:// **www.emnrd.nm.gov**
>
> ---
>
> **From:** Dhugal Hanton <vertexresourcegroupusa@gmail.com>
> **Sent:** Tuesday, March 21, 2023 8:13 AM
> **To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
> **Cc:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
> **Subject:** Re: [EXTERNAL] 48 Hour notice confirmatory sampling
>
> All,
>
> Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:
>
> nAB1703948537, 2RP-4105, DOR: 1/28/2017
>
> nAB1534452923, 2RP-3438, DOR: 12/03/2015
>
> nAB15323346, 2RP-3405, DOR: 11/19/2015
>
> Site Name: Todd 36 State 1
>
> This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.
>
> On March 23, 2023, at approximately 10:00 a.m.,Vertex staff will be on site to conduct confirmatory sampling through March 26, 2023 . I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.
>
> Hopefully this will be the last notice.
>
> Thank you,

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

P 575.725.5001
C 346.814.1413
F

Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov> Wed, Apr 19, 2023 at 1:25 PM
To: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, "Hamlet, Robert, EMNRD" <Robert.Hamlet@emnrd.nm.gov>

Kent,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

1220 South St. Francis Drive | Santa Fe, NM 87505

(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov

http:// **www.emnrd.nm.gov**

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Tuesday, April 18, 2023 1:00 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: Re: [EXTERNAL] 48 Hour notice confirmatory sampling

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

Site Name: Todd 36 State #001

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

On Friday, April 21, 2023, at approximately 8:00 a.m.,Vertex staff will be on site to conduct confirmatory sampling. I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Thank you,

Kent Stallings P.G.
Project Manager

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

P 575.725.5001
C 346.814.1413

On Tue, Mar 21, 2023 at 8:31 AM Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov> wrote:

> Kent,
>
> Please be aware that notification requirements are **two business days**, per rule. Also, when notifying the OCD of a multiple release sampling please include specific days and times of the sampling for each site. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.
>
> JH
>
> **Jocelyn Harimon** ● Environmental Specialist
>
> Environmental Bureau
>
> EMNRD - Oil Conservation Division
>
> 1220 South St. Francis Drive | Santa Fe, NM 87505
>
> (505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
>
> http:// **www.emnrd.nm.gov**

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Tuesday, March 21, 2023 8:13 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: Re: [EXTERNAL] 48 Hour notice confirmatory sampling

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAB1703948537, 2RP-4105, DOR: 1/28/2017

nAB1534452923, 2RP-3438, DOR: 12/03/2015

nAB15323346, 2RP-3405, DOR: 11/19/2015

Site Name: Todd 36 State 1

This work will be completed on behalf of Harvard Petroleum Company, LLC and Devon Energy, LLC.

On March 23, 2023, at approximately 10:00 a.m.,Vertex staff will be on site to conduct confirmatory sampling through March 26, 2023 . I can be reached at 346-814-1413. If you need directions to the site, please do not hesitate to contact me. If you have any questions or concerns regarding this notification, please let me know.

Hopefully this will be the last notice.

Thank you,

APPENDIX E – Laboratory Data Reports and Chain of Custody Forms

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 03, 2022

Kent Stallings

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

RE: Todd 36 State 1 Right of Way OrderNo.: 2210C53

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 24 sample(s) on 10/26/2022 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-01 0'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:00:00 PM
Lab ID: 2210C53-001 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/28/2022 9:59:37 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/28/2022 9:59:37 PM
Surr: DNOP	106	21-129		%Rec	1	10/28/2022 9:59:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/28/2022 10:20:00 PM
Surr: BFB	100	37.7-212		%Rec	1	10/28/2022 10:20:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/28/2022 10:20:00 PM
Toluene	ND	0.048		mg/Kg	1	10/28/2022 10:20:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/28/2022 10:20:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/28/2022 10:20:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	10/28/2022 10:20:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	10/31/2022 10:22:58 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-01 2'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:05:00 PM
Lab ID: 2210C53-002 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/28/2022 4:40:09 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/28/2022 4:40:09 PM
Surr: DNOP	97.0	21-129		%Rec	1	10/28/2022 4:40:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2022 9:10:26 PM
Surr: BFB	88.3	37.7-212		%Rec	1	10/28/2022 9:10:26 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	10/28/2022 9:10:26 PM
Toluene	ND	0.050		mg/Kg	1	10/28/2022 9:10:26 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2022 9:10:26 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/28/2022 9:10:26 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	10/28/2022 9:10:26 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	10/31/2022 10:35:22 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-01 4'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:10:00 PM
Lab ID: 2210C53-003 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/28/2022 5:22:38 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/28/2022 5:22:38 PM
Surr: DNOP	98.4	21-129		%Rec	1	10/28/2022 5:22:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/28/2022 9:33:57 PM
Surr: BFB	88.7	37.7-212		%Rec	1	10/28/2022 9:33:57 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.023		mg/Kg	1	10/28/2022 9:33:57 PM
Toluene	ND	0.047		mg/Kg	1	10/28/2022 9:33:57 PM
Ethylbenzene	ND	0.047		mg/Kg	1	10/28/2022 9:33:57 PM
Xylenes, Total	ND	0.094		mg/Kg	1	10/28/2022 9:33:57 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	10/28/2022 9:33:57 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	61		mg/Kg	20	10/31/2022 10:47:47 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-02 0'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:15:00 PM
Lab ID: 2210C53-004 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/28/2022 5:36:46 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/28/2022 5:36:46 PM
Surr: DNOP	105	21-129		%Rec	1	10/28/2022 5:36:46 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/28/2022 9:57:25 PM
Surr: BFB	88.8	37.7-212		%Rec	1	10/28/2022 9:57:25 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	10/28/2022 9:57:25 PM
Toluene	ND	0.048		mg/Kg	1	10/28/2022 9:57:25 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/28/2022 9:57:25 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/28/2022 9:57:25 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	10/28/2022 9:57:25 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	10/31/2022 11:00:11 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-02 2'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:20:00 PM
Lab ID: 2210C53-005 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/28/2022 5:51:00 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/28/2022 5:51:00 PM
Surr: DNOP	101	21-129		%Rec	1	10/28/2022 5:51:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2022 11:07:41 PM
Surr: BFB	89.3	37.7-212		%Rec	1	10/28/2022 11:07:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	10/28/2022 11:07:41 PM
Toluene	ND	0.050		mg/Kg	1	10/28/2022 11:07:41 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2022 11:07:41 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/28/2022 11:07:41 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	10/28/2022 11:07:41 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	10/31/2022 11:12:35 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-02 4'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:25:00 PM
Lab ID: 2210C53-006 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/28/2022 6:05:07 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/28/2022 6:05:07 PM
Surr: DNOP	98.5	21-129		%Rec	1	10/28/2022 6:05:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2022 11:31:08 PM
Surr: BFB	89.3	37.7-212		%Rec	1	10/28/2022 11:31:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	10/28/2022 11:31:08 PM
Toluene	ND	0.050		mg/Kg	1	10/28/2022 11:31:08 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2022 11:31:08 PM
Xylenes, Total	ND	0.099		mg/Kg	1	10/28/2022 11:31:08 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	10/28/2022 11:31:08 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	10/31/2022 11:49:48 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-03 0'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:30:00 PM
Lab ID: 2210C53-007 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	10/28/2022 6:19:08 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/28/2022 6:19:08 PM
Surr: DNOP	112	21-129		%Rec	1	10/28/2022 6:19:08 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2022 11:54:42 PM
Surr: BFB	90.5	37.7-212		%Rec	1	10/28/2022 11:54:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	10/28/2022 11:54:42 PM
Toluene	ND	0.050		mg/Kg	1	10/28/2022 11:54:42 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2022 11:54:42 PM
Xylenes, Total	ND	0.099		mg/Kg	1	10/28/2022 11:54:42 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	10/28/2022 11:54:42 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	11/1/2022 12:02:12 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-03 2'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 1:35:00 PM
Lab ID: 2210C53-008 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/28/2022 6:33:09 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/28/2022 6:33:09 PM
Surr: DNOP	105	21-129		%Rec	1	10/28/2022 6:33:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/29/2022 12:18:15 AM
Surr: BFB	85.7	37.7-212		%Rec	1	10/29/2022 12:18:15 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 12:18:15 AM
Toluene	ND	0.049		mg/Kg	1	10/29/2022 12:18:15 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/29/2022 12:18:15 AM
Xylenes, Total	ND	0.098		mg/Kg	1	10/29/2022 12:18:15 AM
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	10/29/2022 12:18:15 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	11/1/2022 12:14:37 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-03 4'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 1:40:00 PM
Lab ID: 2210C53-009 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/28/2022 10:40:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/28/2022 10:40:22 PM
Surr: DNOP	98.2	21-129		%Rec	1	10/28/2022 10:40:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/29/2022 12:18:00 AM
Surr: BFB	98.8	37.7-212		%Rec	1	10/29/2022 12:18:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.023		mg/Kg	1	10/29/2022 12:18:00 AM
Toluene	ND	0.047		mg/Kg	1	10/29/2022 12:18:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	10/29/2022 12:18:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	10/29/2022 12:18:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	10/29/2022 12:18:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	11/1/2022 12:27:01 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-04 0'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 1:45:00 PM
Lab ID: 2210C53-010 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/28/2022 10:54:18 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/28/2022 10:54:18 PM
Surr: DNOP	104	21-129		%Rec	1	10/28/2022 10:54:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/29/2022 1:17:00 AM
Surr: BFB	101	37.7-212		%Rec	1	10/29/2022 1:17:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 1:17:00 AM
Toluene	ND	0.047		mg/Kg	1	10/29/2022 1:17:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	10/29/2022 1:17:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	10/29/2022 1:17:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	10/29/2022 1:17:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	11/1/2022 10:33:15 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-04 2'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 1:50:00 PM
Lab ID: 2210C53-011 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/28/2022 11:07:59 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/28/2022 11:07:59 PM
Surr: DNOP	119	21-129		%Rec	1	10/28/2022 11:07:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/29/2022 2:16:00 AM
Surr: BFB	99.7	37.7-212		%Rec	1	10/29/2022 2:16:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 2:16:00 AM
Toluene	ND	0.048		mg/Kg	1	10/29/2022 2:16:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	10/29/2022 2:16:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	10/29/2022 2:16:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	10/29/2022 2:16:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	11/1/2022 10:45:40 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-04 4'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 1:55:00 PM
Lab ID: 2210C53-012 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/28/2022 11:21:29 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/28/2022 11:21:29 PM
Surr: DNOP	119	21-129		%Rec	1	10/28/2022 11:21:29 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/29/2022 2:35:00 AM
Surr: BFB	102	37.7-212		%Rec	1	10/29/2022 2:35:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 2:35:00 AM
Toluene	ND	0.048		mg/Kg	1	10/29/2022 2:35:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	10/29/2022 2:35:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	10/29/2022 2:35:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	10/29/2022 2:35:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	10/31/2022 10:36:16 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-05 0'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 2:00:00 PM
Lab ID: 2210C53-013 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	140	13		mg/Kg	1	10/28/2022 11:34:53 PM
Motor Oil Range Organics (MRO)	120	43		mg/Kg	1	10/28/2022 11:34:53 PM
Surr: DNOP	116	21-129		%Rec	1	10/28/2022 11:34:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/29/2022 2:55:00 AM
Surr: BFB	102	37.7-212		%Rec	1	10/29/2022 2:55:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 2:55:00 AM
Toluene	ND	0.048		mg/Kg	1	10/29/2022 2:55:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	10/29/2022 2:55:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	10/29/2022 2:55:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	10/29/2022 2:55:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	10/31/2022 11:13:18 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-05 2'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:05:00 PM
Lab ID: 2210C53-014 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	10/28/2022 11:48:40 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	10/28/2022 11:48:40 PM
Surr: DNOP	112	21-129		%Rec	1	10/28/2022 11:48:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/29/2022 3:15:00 AM
Surr: BFB	105	37.7-212		%Rec	1	10/29/2022 3:15:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.023		mg/Kg	1	10/29/2022 3:15:00 AM
Toluene	ND	0.047		mg/Kg	1	10/29/2022 3:15:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	10/29/2022 3:15:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	10/29/2022 3:15:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	10/29/2022 3:15:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	83	60		mg/Kg	20	10/31/2022 11:50:20 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-05 4'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 2:10:00 PM
Lab ID: 2210C53-015 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 12:02:21 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/29/2022 12:02:21 AM
Surr: DNOP	96.5	21-129		%Rec	1	10/29/2022 12:02:21 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/29/2022 3:34:00 AM
Surr: BFB	101	37.7-212		%Rec	1	10/29/2022 3:34:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.023		mg/Kg	1	10/29/2022 3:34:00 AM
Toluene	ND	0.047		mg/Kg	1	10/29/2022 3:34:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	10/29/2022 3:34:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	10/29/2022 3:34:00 AM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	10/29/2022 3:34:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	530	60		mg/Kg	20	11/1/2022 12:02:41 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-06 0'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:15:00 PM
Lab ID: 2210C53-016 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 12:15:40 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/29/2022 12:15:40 AM
Surr: DNOP	102	21-129		%Rec	1	10/29/2022 12:15:40 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/29/2022 3:54:00 AM
Surr: BFB	101	37.7-212		%Rec	1	10/29/2022 3:54:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 3:54:00 AM
Toluene	ND	0.048		mg/Kg	1	10/29/2022 3:54:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	10/29/2022 3:54:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	10/29/2022 3:54:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	10/29/2022 3:54:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	61		mg/Kg	20	11/1/2022 12:39:44 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-06 2'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:20:00 PM
Lab ID: 2210C53-017 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/29/2022 12:29:14 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/29/2022 12:29:14 AM
Surr: DNOP	114	21-129		%Rec	1	10/29/2022 12:29:14 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/29/2022 4:14:00 AM
Surr: BFB	100	37.7-212		%Rec	1	10/29/2022 4:14:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.023		mg/Kg	1	10/29/2022 4:14:00 AM
Toluene	ND	0.046		mg/Kg	1	10/29/2022 4:14:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	10/29/2022 4:14:00 AM
Xylenes, Total	ND	0.093		mg/Kg	1	10/29/2022 4:14:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	10/29/2022 4:14:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	11/1/2022 12:52:05 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-06 4'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:25:00 PM
Lab ID: 2210C53-018 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 12:42:52 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/29/2022 12:42:52 AM
Surr: DNOP	111	21-129		%Rec	1	10/29/2022 12:42:52 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/29/2022 4:33:00 AM
Surr: BFB	99.8	37.7-212		%Rec	1	10/29/2022 4:33:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.023		mg/Kg	1	10/29/2022 4:33:00 AM
Toluene	ND	0.047		mg/Kg	1	10/29/2022 4:33:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	10/29/2022 4:33:00 AM
Xylenes, Total	ND	0.093		mg/Kg	1	10/29/2022 4:33:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	10/29/2022 4:33:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	87	60		mg/Kg	20	11/1/2022 1:04:25 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-07 0'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:30:00 PM
Lab ID: 2210C53-019 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 12:56:15 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/29/2022 12:56:15 AM
Surr: DNOP	101	21-129		%Rec	1	10/29/2022 12:56:15 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/29/2022 5:13:00 AM
Surr: BFB	99.7	37.7-212		%Rec	1	10/29/2022 5:13:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 5:13:00 AM
Toluene	ND	0.048		mg/Kg	1	10/29/2022 5:13:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	10/29/2022 5:13:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	10/29/2022 5:13:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	10/29/2022 5:13:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	11/1/2022 1:16:47 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-07 2'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:35:00 PM
Lab ID: 2210C53-020 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 1:09:35 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/29/2022 1:09:35 AM
Surr: DNOP	104	21-129		%Rec	1	10/29/2022 1:09:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/29/2022 5:32:00 AM
Surr: BFB	99.4	37.7-212		%Rec	1	10/29/2022 5:32:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	10/29/2022 5:32:00 AM
Toluene	ND	0.049		mg/Kg	1	10/29/2022 5:32:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/29/2022 5:32:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	10/29/2022 5:32:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	10/29/2022 5:32:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	59		mg/Kg	20	11/1/2022 1:29:08 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-07 4'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:40:00 PM
Lab ID: 2210C53-021 **Matrix:** SOIL
Received Date: 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/29/2022 1:23:05 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/29/2022 1:23:05 AM
Surr: DNOP	116	21-129		%Rec	1	10/29/2022 1:23:05 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/29/2022 5:52:00 AM
Surr: BFB	97.8	37.7-212		%Rec	1	10/29/2022 5:52:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	10/29/2022 5:52:00 AM
Toluene	ND	0.049		mg/Kg	1	10/29/2022 5:52:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/29/2022 5:52:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	10/29/2022 5:52:00 AM
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	10/29/2022 5:52:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	11/1/2022 1:41:29 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-08 0'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 2:45:00 PM
Lab ID: 2210C53-022 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 1:36:19 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/29/2022 1:36:19 AM
Surr: DNOP	96.8	21-129		%Rec	1	10/29/2022 1:36:19 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/29/2022 6:12:00 AM
Surr: BFB	102	37.7-212		%Rec	1	10/29/2022 6:12:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	10/29/2022 6:12:00 AM
Toluene	ND	0.049		mg/Kg	1	10/29/2022 6:12:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/29/2022 6:12:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	10/29/2022 6:12:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	10/29/2022 6:12:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	11/1/2022 1:53:50 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH22-08 2'
Project: Todd 36 State 1 Right of Way **Collection Date:** 10/21/2022 2:50:00 PM
Lab ID: 2210C53-023 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 1:49:41 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/29/2022 1:49:41 AM
Surr: DNOP	104	21-129		%Rec	1	10/29/2022 1:49:41 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/29/2022 6:31:00 AM
Surr: BFB	96.7	37.7-212		%Rec	1	10/29/2022 6:31:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 6:31:00 AM
Toluene	ND	0.048		mg/Kg	1	10/29/2022 6:31:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	10/29/2022 6:31:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	10/29/2022 6:31:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	10/29/2022 6:31:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	11/1/2022 2:06:10 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 **2210C53**
Date Reported: **11/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH22-08 4'
Project: Todd 36 State 1 Right of Way
Collection Date: 10/21/2022 2:55:00 PM
Lab ID: 2210C53-024 **Matrix:** SOIL **Received Date:** 10/26/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/29/2022 2:03:24 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/29/2022 2:03:24 AM
Surr: DNOP	95.1	21-129		%Rec	1	10/29/2022 2:03:24 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/29/2022 6:51:00 AM
Surr: BFB	103	37.7-212		%Rec	1	10/29/2022 6:51:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	10/29/2022 6:51:00 AM
Toluene	ND	0.047		mg/Kg	1	10/29/2022 6:51:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	10/29/2022 6:51:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	10/29/2022 6:51:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	10/29/2022 6:51:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	11/1/2022 2:18:31 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.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **LCS-71186** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **71186** RunNo: **92227**
Prep Date: **10/31/2022** Analysis Date: **10/31/2022** SeqNo: **3312379** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	90	110			

Sample ID: **MB-71189** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **71189** RunNo: **92231**
Prep Date: **10/31/2022** Analysis Date: **10/31/2022** SeqNo: **3312673** Units: **mg/Kg**

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

Sample ID: **LCS-71189** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **71189** RunNo: **92231**
Prep Date: **10/31/2022** Analysis Date: **10/31/2022** SeqNo: **3312674** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.7	90	110			

Sample ID: **MB-71186** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **71186** RunNo: **92252**
Prep Date: **10/31/2022** Analysis Date: **11/1/2022** SeqNo: **3313631** Units: **mg/Kg**

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

Sample ID: **MB-71198** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **71198** RunNo: **92252**
Prep Date: **11/1/2022** Analysis Date: **11/1/2022** SeqNo: **3313633** Units: **mg/Kg**

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

Sample ID: **LCS-71198** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **71198** RunNo: **92252**
Prep Date: **11/1/2022** Analysis Date: **11/1/2022** SeqNo: **3313634** 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			

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#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **LCS-71120** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **71120** RunNo: **92169**
Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310696** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	15	50.00	0	106	64.4	127			
Surr: DNOP	4.9		5.000		98.7	21	129			

Sample ID: **MB-71113** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **71113** RunNo: **92169**
Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310697** 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	11		10.00		105	21	129			

Sample ID: **LCS-71113** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **71113** RunNo: **92169**
Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310698** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	15	50.00	0	102	64.4	127			
Surr: DNOP	4.9		5.000		98.5	21	129			

Sample ID: **2210C53-002AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BH22-01 2'** Batch ID: **71120** RunNo: **92169**
Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310700** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	15	48.78	0	104	36.1	154			
Surr: DNOP	4.8		4.878		98.4	21	129			

Sample ID: **2210C53-002AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BH22-01 2'** Batch ID: **71120** RunNo: **92169**
Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310701** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	14	46.13	0	101	36.1	154	8.26	33.9	
Surr: DNOP	4.4		4.613		95.0	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#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **2210C53-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **BH22-01 0'** Batch ID: **71113** RunNo: **92169**

Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310723** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	14	46.99	0	105	36.1	154			
Surr: DNOP	4.8		4.699		102	21	129			

Sample ID: **2210C53-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **BH22-01 0'** Batch ID: **71113** RunNo: **92169**

Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310724** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	15	48.50	0	89.9	36.1	154	11.9	33.9	
Surr: DNOP	4.4		4.850		91.3	21	129	0	0	

Sample ID: **MB-71120** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **71120** RunNo: **92203**

Prep Date: **10/27/2022** Analysis Date: **10/31/2022** SeqNo: **3310854** 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		79.4	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#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **mb-71090**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **71090**	RunNo: **92156**							
Prep Date: **10/26/2022**	Analysis Date: **10/28/2022**	SeqNo: **3309643**	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	910		1000		90.6	37.7	212			

Sample ID: **lcs-71090**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **71090**	RunNo: **92156**							
Prep Date: **10/26/2022**	Analysis Date: **10/28/2022**	SeqNo: **3309644**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.8	72.3	137			
Surr: BFB	1800		1000		181	37.7	212			

Sample ID: **lcs-71084**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **71084**	RunNo: **92196**							
Prep Date: **10/26/2022**	Analysis Date: **10/28/2022**	SeqNo: **3310373**	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	2200		1000		216	37.7	212			S

Sample ID: **mb-71084**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **71084**	RunNo: **92196**							
Prep Date: **10/26/2022**	Analysis Date: **10/28/2022**	SeqNo: **3310374**	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	970		1000		97.5	37.7	212			

Sample ID: **lcs-71111**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **71111**	RunNo: **92196**							
Prep Date: **10/27/2022**	Analysis Date: **10/28/2022**	SeqNo: **3310397**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.4	72.3	137			
Surr: BFB	2100		1000		213	37.7	212			S

Sample ID: **mb-71111**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **71111**	RunNo: **92196**							
Prep Date: **10/27/2022**	Analysis Date: **10/28/2022**	SeqNo: **3310398**	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#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **mb-71111** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **71111** RunNo: **92196**
Prep Date: **10/27/2022** Analysis Date: **10/28/2022** SeqNo: **3310398** 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: **2210C53-009ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BH22-03 4'** Batch ID: **71111** RunNo: **92196**
Prep Date: **10/27/2022** Analysis Date: **10/29/2022** SeqNo: **3310400** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.34	0	93.4	70	130			
Surr: BFB	2100		933.7		220	37.7	212			S

Sample ID: **2210C53-009amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BH22-03 4'** Batch ID: **71111** RunNo: **92196**
Prep Date: **10/27/2022** Analysis Date: **10/29/2022** SeqNo: **3310401** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.36	0	99.4	70	130	6.27	20	
Surr: BFB	2000		934.6		219	37.7	212	0	0	S

Sample ID: **lcs-71125** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **71125** RunNo: **92196**
Prep Date: **10/27/2022** Analysis Date: **10/29/2022** SeqNo: **3310421** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2200		1000		221	37.7	212			S

Sample ID: **mb-71125** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **71125** RunNo: **92196**
Prep Date: **10/27/2022** Analysis Date: **10/29/2022** SeqNo: **3310422** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	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#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **mb-71090** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **71090** RunNo: **92156**

Prep Date: **10/26/2022** Analysis Date: **10/28/2022** SeqNo: **3309704** 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	0.98		1.000		98.3	70	130			

Sample ID: **LCS-71090** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **71090** RunNo: **92156**

Prep Date: **10/26/2022** Analysis Date: **10/28/2022** SeqNo: **3309705** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.7	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.9	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.4	70	130			

Sample ID: **lcs-71084** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **71084** RunNo: **92196**

Prep Date: **10/26/2022** Analysis Date: **10/28/2022** SeqNo: **3310523** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	118	80	120			
Toluene	1.2	0.050	1.000	0	118	80	120			
Ethylbenzene	1.2	0.050	1.000	0	116	80	120			
Xylenes, Total	3.5	0.10	3.000	0	116	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	70	130			

Sample ID: **mb-71084** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **71084** RunNo: **92196**

Prep Date: **10/26/2022** Analysis Date: **10/28/2022** SeqNo: **3310524** 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	1.1		1.000		112	70	130			

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#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **lcs-71111**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **71111**	RunNo: **92196**
Prep Date: **10/27/2022**	Analysis Date: **10/28/2022**	SeqNo: **3310547** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	114	80	120			
Toluene	1.2	0.050	1.000	0	115	80	120			
Ethylbenzene	1.1	0.050	1.000	0	115	80	120			
Xylenes, Total	3.4	0.10	3.000	0	114	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		120	70	130			

Sample ID: **mb-71111**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **71111**	RunNo: **92196**
Prep Date: **10/27/2022**	Analysis Date: **10/28/2022**	SeqNo: **3310548** 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		121	70	130			

Sample ID: **2210C53-010ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BH22-04 0'**	Batch ID: **71111**	RunNo: **92196**
Prep Date: **10/27/2022**	Analysis Date: **10/29/2022**	SeqNo: **3310551** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.023	0.9363	0	116	68.8	120			
Toluene	1.1	0.047	0.9363	0	117	73.6	124			
Ethylbenzene	1.1	0.047	0.9363	0	118	72.7	129			
Xylenes, Total	3.3	0.094	2.809	0	118	75.7	126			
Surr: 4-Bromofluorobenzene	1.1		0.9363		121	70	130			

Sample ID: **2210C53-010amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BH22-04 0'**	Batch ID: **71111**	RunNo: **92196**
Prep Date: **10/27/2022**	Analysis Date: **10/29/2022**	SeqNo: **3310552** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.023	0.9372	0	117	68.8	120	1.57	20	
Toluene	1.1	0.047	0.9372	0	120	73.6	124	2.35	20	
Ethylbenzene	1.1	0.047	0.9372	0	121	72.7	129	2.77	20	
Xylenes, Total	3.4	0.094	2.812	0	121	75.7	126	2.98	20	
Surr: 4-Bromofluorobenzene	1.1		0.9372		121	70	130	0	0	

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#: **2210C53**

03-Nov-22

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 1 Right of Way

Sample ID: **lcs-71125**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **71125**	RunNo: **92196**
Prep Date: **10/27/2022**	Analysis Date: **10/29/2022**	SeqNo: **3310571** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		121	70	130			

Sample ID: **mb-71125**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **71125**	RunNo: **92196**
Prep Date: **10/27/2022**	Analysis Date: **10/29/2022**	SeqNo: **3310572** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		120	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

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: Vertex Resources Services, Inc.

Work Order Number: 2210C53

RcptNo: 1

Received By: **Juan Rojas** 10/26/2022 7:10:00 AM

Completed By: **Sean Livingston** 10/26/2022 7:57:29 AM

Reviewed By: JR 10/26/22

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: KPA 10·26·22

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	3.3	Good				

Chain-of-Custody Record

Client: Vertex (Devon)

Mailing Address: on file

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☒ Rush 5 Day

Project Name:
Tod 36State 1 "Right of way"

Project #:
21E-02816

Project Manager:
Kent Stallings.

Sampler: J. Reta

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.4-0.1=3.3 (°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. 2210253	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)
10/21	13:00	Soil	BH22-01 0'	4oz Jar	Ice	001										
	13:05		BH22-01 2'			002										
	13:10		BH22-01 4'			003										
	13:15		BH22-02 0'			004										
	13:20		BH22-02 2'			005										
	13:25		BH22-02 4'			006										
	13:30		BH22-03 0'			007										
	13:35		BH22-03 2'			008										
	13:40		BH22-03 4'			009										
	13:45		BH22-04 0'			010										
	13:50		BH22-04 2'			011										
	13:55		BH22-04 4'			012										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
10/21	16:52	J. Reta				
10/25/22	1900			courier	10/26/22	7:40

Remarks: Direct Bill to Devon
cc: Monica Peppin

Devon - Harvard.

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: Vertex (Devon)

Mailing Address: On file

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☒ Rush 5 Day

Project Name: Todd 36 State 1 "Right of Way"

Project #: 21E-02816

Project Manager: Kent Stallings

Sampler: J. Reta

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.4-0.1=3.3 (°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.	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)
10/21	14:00	Soil	BH22-05 0'	4oz Jar	Ice	013										
	14:05		BH22-05 2'			014										
	14:10		BH22-05 4'			015										
	14:15		BH22-06 0'			016										
	14:20		BH22-06 2'			017										
	14:25		BH22-06 4'			018										
	14:30		BH22-07 0'			019										
	14:35		BH22-07 2'			020										
	14:40		BH22-07 4'			021										
	14:45		BH22-08 0'			022										
	14:50		BH22-08 2'			023										
	14:55		BH22-08 4'			024										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
10/21	16:52	J. Reta			10/25/22	0730
10/25/22	1900			Courier	10/26/22	7:10

Remarks: Direct B:11 to Devon
cc: Monica Peppin

Devon - Harvard.

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.

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

March 01, 2023

Kent Stallings

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

RE: Todd 36 State 1 Row OrderNo.: 2302813

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/18/2023 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Client Sample ID: SS23-01 0'
Project: Todd 36 State 1 Row
Collection Date: 2/16/2023 11:20:00 AM
Lab ID: 2302813-001 **Matrix:** SOIL
Received Date: 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/21/2023 12:07:23 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/21/2023 12:07:23 PM
Surr: DNOP	87.4	69-147		%Rec	1	2/21/2023 12:07:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/21/2023 11:55:33 AM
Surr: BFB	108	37.7-212		%Rec	1	2/21/2023 11:55:33 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/21/2023 11:55:33 AM
Toluene	ND	0.048		mg/Kg	1	2/21/2023 11:55:33 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/21/2023 11:55:33 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/21/2023 11:55:33 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/21/2023 11:55:33 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 3:15:22 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Project: Todd 36 State 1 Row
Lab ID: 2302813-002 **Matrix:** SOIL

Client Sample ID: SS23-02 0'
Collection Date: 2/16/2023 11:25:00 AM
Received Date: 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/21/2023 4:48:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/21/2023 4:48:59 PM
Surr: DNOP	119	69-147		%Rec	1	2/21/2023 4:48:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/21/2023 1:06:01 PM
Surr: BFB	107	37.7-212		%Rec	1	2/21/2023 1:06:01 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/21/2023 1:06:01 PM
Toluene	ND	0.049		mg/Kg	1	2/21/2023 1:06:01 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/21/2023 1:06:01 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/21/2023 1:06:01 PM
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	2/21/2023 1:06:01 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 3:27:42 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Project: Todd 36 State 1 Row
Lab ID: 2302813-003 **Matrix:** SOIL

Client Sample ID: SS23-03 0'
Collection Date: 2/16/2023 11:30:00 AM
Received Date: 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/21/2023 4:59:48 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/21/2023 4:59:48 PM
Surr: DNOP	96.8	69-147		%Rec	1	2/21/2023 4:59:48 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/21/2023 2:17:08 PM
Surr: BFB	106	37.7-212		%Rec	1	2/21/2023 2:17:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/21/2023 2:17:08 PM
Toluene	ND	0.048		mg/Kg	1	2/21/2023 2:17:08 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/21/2023 2:17:08 PM
Xylenes, Total	ND	0.096		mg/Kg	1	2/21/2023 2:17:08 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	2/21/2023 2:17:08 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 4:04:43 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Client Sample ID: SS23-04 0'
Project: Todd 36 State 1 Row
Collection Date: 2/16/2023 11:35:00 AM
Lab ID: 2302813-004 **Matrix:** SOIL **Received Date:** 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/23/2023 1:32:38 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/23/2023 1:32:38 AM
Surr: DNOP	80.5	69-147		%Rec	1	2/23/2023 1:32:38 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/21/2023 2:40:37 PM
Surr: BFB	106	37.7-212		%Rec	1	2/21/2023 2:40:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/21/2023 2:40:37 PM
Toluene	ND	0.048		mg/Kg	1	2/21/2023 2:40:37 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/21/2023 2:40:37 PM
Xylenes, Total	ND	0.096		mg/Kg	1	2/21/2023 2:40:37 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	2/21/2023 2:40:37 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 4:17:04 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Project: Todd 36 State 1 Row
Lab ID: 2302813-005 **Matrix:** SOIL

Client Sample ID: SS23-05 0'
Collection Date: 2/16/2023 11:40:00 AM
Received Date: 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/23/2023 2:04:00 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/23/2023 2:04:00 AM
Surr: DNOP	93.6	69-147		%Rec	1	2/23/2023 2:04:00 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/21/2023 3:04:10 PM
Surr: BFB	100	37.7-212		%Rec	1	2/21/2023 3:04:10 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/21/2023 3:04:10 PM
Toluene	ND	0.049		mg/Kg	1	2/21/2023 3:04:10 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/21/2023 3:04:10 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/21/2023 3:04:10 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/21/2023 3:04:10 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 4:29:25 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Project: Todd 36 State 1 Row
Lab ID: 2302813-006 **Matrix:** SOIL

Client Sample ID: SS23-06 0'
Collection Date: 2/16/2023 11:45:00 AM
Received Date: 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/23/2023 2:14:25 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/23/2023 2:14:25 AM
Surr: DNOP	72.5	69-147		%Rec	1	2/23/2023 2:14:25 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/21/2023 3:27:44 PM
Surr: BFB	107	37.7-212		%Rec	1	2/21/2023 3:27:44 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/21/2023 3:27:44 PM
Toluene	ND	0.049		mg/Kg	1	2/21/2023 3:27:44 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/21/2023 3:27:44 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/21/2023 3:27:44 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	2/21/2023 3:27:44 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 4:41:46 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Project: Todd 36 State 1 Row
Lab ID: 2302813-007 **Matrix:** SOIL

Client Sample ID: SS23-07 0'
Collection Date: 2/16/2023 11:50:00 AM
Received Date: 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/23/2023 2:24:48 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/23/2023 2:24:48 AM
Surr: DNOP	82.3	69-147		%Rec	1	2/23/2023 2:24:48 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/21/2023 3:51:15 PM
Surr: BFB	104	37.7-212		%Rec	1	2/21/2023 3:51:15 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/21/2023 3:51:15 PM
Toluene	ND	0.050		mg/Kg	1	2/21/2023 3:51:15 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/21/2023 3:51:15 PM
Xylenes, Total	ND	0.099		mg/Kg	1	2/21/2023 3:51:15 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	2/21/2023 3:51:15 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 4:54:06 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 **2302813**
Date Reported: **3/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy
Project: Todd 36 State 1 Row
Lab ID: 2302813-008 **Matrix:** SOIL

Client Sample ID: SS23-08 0'
Collection Date: 2/16/2023 11:55:00 AM
Received Date: 2/18/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/23/2023 2:35:10 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/23/2023 2:35:10 AM
Surr: DNOP	85.1	69-147		%Rec	1	2/23/2023 2:35:10 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/21/2023 4:14:41 PM
Surr: BFB	110	37.7-212		%Rec	1	2/21/2023 4:14:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/21/2023 4:14:41 PM
Toluene	ND	0.047		mg/Kg	1	2/21/2023 4:14:41 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/21/2023 4:14:41 PM
Xylenes, Total	ND	0.094		mg/Kg	1	2/21/2023 4:14:41 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	2/21/2023 4:14:41 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	2/21/2023 5:06:27 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.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2302813**

01-Mar-23

Client: Devon Energy

Project: Todd 36 State 1 Row

Sample ID:	**MB-73277**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**73277**	RunNo:	**94770**					
Prep Date:	**2/21/2023**	Analysis Date:	**2/21/2023**	SeqNo:	**3425718**	Units:	**mg/Kg**			

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

Sample ID:	**LCS-73277**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**73277**	RunNo:	**94770**					
Prep Date:	**2/21/2023**	Analysis Date:	**2/21/2023**	SeqNo:	**3425719**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.9	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#: **2302813**

01-Mar-23

Client: Devon Energy

Project: Todd 36 State 1 Row

Sample ID: **LCS-73273**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **73273**	RunNo: **94787**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3426200** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.5	61.9	130			
Surr: DNOP	4.7		5.000		93.4	69	147			

Sample ID: **MB-73273**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **73273**	RunNo: **94787**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3426201** 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	9.0		10.00		90.4	69	147			

Sample ID: **2302813-004AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SS23-04 0'**	Batch ID: **73281**	RunNo: **94831**
Prep Date: **2/21/2023**	Analysis Date: **2/23/2023**	SeqNo: **3427313** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.8	48.78	0	86.4	54.2	135			
Surr: DNOP	4.1		4.878		84.2	69	147			

Sample ID: **2302813-004AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SS23-04 0'**	Batch ID: **73281**	RunNo: **94831**
Prep Date: **2/21/2023**	Analysis Date: **2/23/2023**	SeqNo: **3427314** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.4	46.95	0	95.6	54.2	135	6.26	29.2	
Surr: DNOP	4.4		4.695		93.9	69	147	0	0	

Sample ID: **LCS-73281**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **73281**	RunNo: **94831**
Prep Date: **2/21/2023**	Analysis Date: **2/22/2023**	SeqNo: **3427388** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.1	61.9	130			
Surr: DNOP	4.4		5.000		88.2	69	147			

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#: **2302813**

01-Mar-23

Client: Devon Energy

Project: Todd 36 State 1 Row

Sample ID: **LCS-73294**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **73294**	RunNo: **94831**
Prep Date: **2/21/2023**	Analysis Date: **2/22/2023**	SeqNo: **3427390** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		104	69	147			

Sample ID: **MB-73281**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **73281**	RunNo: **94831**
Prep Date: **2/21/2023**	Analysis Date: **2/22/2023**	SeqNo: **3427392** 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	8.8		10.00		87.6	69	147			

Sample ID: **MB-73294**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **73294**	RunNo: **94831**
Prep Date: **2/21/2023**	Analysis Date: **2/22/2023**	SeqNo: **3427394** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.8	69	147			

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#: **2302813**

01-Mar-23

Client: Devon Energy

Project: Todd 36 State 1 Row

Sample ID: **LCS-73280**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425194** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.7	72.3	137			
Surr: BFB	2000		1000		195	37.7	212			

Sample ID: **mb-73280**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425195** 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	1100		1000		108	37.7	212			

Sample ID: **2302813-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SS23-01 0'**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425299** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	24.15	0	103	70	130			
Surr: BFB	2000		966.2		205	37.7	212			

Sample ID: **2302813-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SS23-01 0'**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425300** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	24.15	0	104	70	130	1.16	20	
Surr: BFB	2000		966.2		205	37.7	212	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#: **2302813**

01-Mar-23

Client: Devon Energy

Project: Todd 36 State 1 Row

Sample ID: **LCS-73280**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425196** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.8	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: **mb-73280**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425197** 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	1.0		1.000		101	70	130			

Sample ID: **2302813-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SS23-02 0'**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425306** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9794	0	94.0	68.8	120			
Toluene	0.96	0.049	0.9794	0.01751	96.0	73.6	124			
Ethylbenzene	0.95	0.049	0.9794	0	97.2	72.7	129			
Xylenes, Total	2.9	0.098	2.938	0	97.8	75.7	126			
Surr: 4-Bromofluorobenzene	0.99		0.9794		101	70	130			

Sample ID: **2302813-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SS23-02 0'**	Batch ID: **73280**	RunNo: **94751**
Prep Date: **2/20/2023**	Analysis Date: **2/21/2023**	SeqNo: **3425307** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9794	0	92.9	68.8	120	1.22	20	
Toluene	0.94	0.049	0.9794	0.01751	94.4	73.6	124	1.64	20	
Ethylbenzene	0.94	0.049	0.9794	0	95.7	72.7	129	1.59	20	
Xylenes, Total	2.8	0.098	2.938	0	96.1	75.7	126	1.68	20	
Surr: 4-Bromofluorobenzene	0.98		0.9794		99.8	70	130	0	0	

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.		

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: 2302813 | RcptNo: 1

Received By: Tracy Casarrubias 2/18/2023 9:30:00 AM

Completed By: Tracy Casarrubias 2/18/2023 10:15:16 AM

Reviewed By: CMe 2/20/23

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: TMC 2/18/23

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	0.9	Good	Yes	Morty		

Chain-of-Custody Record

Client: Devon (Vertex)

Mailing Address: on file

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☒ Rush 5 Day

Project Name: Todd 36 State 1 "ROW"

Project #: 21E-02816

Project Manager: Kent Stallings

Sampler: J. Reta

On Ice: ☑ Yes ☐ No mostly

# of Coolers: 1

Cooler Temp(including CF): 0.9-0.2 0.9 (°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. 2302813	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)
02/16/23	11:20	Soil	SS23-01 0'	4oz Jar	Ice	001										
	11:25		SS23-02 0'			002										
	11:30		SS23-03 0'			003										
	11:35		SS23-04 0'			004										
	11:40		SS23-05 0'			005										
	11:45		SS23-06 0'			006										
	11:50		SS23-07 0'			007										
	11:55		SS23-08 0'			008										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
02/16/23	845	J. Reta			2/17/23	845
2/17/23	1900				2/18/23	9:35

Remarks: Direct Bill to Devon
CC: Jacob Reta
Devon/Harvard.

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.

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

May 01, 2023

Kent Stallings

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

RE: Todd 36 State 001 ROW OrderNo.: 2304A16

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 10 sample(s) on 4/25/2023 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH23-09 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 7:00:00 AM
Lab ID: 2304A16-001 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/26/2023 8:20:34 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/26/2023 8:20:34 PM
Surr: DNOP	89.1	69-147		%Rec	1	4/26/2023 8:20:34 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/27/2023 5:52:00 AM
Surr: BFB	91.6	37.7-212		%Rec	1	4/27/2023 5:52:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 5:52:00 AM
Toluene	ND	0.049		mg/Kg	1	4/27/2023 5:52:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/27/2023 5:52:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	4/27/2023 5:52:00 AM
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	4/27/2023 5:52:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 2:53:31 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH23-09 2'
Project: Todd 36 State 001 ROW **Collection Date:** 4/21/2023 7:05:00 AM
Lab ID: 2304A16-002 **Matrix:** SOIL **Received Date:** 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/26/2023 8:31:20 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/26/2023 8:31:20 PM
Surr: DNOP	90.1	69-147		%Rec	1	4/26/2023 8:31:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/27/2023 6:14:00 AM
Surr: BFB	92.0	37.7-212		%Rec	1	4/27/2023 6:14:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	4/27/2023 6:14:00 AM
Toluene	ND	0.050		mg/Kg	1	4/27/2023 6:14:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/27/2023 6:14:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/27/2023 6:14:00 AM
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	4/27/2023 6:14:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 3:05:56 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH23-10 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 7:10:00 AM
Lab ID: 2304A16-003 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	8.4		mg/Kg	1	4/26/2023 8:42:05 PM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	4/26/2023 8:42:05 PM
Surr: DNOP	116	69-147		%Rec	1	4/26/2023 8:42:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/27/2023 6:36:00 AM
Surr: BFB	90.2	37.7-212		%Rec	1	4/27/2023 6:36:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 6:36:00 AM
Toluene	ND	0.048		mg/Kg	1	4/27/2023 6:36:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/27/2023 6:36:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	4/27/2023 6:36:00 AM
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	4/27/2023 6:36:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 3:18:20 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	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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH23-10 2'
Project: Todd 36 State 001 ROW **Collection Date:** 4/21/2023 7:15:00 AM
Lab ID: 2304A16-004 **Matrix:** SOIL **Received Date:** 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/26/2023 8:52:49 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/26/2023 8:52:49 PM
Surr: DNOP	92.1	69-147		%Rec	1	4/26/2023 8:52:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/27/2023 7:19:00 AM
Surr: BFB	97.5	37.7-212		%Rec	1	4/27/2023 7:19:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 7:19:00 AM
Toluene	ND	0.047		mg/Kg	1	4/27/2023 7:19:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	4/27/2023 7:19:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	4/27/2023 7:19:00 AM
Surr: 4-Bromofluorobenzene	89.4	70-130		%Rec	1	4/27/2023 7:19:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 3:30:45 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH23-11 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 7:20:00 AM
Lab ID: 2304A16-005 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/26/2023 9:03:32 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/26/2023 9:03:32 PM
Surr: DNOP	89.2	69-147		%Rec	1	4/26/2023 9:03:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/27/2023 7:40:00 AM
Surr: BFB	92.3	37.7-212		%Rec	1	4/27/2023 7:40:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 7:40:00 AM
Toluene	ND	0.049		mg/Kg	1	4/27/2023 7:40:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/27/2023 7:40:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/27/2023 7:40:00 AM
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	4/27/2023 7:40:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 3:43:09 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH23-11 2'
Project: Todd 36 State 001 ROW **Collection Date:** 4/21/2023 7:25:00 AM
Lab ID: 2304A16-006 **Matrix:** SOIL **Received Date:** 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/26/2023 9:14:13 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/26/2023 9:14:13 PM
Surr: DNOP	90.9	69-147		%Rec	1	4/26/2023 9:14:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/27/2023 8:02:00 AM
Surr: BFB	91.4	37.7-212		%Rec	1	4/27/2023 8:02:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 8:02:00 AM
Toluene	ND	0.047		mg/Kg	1	4/27/2023 8:02:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	4/27/2023 8:02:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	4/27/2023 8:02:00 AM
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	4/27/2023 8:02:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 3:55:34 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BH23-12 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 7:30:00 AM
Lab ID: 2304A16-007 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/26/2023 9:24:55 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/26/2023 9:24:55 PM
Surr: DNOP	95.6	69-147		%Rec	1	4/26/2023 9:24:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/27/2023 8:24:00 AM
Surr: BFB	95.2	37.7-212		%Rec	1	4/27/2023 8:24:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 8:24:00 AM
Toluene	ND	0.048		mg/Kg	1	4/27/2023 8:24:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/27/2023 8:24:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/27/2023 8:24:00 AM
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	4/27/2023 8:24:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	61		mg/Kg	20	4/26/2023 4:28:51 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH23-12 2'
Project: Todd 36 State 001 ROW **Collection Date:** 4/21/2023 7:35:00 AM
Lab ID: 2304A16-008 **Matrix:** SOIL **Received Date:** 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/26/2023 9:35:38 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/26/2023 9:35:38 PM
Surr: DNOP	95.6	69-147		%Rec	1	4/26/2023 9:35:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/27/2023 8:45:00 AM
Surr: BFB	90.8	37.7-212		%Rec	1	4/27/2023 8:45:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 8:45:00 AM
Toluene	ND	0.048		mg/Kg	1	4/27/2023 8:45:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/27/2023 8:45:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	4/27/2023 8:45:00 AM
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	4/27/2023 8:45:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	61		mg/Kg	20	4/26/2023 4:41:11 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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH23-13 0'
Project: Todd 36 State 001 ROW **Collection Date:** 4/21/2023 7:40:00 AM
Lab ID: 2304A16-009 **Matrix:** SOIL **Received Date:** 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	9.9	8.6		mg/Kg	1	4/26/2023 9:46:19 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	4/26/2023 9:46:19 PM
Surr: DNOP	88.1	69-147		%Rec	1	4/26/2023 9:46:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/27/2023 9:07:00 AM
Surr: BFB	93.5	37.7-212		%Rec	1	4/27/2023 9:07:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 9:07:00 AM
Toluene	ND	0.049		mg/Kg	1	4/27/2023 9:07:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/27/2023 9:07:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/27/2023 9:07:00 AM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	4/27/2023 9:07:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	4/26/2023 5:18:14 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	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 **2304A16**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BH23-13 2'
Project: Todd 36 State 001 ROW **Collection Date:** 4/21/2023 7:45:00 AM
Lab ID: 2304A16-010 **Matrix:** SOIL **Received Date:** 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/26/2023 9:57:00 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/26/2023 9:57:00 PM
Surr: DNOP	91.0	69-147		%Rec	1	4/26/2023 9:57:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/27/2023 9:29:00 AM
Surr: BFB	93.4	37.7-212		%Rec	1	4/27/2023 9:29:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 9:29:00 AM
Toluene	ND	0.049		mg/Kg	1	4/27/2023 9:29:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/27/2023 9:29:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	4/27/2023 9:29:00 AM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	4/27/2023 9:29:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	75	60		mg/Kg	20	4/26/2023 5:55:17 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.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2304A16**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **MB-74576**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74576**	RunNo: **96339**							
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489056**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74576**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74576**	RunNo: **96339**							
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489057**	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-74584**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74584**	RunNo: **96342**							
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489317**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74584**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74584**	RunNo: **96342**							
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489318**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

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#: **2304A16**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **LCS-74564**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **74564**	RunNo: **96315**
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489049** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.5	61.9	130			
Surr: DNOP	4.6		5.000		92.1	69	147			

Sample ID: **MB-74564**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **74564**	RunNo: **96315**
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489052** 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	9.0		10.00		90.2	69	147			

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#: **2304A16**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **lcs-74558**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **74558**	RunNo: **96347**
Prep Date: **4/25/2023**	Analysis Date: **4/27/2023**	SeqNo: **3489509** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	78.2	70	130			
Surr: BFB	1900		1000		187	37.7	212			

Sample ID: **mb-74558**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **74558**	RunNo: **96347**
Prep Date: **4/25/2023**	Analysis Date: **4/27/2023**	SeqNo: **3489510** 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	920		1000		92.1	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#: **2304A16**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **lcs-74558**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **74558**	RunNo: **96347**
Prep Date: **4/25/2023**	Analysis Date: **4/27/2023**	SeqNo: **3489574** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.2	80	120			
Toluene	0.86	0.050	1.000	0	86.3	80	120			
Ethylbenzene	0.84	0.050	1.000	0	84.1	80	120			
Xylenes, Total	2.5	0.10	3.000	0	82.9	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	70	130			

Sample ID: **mb-74558**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **74558**	RunNo: **96347**
Prep Date: **4/25/2023**	Analysis Date: **4/27/2023**	SeqNo: **3489575** 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	0.88		1.000		88.3	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

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: Vertex Resources Services, Inc.

Work Order Number: 2304A16

RcptNo: 1

Received By: Juan Rojas 4/25/2023 7:20:00 AM

Completed By: Tracy Casarrubias 4/25/2023 8:35:17 AM

Reviewed By: TMC 4/25/23

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: TMC 4/25/23

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: Mailing address, phone number and Email missing on COC- TMC 4/25/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good	Yes	Morty		

Chain-of-Custody Record

Client: **Vertex**

(direct bill to Devon)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush 48-hr

Project Name: **Todd 36 State #001 ROW**

Project #: **22E-02816-22**

Project Manager: Kent Stallings

kstallings@vertex.ca

Sampler: L. Pullman

On Ice: ~~☐ Yes~~ ☐ No

# of Coolers: 1 (Morty)

Cooler Temp(including CF): 4.8-0.1=4.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2304A16	Analysis Request: (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)
04/21/23	7:00	Soil	BH23-09 0'	1, 4oz jar		001	X	X					X			
04/21/23	7:05	Soil	BH23-09 2'	1, 4oz jar		002	X	X					X			
04/21/23	7:10	Soil	BH23-10 0'	1, 4oz jar		003	X	X					X			
04/21/23	7:15	Soil	BH23-10 2'	1, 4oz jar		004	X	X					X			
04/21/23	7:20	Soil	BH23-11 0'	1, 4oz jar		005	X	X					X			
04/21/23	7:25	Soil	BH23-11 2'	1, 4oz jar		006	X	X					X			
04/21/23	7:30	Soil	BH23-12 0'	1, 4oz jar		007	X	X					X			
04/21/23	7:35	Soil	BH23-12 2'	1, 4oz jar		008	X	X					X			
04/21/23	7:40	Soil	BH23-13 0'	1, 4oz jar		009	X	X					X			
04/21/23	7:45	Soil	BH23-13 2'	1, 4oz jar		010	X	X					X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
4-24-23	07:00				4/21/23	700
4/21/23	1900			courier	4/21/23	7:20

Remarks:

Direct bill to Devon, Dale Woodall

cc. kstallings@vertex.ca for Final Report

1/1

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.

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

May 01, 2023

Kent Stallings

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

RE: Todd 36 State 001 ROW OrderNo.: 2304A17

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 7 sample(s) on 4/25/2023 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 **2304A17**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BS23-09 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 8:05:00 AM
Lab ID: 2304A17-001 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	4/26/2023 10:07:40 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	4/26/2023 10:07:40 PM
Surr: DNOP	86.5	69-147		%Rec	1	4/26/2023 10:07:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/27/2023 9:50:00 AM
Surr: BFB	92.8	37.7-212		%Rec	1	4/27/2023 9:50:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	4/27/2023 9:50:00 AM
Toluene	ND	0.049		mg/Kg	1	4/27/2023 9:50:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/27/2023 9:50:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	4/27/2023 9:50:00 AM
Surr: 4-Bromofluorobenzene	88.3	70-130		%Rec	1	4/27/2023 9:50:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	4/26/2023 6:07:37 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 **2304A17**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BS23-10 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 8:10:00 AM
Lab ID: 2304A17-002 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/26/2023 10:18:18 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/26/2023 10:18:18 PM
Surr: DNOP	79.9	69-147		%Rec	1	4/26/2023 10:18:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/27/2023 10:12:00 AM
Surr: BFB	91.4	37.7-212		%Rec	1	4/27/2023 10:12:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.023		mg/Kg	1	4/27/2023 10:12:00 AM
Toluene	ND	0.047		mg/Kg	1	4/27/2023 10:12:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	4/27/2023 10:12:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	4/27/2023 10:12:00 AM
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	4/27/2023 10:12:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	4/26/2023 6:19:57 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 **2304A17**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BS23-11 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 8:15:00 AM
Lab ID: 2304A17-003 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	4/26/2023 10:28:54 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	4/26/2023 10:28:54 PM
Surr: DNOP	87.1	69-147		%Rec	1	4/26/2023 10:28:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/27/2023 10:34:00 AM
Surr: BFB	95.6	37.7-212		%Rec	1	4/27/2023 10:34:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 10:34:00 AM
Toluene	ND	0.048		mg/Kg	1	4/27/2023 10:34:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/27/2023 10:34:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/27/2023 10:34:00 AM
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	4/27/2023 10:34:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	4/26/2023 6:32:18 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 **2304A17**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BS23-12 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 8:20:00 AM
Lab ID: 2304A17-004 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	18	9.4		mg/Kg	1	4/26/2023 11:11:19 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/26/2023 11:11:19 PM
Surr: DNOP	92.4	69-147		%Rec	1	4/26/2023 11:11:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/27/2023 7:48:00 PM
Surr: BFB	90.3	37.7-212		%Rec	1	4/27/2023 7:48:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	4/27/2023 7:48:00 PM
Toluene	ND	0.050		mg/Kg	1	4/27/2023 7:48:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/27/2023 7:48:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/27/2023 7:48:00 PM
Surr: 4-Bromofluorobenzene	87.3	70-130		%Rec	1	4/27/2023 7:48:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 1:25:22 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 **2304A17**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BS23-13 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 8:25:00 AM
Lab ID: 2304A17-005 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	4/26/2023 11:43:14 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	4/26/2023 11:43:14 PM
Surr: DNOP	98.2	69-147		%Rec	1	4/26/2023 11:43:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/27/2023 8:52:00 PM
Surr: BFB	91.6	37.7-212		%Rec	1	4/27/2023 8:52:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	4/27/2023 8:52:00 PM
Toluene	ND	0.050		mg/Kg	1	4/27/2023 8:52:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/27/2023 8:52:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/27/2023 8:52:00 PM
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	4/27/2023 8:52:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 2:02:36 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 **2304A17**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BS23-14 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 8:30:00 AM
Lab ID: 2304A17-006 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/26/2023 11:53:54 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/26/2023 11:53:54 PM
Surr: DNOP	84.6	69-147		%Rec	1	4/26/2023 11:53:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/27/2023 9:57:00 PM
Surr: BFB	90.0	37.7-212		%Rec	1	4/27/2023 9:57:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	4/27/2023 9:57:00 PM
Toluene	ND	0.049		mg/Kg	1	4/27/2023 9:57:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/27/2023 9:57:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/27/2023 9:57:00 PM
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	4/27/2023 9:57:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 2:15:01 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 **2304A17**
Date Reported: **5/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.
Client Sample ID: BS23-15 0'
Project: Todd 36 State 001 ROW
Collection Date: 4/21/2023 8:50:00 AM
Lab ID: 2304A17-007 **Matrix:** SOIL
Received Date: 4/25/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/27/2023 12:04:34 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/27/2023 12:04:34 AM
Surr: DNOP	87.9	69-147		%Rec	1	4/27/2023 12:04:34 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/27/2023 10:18:00 PM
Surr: BFB	91.6	37.7-212		%Rec	1	4/27/2023 10:18:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	4/27/2023 10:18:00 PM
Toluene	ND	0.048		mg/Kg	1	4/27/2023 10:18:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/27/2023 10:18:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	4/27/2023 10:18:00 PM
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	4/27/2023 10:18:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/27/2023 2:27:26 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.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2304A17**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **MB-74584**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74584**	RunNo: **96342**							
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489317**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74584**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74584**	RunNo: **96342**							
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489318**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Sample ID: **MB-74601**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **74601**	RunNo: **96357**							
Prep Date: **4/27/2023**	Analysis Date: **4/27/2023**	SeqNo: **3490739**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74601**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **74601**	RunNo: **96357**							
Prep Date: **4/27/2023**	Analysis Date: **4/27/2023**	SeqNo: **3490740**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.1	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#: **2304A17**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **2304A17-004AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **BS23-12 0'** Batch ID: **74583** RunNo: **96315**

Prep Date: **4/26/2023** Analysis Date: **4/26/2023** SeqNo: **3489042** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.0	45.25	17.94	51.0	54.2	135			S
Surr: DNOP	4.0		4.525		87.4	69	147			

Sample ID: **2304A17-004AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **BS23-12 0'** Batch ID: **74583** RunNo: **96315**

Prep Date: **4/26/2023** Analysis Date: **4/26/2023** SeqNo: **3489043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.6	47.94	17.94	51.9	54.2	135	4.30	29.2	S
Surr: DNOP	3.9		4.794		80.5	69	147	0	0	

Sample ID: **LCS-74564** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **74564** RunNo: **96315**

Prep Date: **4/26/2023** Analysis Date: **4/26/2023** SeqNo: **3489049** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.5	61.9	130			
Surr: DNOP	4.6		5.000		92.1	69	147			

Sample ID: **LCS-74583** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **74583** RunNo: **96315**

Prep Date: **4/26/2023** Analysis Date: **4/26/2023** SeqNo: **3489050** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.6	61.9	130			
Surr: DNOP	4.4		5.000		88.6	69	147			

Sample ID: **MB-74564** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **74564** RunNo: **96315**

Prep Date: **4/26/2023** Analysis Date: **4/26/2023** SeqNo: **3489052** 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	9.0		10.00		90.2	69	147			

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#: **2304A17**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **MB-74583**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **74583**	RunNo: **96315**
Prep Date: **4/26/2023**	Analysis Date: **4/26/2023**	SeqNo: **3489053** 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	9.3		10.00		92.8	69	147			

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#: **2304A17**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **lcs-74558** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **74558** RunNo: **96347**
Prep Date: **4/25/2023** Analysis Date: **4/27/2023** SeqNo: **3489509** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	78.2	70	130			
Surr: BFB	1900		1000		187	37.7	212			

Sample ID: **mb-74558** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **74558** RunNo: **96347**
Prep Date: **4/25/2023** Analysis Date: **4/27/2023** SeqNo: **3489510** 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	920		1000		92.1	37.7	212			

Sample ID: **lcs-74569** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **74569** RunNo: **96355**
Prep Date: **4/26/2023** Analysis Date: **4/27/2023** SeqNo: **3490359** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	84.2	70	130			
Surr: BFB	1900		1000		195	37.7	212			

Sample ID: **mb-74569** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **74569** RunNo: **96355**
Prep Date: **4/26/2023** Analysis Date: **4/27/2023** SeqNo: **3490360** 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		92.9	37.7	212			

Sample ID: **2304A17-004ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BS23-12 0'** Batch ID: **74569** RunNo: **96355**
Prep Date: **4/26/2023** Analysis Date: **4/27/2023** SeqNo: **3490362** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.9	24.56	0	82.8	70	130			
Surr: BFB	1900		982.3		194	37.7	212			

Sample ID: **2304A17-004amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BS23-12 0'** Batch ID: **74569** RunNo: **96355**
Prep Date: **4/26/2023** Analysis Date: **4/27/2023** SeqNo: **3490363** 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#: **2304A17**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **2304A17-004amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BS23-12 0'**	Batch ID: **74569**	RunNo: **96355**
Prep Date: **4/26/2023**	Analysis Date: **4/27/2023**	SeqNo: **3490363** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.70	0	85.8	70	130	4.24	20	
Surr: BFB	2000		988.1		198	37.7	212	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#: **2304A17**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **lcs-74558**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **74558**	RunNo: **96347**
Prep Date: **4/25/2023**	Analysis Date: **4/27/2023**	SeqNo: **3489574** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.2	80	120			
Toluene	0.86	0.050	1.000	0	86.3	80	120			
Ethylbenzene	0.84	0.050	1.000	0	84.1	80	120			
Xylenes, Total	2.5	0.10	3.000	0	82.9	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	70	130			

Sample ID: **mb-74558**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **74558**	RunNo: **96347**
Prep Date: **4/25/2023**	Analysis Date: **4/27/2023**	SeqNo: **3489575** 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	0.88		1.000		88.3	70	130			

Sample ID: **lcs-74569**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **74569**	RunNo: **96355**
Prep Date: **4/26/2023**	Analysis Date: **4/27/2023**	SeqNo: **3490404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.6	80	120			
Toluene	0.88	0.050	1.000	0	87.5	80	120			
Ethylbenzene	0.85	0.050	1.000	0	85.0	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.0	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.5	70	130			

Sample ID: **mb-74569**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **74569**	RunNo: **96355**
Prep Date: **4/26/2023**	Analysis Date: **4/27/2023**	SeqNo: **3490405** 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	0.86		1.000		85.8	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#: **2304A17**

01-May-23

Client: Vertex Resources Services, Inc.

Project: Todd 36 State 001 ROW

Sample ID: **2304A17-005ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BS23-13 0'**	Batch ID: **74569**	RunNo: **96355**
Prep Date: **4/26/2023**	Analysis Date: **4/27/2023**	SeqNo: **3490409** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	0.9901	0	89.4	68.8	120			
Toluene	0.90	0.050	0.9901	0	90.9	73.6	124			
Ethylbenzene	0.89	0.050	0.9901	0	89.4	72.7	129			
Xylenes, Total	2.6	0.099	2.970	0	88.7	75.7	126			
Surr: 4-Bromofluorobenzene	0.88		0.9901		89.3	70	130			

Sample ID: **2304A17-005amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BS23-13 0'**	Batch ID: **74569**	RunNo: **96355**
Prep Date: **4/26/2023**	Analysis Date: **4/27/2023**	SeqNo: **3490410** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	0.9891	0	86.7	68.8	120	3.19	20	
Toluene	0.88	0.049	0.9891	0	88.5	73.6	124	2.77	20	
Ethylbenzene	0.87	0.049	0.9891	0	88.3	72.7	129	1.38	20	
Xylenes, Total	2.6	0.099	2.967	0	87.5	75.7	126	1.49	20	
Surr: 4-Bromofluorobenzene	0.85		0.9891		85.4	70	130	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

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: Vertex Resources Services, Inc.

Work Order Number: 2304A17

RcptNo: 1

Received By: Juan Rojas 4/25/2023 7:20:00 AM

Completed By: Tracy Casarrubias 4/25/2023 8:43:28 AM

Reviewed By: JR 4/25/23

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: MB 4/25/23

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: Mailing address, phone number and Email missing on COC- TMC 4/25/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good	Yes	Morty		

Chain-of-Custody Record

Client: **Vertex**

(direct bill to Devon)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush 48-hr

Project Name: **Todd 36 State #001 ROW**

Project #: **22E-02816-22**

Project Manager: Kent Stallings

kstallings@vertex.ca

Sampler: L. Pullman

On Ice: ~~☐ Yes~~ ☐ No

# of Coolers: 1 Wurty

Cooler Temp(Including CF): 4.8-0.1=4.7

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. 2304A17	(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)
04/21/23	8:05	Soil	BS23-09 0'	1, 4oz jar		001	X	X					X			
04/21/23	8:10	Soil	BS23-10 0'	1, 4oz jar		002	X	X					X			
04/21/23	8:15	Soil	BS23-11 0'	1, 4oz jar		003	X	X					X			
04/21/23	8:20	Soil	BS23-12 0'	1, 4oz jar		004	X	X					X			
04/21/23	8:25	Soil	BS23-13 0'	1, 4oz jar		005	X	X					X			
04/21/23	8:30	Soil	BS23-14 0'	1, 4oz jar		006	X	X					X			
04/21/23	8:50	Soil	BS23-15 0'	1, 4oz jar		007	X	X					X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
4-24-2023	07:00	Dale Woodall				
4/24/23	1900			Courier	4/25/23	7:20

Remarks:
Direct bill to Devon, Dale Woodall
cc. kstallings@vertex.ca for Final Report

1/1

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.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kent Stallings
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 3/30/2026 1:18:19 PM

JOB DESCRIPTION

Todd 36 State #001 ROW

JOB NUMBER

885-45728-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
3/30/2026 1:18:19 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Laboratory Job ID: 885-45728-1

Table of Contents

Definitions/Glossary

Client: Vertex Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Qualifiers

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Todd 36 State #001 ROW

Job ID: 885-45728-1

Job ID: 885-45728-1 Eurofins Albuquerque

Job Narrative
885-45728-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 3/20/2026 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 1
Lab Sample ID: 885-45728-1
Date Collected: 03/18/26 10:00
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9		mg/Kg		03/23/26 14:25	03/27/26 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 16:05*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 16:05	1
Ethylbenzene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 16:05	1
Toluene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 16:05	1
Xylenes, Total	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 150*	*03/23/26 14:25*	*03/27/26 16:05*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/24/26 10:09	03/25/26 05:59	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/24/26 10:09	03/25/26 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*77*		*62 - 134*	*03/24/26 10:09*	*03/25/26 05:59*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	ND		50		mg/Kg			03/26/26 16:23	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 2
Lab Sample ID: 885-45728-2
Date Collected: 03/18/26 10:05
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7		mg/Kg		03/23/26 14:25	03/27/26 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*15 - 150*	*03/23/26 14:25*	*03/27/26 16:27*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 16:27	1
Ethylbenzene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 16:27	1
Toluene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 16:27	1
Xylenes, Total	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 150*	*03/23/26 14:25*	*03/27/26 16:27*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/24/26 10:09	03/25/26 06:10	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/24/26 10:09	03/25/26 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*79*		*62 - 134*	*03/24/26 10:09*	*03/25/26 06:10*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	ND		51		mg/Kg			03/26/26 16:23	1

Client Sample Results

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

Client Sample ID: TP-26-01 3

Date Collected: 03/18/26 10:10
Date Received: 03/20/26 08:00

Lab Sample ID: 885-45728-3

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 14:25	03/27/26 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 16:48*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:25	03/27/26 16:48	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 16:48	1
Toluene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 16:48	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*15 - 150*	*03/23/26 14:25*	*03/27/26 16:48*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		03/24/26 10:09	03/25/26 06:22	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/24/26 10:09	03/25/26 06:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*80*		*62 - 134*	*03/24/26 10:09*	*03/25/26 06:22*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**87**		50		mg/Kg			03/26/26 16:24	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 4
Lab Sample ID: 885-45728-4
Date Collected: 03/18/26 10:15
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 14:25	03/27/26 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 17:10*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:25	03/27/26 17:10	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 17:10	1
Toluene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 17:10	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*15 - 150*	*03/23/26 14:25*	*03/27/26 17:10*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/24/26 10:09	03/25/26 06:33	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/24/26 10:09	03/25/26 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*78*		*62 - 134*	*03/24/26 10:09*	*03/25/26 06:33*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	ND		51		mg/Kg			03/26/26 16:24	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 5
Lab Sample ID: 885-45728-5
Date Collected: 03/18/26 10:20
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 14:25	03/27/26 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*15 - 150*	*03/23/26 14:25*	*03/27/26 17:32*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:25	03/27/26 17:32	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 17:32	1
Toluene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 17:32	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 150*	*03/23/26 14:25*	*03/27/26 17:32*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/24/26 10:09	03/25/26 06:45	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/24/26 10:09	03/25/26 06:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*79*		*62 - 134*	*03/24/26 10:09*	*03/25/26 06:45*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**160**		51		mg/Kg			03/26/26 16:25	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 6
Lab Sample ID: 885-45728-6
Date Collected: 03/18/26 10:25
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8		mg/Kg		03/23/26 14:25	03/27/26 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*15 - 150*	*03/23/26 14:25*	*03/27/26 17:53*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 17:53	1
Ethylbenzene	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 17:53	1
Toluene	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 17:53	1
Xylenes, Total	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*15 - 150*	*03/23/26 14:25*	*03/27/26 17:53*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/24/26 10:09	03/25/26 06:56	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/24/26 10:09	03/25/26 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*79*		*62 - 134*	*03/24/26 10:09*	*03/25/26 06:56*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**600**		49		mg/Kg			03/26/26 16:25	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 7
Lab Sample ID: 885-45728-7
Date Collected: 03/18/26 10:30
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7		mg/Kg		03/23/26 14:25	03/27/26 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 18:15*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		03/23/26 14:25	03/27/26 18:15	1
Ethylbenzene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 18:15	1
Toluene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 18:15	1
Xylenes, Total	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*15 - 150*	*03/23/26 14:25*	*03/27/26 18:15*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		03/24/26 10:09	03/25/26 07:08	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/24/26 10:09	03/25/26 07:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*79*		*62 - 134*	*03/24/26 10:09*	*03/25/26 07:08*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**420**		50		mg/Kg			03/26/26 16:26	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 8
Lab Sample ID: 885-45728-8
Date Collected: 03/18/26 10:35
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9		mg/Kg		03/23/26 14:25	03/27/26 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*15 - 150*	*03/23/26 14:25*	*03/27/26 18:37*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 18:37	1
Ethylbenzene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 18:37	1
Toluene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 18:37	1
Xylenes, Total	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*15 - 150*	*03/23/26 14:25*	*03/27/26 18:37*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/24/26 10:09	03/25/26 07:19	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/24/26 10:09	03/25/26 07:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*79*		*62 - 134*	*03/24/26 10:09*	*03/25/26 07:19*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**430**		50		mg/Kg			03/27/26 10:53	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 9
Lab Sample ID: 885-45728-9
Date Collected: 03/18/26 10:40
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 14:25	03/27/26 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*15 - 150*	*03/23/26 14:25*	*03/27/26 19:20*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:25	03/27/26 19:20	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 19:20	1
Toluene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 19:20	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*15 - 150*	*03/23/26 14:25*	*03/27/26 19:20*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		03/24/26 10:09	03/25/26 07:31	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/24/26 10:09	03/25/26 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*78*		*62 - 134*	*03/24/26 10:09*	*03/25/26 07:31*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**1900**		500		mg/Kg			03/27/26 11:17	10

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 10
Lab Sample ID: 885-45728-10
Date Collected: 03/18/26 10:45
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7		mg/Kg		03/23/26 14:25	03/27/26 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*15 - 150*	*03/23/26 14:25*	*03/27/26 19:42*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 19:42	1
Ethylbenzene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 19:42	1
Toluene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 19:42	1
Xylenes, Total	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*15 - 150*	*03/23/26 14:25*	*03/27/26 19:42*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/24/26 10:09	03/25/26 07:42	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/24/26 10:09	03/25/26 07:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*80*		*62 - 134*	*03/24/26 10:09*	*03/25/26 07:42*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**2400**		500		mg/Kg			03/27/26 11:17	10

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 1
Lab Sample ID: 885-45728-11
Date Collected: 03/18/26 11:00
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 14:25	03/27/26 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 20:03*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:25	03/27/26 20:03	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 20:03	1
Toluene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 20:03	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 150*	*03/23/26 14:25*	*03/27/26 20:03*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		03/24/26 10:09	03/25/26 07:53	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/24/26 10:09	03/25/26 07:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*80*		*62 - 134*	*03/24/26 10:09*	*03/25/26 07:53*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	ND		51		mg/Kg			03/27/26 10:57	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 2
Lab Sample ID: 885-45728-12
Date Collected: 03/18/26 11:05
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8		mg/Kg		03/23/26 14:25	03/27/26 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*15 - 150*	*03/23/26 14:25*	*03/27/26 20:25*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 20:25	1
Ethylbenzene	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 20:25	1
Toluene	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 20:25	1
Xylenes, Total	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*15 - 150*	*03/23/26 14:25*	*03/27/26 20:25*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		03/24/26 10:09	03/25/26 08:05	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/24/26 10:09	03/25/26 08:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*80*		*62 - 134*	*03/24/26 10:09*	*03/25/26 08:05*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	ND		49		mg/Kg			03/27/26 10:58	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 3
Lab Sample ID: 885-45728-13
Date Collected: 03/18/26 11:10
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9		mg/Kg		03/23/26 14:25	03/27/26 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*15 - 150*	*03/23/26 14:25*	*03/27/26 20:47*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 20:47	1
Ethylbenzene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 20:47	1
Toluene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 20:47	1
Xylenes, Total	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*15 - 150*	*03/23/26 14:25*	*03/27/26 20:47*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5		mg/Kg		03/24/26 10:09	03/25/26 08:16	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/24/26 10:09	03/25/26 08:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*80*		*62 - 134*	*03/24/26 10:09*	*03/25/26 08:16*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	ND		49		mg/Kg			03/27/26 10:58	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 4
Lab Sample ID: 885-45728-14
Date Collected: 03/18/26 11:15
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 14:25	03/27/26 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*15 - 150*	*03/23/26 14:25*	*03/27/26 21:09*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:25	03/27/26 21:09	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 21:09	1
Toluene	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 21:09	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 14:25	03/27/26 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*15 - 150*	*03/23/26 14:25*	*03/27/26 21:09*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5		mg/Kg		03/24/26 10:09	03/25/26 08:28	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/24/26 10:09	03/25/26 08:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*77*		*62 - 134*	*03/24/26 10:09*	*03/25/26 08:28*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	ND		50		mg/Kg			03/27/26 10:59	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 5
Lab Sample ID: 885-45728-15
Date Collected: 03/18/26 11:20
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9		mg/Kg		03/23/26 14:25	03/27/26 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 21:30*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:25	03/27/26 21:30	1
Ethylbenzene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 21:30	1
Toluene	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 21:30	1
Xylenes, Total	ND		0.049		mg/Kg		03/23/26 14:25	03/27/26 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*15 - 150*	*03/23/26 14:25*	*03/27/26 21:30*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		03/24/26 10:09	03/25/26 08:39	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/24/26 10:09	03/25/26 08:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*76*		*62 - 134*	*03/24/26 10:09*	*03/25/26 08:39*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**81**		51		mg/Kg			03/27/26 11:00	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 6
Lab Sample ID: 885-45728-16
Date Collected: 03/18/26 11:25
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7		mg/Kg		03/23/26 14:25	03/27/26 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 21:52*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 21:52	1
Ethylbenzene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 21:52	1
Toluene	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 21:52	1
Xylenes, Total	ND		0.047		mg/Kg		03/23/26 14:25	03/27/26 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*15 - 150*	*03/23/26 14:25*	*03/27/26 21:52*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/24/26 10:09	03/25/26 08:51	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/24/26 10:09	03/25/26 08:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*76*		*62 - 134*	*03/24/26 10:09*	*03/25/26 08:51*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**270**		51		mg/Kg			03/27/26 11:00	1

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 7
Lab Sample ID: 885-45728-17
Date Collected: 03/18/26 11:30
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6		mg/Kg		03/23/26 14:25	03/27/26 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*15 - 150*	*03/23/26 14:25*	*03/27/26 22:14*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		03/23/26 14:25	03/27/26 22:14	1
Ethylbenzene	ND		0.046		mg/Kg		03/23/26 14:25	03/27/26 22:14	1
Toluene	ND		0.046		mg/Kg		03/23/26 14:25	03/27/26 22:14	1
Xylenes, Total	ND		0.046		mg/Kg		03/23/26 14:25	03/27/26 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*15 - 150*	*03/23/26 14:25*	*03/27/26 22:14*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/24/26 10:09	03/25/26 09:02	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/24/26 10:09	03/25/26 09:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*75*		*62 - 134*	*03/24/26 10:09*	*03/25/26 09:02*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**3700**		510		mg/Kg			03/27/26 11:19	10

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 8
Lab Sample ID: 885-45728-18
Date Collected: 03/18/26 11:35
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8		mg/Kg		03/23/26 14:25	03/27/26 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 150*	*03/23/26 14:25*	*03/27/26 22:35*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 14:25	03/27/26 22:35	1
Ethylbenzene	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 22:35	1
Toluene	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 22:35	1
Xylenes, Total	ND		0.048		mg/Kg		03/23/26 14:25	03/27/26 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 150*	*03/23/26 14:25*	*03/27/26 22:35*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		03/24/26 10:09	03/25/26 09:13	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		03/24/26 10:09	03/25/26 09:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*77*		*62 - 134*	*03/24/26 10:09*	*03/25/26 09:13*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**5800**		490		mg/Kg			03/27/26 11:19	10

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 9
Lab Sample ID: 885-45728-19
Date Collected: 03/18/26 11:40
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7		mg/Kg		03/23/26 15:22	03/25/26 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*15 - 150*	*03/23/26 15:22*	*03/25/26 15:58*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/23/26 15:22	03/25/26 15:58	1
Ethylbenzene	ND		0.047		mg/Kg		03/23/26 15:22	03/25/26 15:58	1
Toluene	ND		0.047		mg/Kg		03/23/26 15:22	03/25/26 15:58	1
Xylenes, Total	ND		0.047		mg/Kg		03/23/26 15:22	03/25/26 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*15 - 150*	*03/23/26 15:22*	*03/25/26 15:58*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/24/26 09:31	03/25/26 09:47	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/24/26 09:31	03/25/26 09:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*77*		*62 - 134*	*03/24/26 09:31*	*03/25/26 09:47*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**4600**		500		mg/Kg			03/27/26 11:20	10

Client Sample Results

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 10
Lab Sample ID: 885-45728-20
Date Collected: 03/18/26 11:45
Matrix: Solid
Date Received: 03/20/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 15:22	03/25/26 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*15 - 150*	*03/23/26 15:22*	*03/25/26 17:09*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 15:22	03/25/26 17:09	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 15:22	03/25/26 17:09	1
Toluene	ND		0.050		mg/Kg		03/23/26 15:22	03/25/26 17:09	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 15:22	03/25/26 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*15 - 150*	*03/23/26 15:22*	*03/25/26 17:09*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		03/24/26 09:31	03/25/26 09:58	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		03/24/26 09:31	03/25/26 09:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*71*		*62 - 134*	*03/24/26 09:31*	*03/25/26 09:58*	*1*

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	**4100**		490		mg/Kg			03/27/26 11:20	10

QC Sample Results

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-45335/1-A
Matrix: Solid
Analysis Batch: 45632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45335

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 14:24	03/27/26 12:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*15 - 150*	*03/23/26 14:24*	*03/27/26 12:33*	*1*

Lab Sample ID: LCS 885-45335/2-A
Matrix: Solid
Analysis Batch: 45632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45335

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			25.0	22.5		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*207*		*15 - 150*

Lab Sample ID: MB 885-45340/1-A
Matrix: Solid
Analysis Batch: 45500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45340

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0		mg/Kg		03/23/26 15:22	03/25/26 15:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*15 - 150*	*03/23/26 15:22*	*03/25/26 15:34*	*1*

Lab Sample ID: LCS 885-45340/2-A
Matrix: Solid
Analysis Batch: 45500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45340

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			25.0	22.5		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*193*		*15 - 150*

Lab Sample ID: 885-45728-19 MS
Matrix: Solid
Analysis Batch: 45500

Client Sample ID: TP-26-02 9
Prep Type: Total/NA
Prep Batch: 45340

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	ND		24.4	22.4		mg/Kg		92	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: 885-45728-19 MS
Matrix: Solid
Analysis Batch: 45500

Client Sample ID: TP-26-02 9
Prep Type: Total/NA
Prep Batch: 45340

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*199*		*15 - 150*

Lab Sample ID: 885-45728-19 MSD
Matrix: Solid
Analysis Batch: 45500

Client Sample ID: TP-26-02 9
Prep Type: Total/NA
Prep Batch: 45340

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	ND		24.3	19.6		mg/Kg		80	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*195*		*15 - 150*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-45335/1-A
Matrix: Solid
Analysis Batch: 45642

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45335

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 14:24	03/27/26 12:33	1
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 14:24	03/27/26 12:33	1
Toluene	ND		0.050		mg/Kg		03/23/26 14:24	03/27/26 12:33	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 14:24	03/27/26 12:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*92*		*15 - 150*	*03/23/26 14:24*	*03/27/26 12:33*	*1*

Lab Sample ID: LCS 885-45335/3-A
Matrix: Solid
Analysis Batch: 45642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.866		mg/Kg		87	70 - 130
Ethylbenzene	1.00	0.861		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	2.00	1.72		mg/Kg		86	70 - 130
o-Xylene	1.00	0.853		mg/Kg		85	70 - 130
Toluene	1.00	0.871		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*95*		*15 - 150*

Lab Sample ID: MB 885-45340/1-A
Matrix: Solid
Analysis Batch: 45501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45340

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/23/26 15:22	03/25/26 15:34	1

QC Sample Results

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-45340/1-A
Matrix: Solid
Analysis Batch: 45501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45340

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.050		mg/Kg		03/23/26 15:22	03/25/26 15:34	1
Toluene	ND		0.050		mg/Kg		03/23/26 15:22	03/25/26 15:34	1
Xylenes, Total	ND		0.050		mg/Kg		03/23/26 15:22	03/25/26 15:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 150*	*03/23/26 15:22*	*03/25/26 15:34*	*1*

Lab Sample ID: LCS 885-45340/3-A
Matrix: Solid
Analysis Batch: 45501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45340

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.891		mg/Kg		89	70 - 130		
Ethylbenzene			1.00	0.934		mg/Kg		93	70 - 130		
m-Xylene & p-Xylene			2.00	1.79		mg/Kg		90	70 - 130		
o-Xylene			1.00	0.875		mg/Kg		87	70 - 130		
Toluene			1.00	0.961		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*15 - 150*

Lab Sample ID: 885-45728-20 MS
Matrix: Solid
Analysis Batch: 45501

Client Sample ID: TP-26-02 10
Prep Type: Total/NA
Prep Batch: 45340

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.976	0.820		mg/Kg		84	70 - 130		
Ethylbenzene	ND		0.976	0.885		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene	ND		1.95	1.70		mg/Kg		87	70 - 130		
o-Xylene	ND		0.976	0.832		mg/Kg		85	70 - 130		
Toluene	ND		0.976	0.915		mg/Kg		94	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*15 - 150*

Lab Sample ID: 885-45728-20 MSD
Matrix: Solid
Analysis Batch: 45501

Client Sample ID: TP-26-02 10
Prep Type: Total/NA
Prep Batch: 45340

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.974	0.835		mg/Kg		86	70 - 130	2	20
Ethylbenzene	ND		0.974	0.909		mg/Kg		93	70 - 130	3	20
m-Xylene & p-Xylene	ND		1.95	1.75		mg/Kg		90	70 - 130	3	20
o-Xylene	ND		0.974	0.846		mg/Kg		87	70 - 130	2	20
Toluene	ND		0.974	0.919		mg/Kg		94	70 - 130	0	20

QC Sample Results

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-45728-20 MSD
Matrix: Solid
Analysis Batch: 45501

Client Sample ID: TP-26-02 10
Prep Type: Total/NA
Prep Batch: 45340

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*103*		*15 - 150*

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-45385/1-A
Matrix: Solid
Analysis Batch: 45387

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45385

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/24/26 09:31	03/25/26 09:23	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/24/26 09:31	03/25/26 09:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*81*		*62 - 134*	*03/24/26 09:31*	*03/25/26 09:23*	*1*

Lab Sample ID: LCS 885-45385/2-A
Matrix: Solid
Analysis Batch: 45387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45385

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	44.1		mg/Kg		88	51 - 148		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	*79*		*62 - 134*

Lab Sample ID: MB 885-45390/1-A
Matrix: Solid
Analysis Batch: 45418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45390

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/24/26 10:09	03/25/26 05:13	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/24/26 10:09	03/25/26 05:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*78*		*62 - 134*	*03/24/26 10:09*	*03/25/26 05:13*	*1*

Lab Sample ID: LCS 885-45390/2-A
Matrix: Solid
Analysis Batch: 45418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45390

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	53.5		mg/Kg		107	51 - 148		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	*69*		*62 - 134*

QC Sample Results

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 885-45728-18 MS
Matrix: Solid
Analysis Batch: 45418

Client Sample ID: TP-26-02 8
Prep Type: Total/NA
Prep Batch: 45390

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		48.4	50.2		mg/Kg		104	44 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*73*		*62 - 134*

Lab Sample ID: 885-45728-18 MSD
Matrix: Solid
Analysis Batch: 45418

Client Sample ID: TP-26-02 8
Prep Type: Total/NA
Prep Batch: 45390

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		49.1	50.6		mg/Kg		103	44 - 136	1	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*74*		*62 - 134*

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 885-45573/1-A
Matrix: Solid
Analysis Batch: 45600

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50		mg/Kg			03/26/26 16:11	1

Lab Sample ID: LCS 885-45573/2-A
Matrix: Solid
Analysis Batch: 45600

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			507	490		mg/Kg		97	85 - 115		

Lab Sample ID: MB 885-45598/1-A
Matrix: Solid
Analysis Batch: 45655

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50		mg/Kg			03/27/26 10:52	1

Lab Sample ID: LCS 885-45598/2-A
Matrix: Solid
Analysis Batch: 45655

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			495	469		mg/Kg		95	85 - 115		

QC Sample Results

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 885-45728-8 MS
Matrix: Solid
Analysis Batch: 45655

Client Sample ID: TP-26-01 8
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	430		505	948		mg/Kg		102	85 - 115

Lab Sample ID: 885-45728-8 MSD
Matrix: Solid
Analysis Batch: 45655

Client Sample ID: TP-26-01 8
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	430		507	963		mg/Kg		105	85 - 115	2	20

Lab Sample ID: 885-45728-10 MS
Matrix: Solid
Analysis Batch: 45655

Client Sample ID: TP-26-01 10
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2400		503	3040	4	mg/Kg		118	85 - 115

Lab Sample ID: 885-45728-10 MSD
Matrix: Solid
Analysis Batch: 45655

Client Sample ID: TP-26-01 10
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2400		497	2910	4	mg/Kg		94	85 - 115	4	20

QC Association Summary

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

GC VOA

Prep Batch: 45335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-1	TP-26-01 1	Total/NA	Solid	5030C	
885-45728-2	TP-26-01 2	Total/NA	Solid	5030C	
885-45728-3	TP-26-01 3	Total/NA	Solid	5030C	
885-45728-4	TP-26-01 4	Total/NA	Solid	5030C	
885-45728-5	TP-26-01 5	Total/NA	Solid	5030C	
885-45728-6	TP-26-01 6	Total/NA	Solid	5030C	
885-45728-7	TP-26-01 7	Total/NA	Solid	5030C	
885-45728-8	TP-26-01 8	Total/NA	Solid	5030C	
885-45728-9	TP-26-01 9	Total/NA	Solid	5030C	
885-45728-10	TP-26-01 10	Total/NA	Solid	5030C	
885-45728-11	TP-26-02 1	Total/NA	Solid	5030C	
885-45728-12	TP-26-02 2	Total/NA	Solid	5030C	
885-45728-13	TP-26-02 3	Total/NA	Solid	5030C	
885-45728-14	TP-26-02 4	Total/NA	Solid	5030C	
885-45728-15	TP-26-02 5	Total/NA	Solid	5030C	
885-45728-16	TP-26-02 6	Total/NA	Solid	5030C	
885-45728-17	TP-26-02 7	Total/NA	Solid	5030C	
885-45728-18	TP-26-02 8	Total/NA	Solid	5030C	
MB 885-45335/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-45335/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-45335/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 45340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-19	TP-26-02 9	Total/NA	Solid	5030C	
885-45728-20	TP-26-02 10	Total/NA	Solid	5030C	
MB 885-45340/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-45340/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-45340/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-45728-19 MS	TP-26-02 9	Total/NA	Solid	5030C	
885-45728-19 MSD	TP-26-02 9	Total/NA	Solid	5030C	
885-45728-20 MS	TP-26-02 10	Total/NA	Solid	5030C	
885-45728-20 MSD	TP-26-02 10	Total/NA	Solid	5030C	

Analysis Batch: 45500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-19	TP-26-02 9	Total/NA	Solid	8015M/D	45340
885-45728-20	TP-26-02 10	Total/NA	Solid	8015M/D	45340
MB 885-45340/1-A	Method Blank	Total/NA	Solid	8015M/D	45340
LCS 885-45340/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	45340
885-45728-19 MS	TP-26-02 9	Total/NA	Solid	8015M/D	45340
885-45728-19 MSD	TP-26-02 9	Total/NA	Solid	8015M/D	45340

Analysis Batch: 45501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-19	TP-26-02 9	Total/NA	Solid	8021B	45340
885-45728-20	TP-26-02 10	Total/NA	Solid	8021B	45340
MB 885-45340/1-A	Method Blank	Total/NA	Solid	8021B	45340
LCS 885-45340/3-A	Lab Control Sample	Total/NA	Solid	8021B	45340
885-45728-20 MS	TP-26-02 10	Total/NA	Solid	8021B	45340
885-45728-20 MSD	TP-26-02 10	Total/NA	Solid	8021B	45340

QC Association Summary

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

GC VOA

Analysis Batch: 45632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-1	TP-26-01 1	Total/NA	Solid	8015M/D	45335
885-45728-2	TP-26-01 2	Total/NA	Solid	8015M/D	45335
885-45728-3	TP-26-01 3	Total/NA	Solid	8015M/D	45335
885-45728-4	TP-26-01 4	Total/NA	Solid	8015M/D	45335
885-45728-5	TP-26-01 5	Total/NA	Solid	8015M/D	45335
885-45728-6	TP-26-01 6	Total/NA	Solid	8015M/D	45335
885-45728-7	TP-26-01 7	Total/NA	Solid	8015M/D	45335
885-45728-8	TP-26-01 8	Total/NA	Solid	8015M/D	45335
885-45728-9	TP-26-01 9	Total/NA	Solid	8015M/D	45335
885-45728-10	TP-26-01 10	Total/NA	Solid	8015M/D	45335
885-45728-11	TP-26-02 1	Total/NA	Solid	8015M/D	45335
885-45728-12	TP-26-02 2	Total/NA	Solid	8015M/D	45335
885-45728-13	TP-26-02 3	Total/NA	Solid	8015M/D	45335
885-45728-14	TP-26-02 4	Total/NA	Solid	8015M/D	45335
885-45728-15	TP-26-02 5	Total/NA	Solid	8015M/D	45335
885-45728-16	TP-26-02 6	Total/NA	Solid	8015M/D	45335
885-45728-17	TP-26-02 7	Total/NA	Solid	8015M/D	45335
885-45728-18	TP-26-02 8	Total/NA	Solid	8015M/D	45335
MB 885-45335/1-A	Method Blank	Total/NA	Solid	8015M/D	45335
LCS 885-45335/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	45335

Analysis Batch: 45642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-1	TP-26-01 1	Total/NA	Solid	8021B	45335
885-45728-2	TP-26-01 2	Total/NA	Solid	8021B	45335
885-45728-3	TP-26-01 3	Total/NA	Solid	8021B	45335
885-45728-4	TP-26-01 4	Total/NA	Solid	8021B	45335
885-45728-5	TP-26-01 5	Total/NA	Solid	8021B	45335
885-45728-6	TP-26-01 6	Total/NA	Solid	8021B	45335
885-45728-7	TP-26-01 7	Total/NA	Solid	8021B	45335
885-45728-8	TP-26-01 8	Total/NA	Solid	8021B	45335
885-45728-9	TP-26-01 9	Total/NA	Solid	8021B	45335
885-45728-10	TP-26-01 10	Total/NA	Solid	8021B	45335
885-45728-11	TP-26-02 1	Total/NA	Solid	8021B	45335
885-45728-12	TP-26-02 2	Total/NA	Solid	8021B	45335
885-45728-13	TP-26-02 3	Total/NA	Solid	8021B	45335
885-45728-14	TP-26-02 4	Total/NA	Solid	8021B	45335
885-45728-15	TP-26-02 5	Total/NA	Solid	8021B	45335
885-45728-16	TP-26-02 6	Total/NA	Solid	8021B	45335
885-45728-17	TP-26-02 7	Total/NA	Solid	8021B	45335
885-45728-18	TP-26-02 8	Total/NA	Solid	8021B	45335
MB 885-45335/1-A	Method Blank	Total/NA	Solid	8021B	45335
LCS 885-45335/3-A	Lab Control Sample	Total/NA	Solid	8021B	45335

GC Semi VOA

Prep Batch: 45385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-19	TP-26-02 9	Total/NA	Solid	SHAKE	
885-45728-20	TP-26-02 10	Total/NA	Solid	SHAKE	
MB 885-45385/1-A	Method Blank	Total/NA	Solid	SHAKE	

QC Association Summary

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

GC Semi VOA (Continued)

Prep Batch: 45385 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-45385/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 45387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-19	TP-26-02 9	Total/NA	Solid	8015M/D	45385
885-45728-20	TP-26-02 10	Total/NA	Solid	8015M/D	45385
MB 885-45385/1-A	Method Blank	Total/NA	Solid	8015M/D	45385
LCS 885-45385/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	45385

Prep Batch: 45390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-1	TP-26-01 1	Total/NA	Solid	SHAKE	
885-45728-2	TP-26-01 2	Total/NA	Solid	SHAKE	
885-45728-3	TP-26-01 3	Total/NA	Solid	SHAKE	
885-45728-4	TP-26-01 4	Total/NA	Solid	SHAKE	
885-45728-5	TP-26-01 5	Total/NA	Solid	SHAKE	
885-45728-6	TP-26-01 6	Total/NA	Solid	SHAKE	
885-45728-7	TP-26-01 7	Total/NA	Solid	SHAKE	
885-45728-8	TP-26-01 8	Total/NA	Solid	SHAKE	
885-45728-9	TP-26-01 9	Total/NA	Solid	SHAKE	
885-45728-10	TP-26-01 10	Total/NA	Solid	SHAKE	
885-45728-11	TP-26-02 1	Total/NA	Solid	SHAKE	
885-45728-12	TP-26-02 2	Total/NA	Solid	SHAKE	
885-45728-13	TP-26-02 3	Total/NA	Solid	SHAKE	
885-45728-14	TP-26-02 4	Total/NA	Solid	SHAKE	
885-45728-15	TP-26-02 5	Total/NA	Solid	SHAKE	
885-45728-16	TP-26-02 6	Total/NA	Solid	SHAKE	
885-45728-17	TP-26-02 7	Total/NA	Solid	SHAKE	
885-45728-18	TP-26-02 8	Total/NA	Solid	SHAKE	
MB 885-45390/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-45390/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-45728-18 MS	TP-26-02 8	Total/NA	Solid	SHAKE	
885-45728-18 MSD	TP-26-02 8	Total/NA	Solid	SHAKE	

Analysis Batch: 45418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-1	TP-26-01 1	Total/NA	Solid	8015M/D	45390
885-45728-2	TP-26-01 2	Total/NA	Solid	8015M/D	45390
885-45728-3	TP-26-01 3	Total/NA	Solid	8015M/D	45390
885-45728-4	TP-26-01 4	Total/NA	Solid	8015M/D	45390
885-45728-5	TP-26-01 5	Total/NA	Solid	8015M/D	45390
885-45728-6	TP-26-01 6	Total/NA	Solid	8015M/D	45390
885-45728-7	TP-26-01 7	Total/NA	Solid	8015M/D	45390
885-45728-8	TP-26-01 8	Total/NA	Solid	8015M/D	45390
885-45728-9	TP-26-01 9	Total/NA	Solid	8015M/D	45390
885-45728-10	TP-26-01 10	Total/NA	Solid	8015M/D	45390
885-45728-11	TP-26-02 1	Total/NA	Solid	8015M/D	45390
885-45728-12	TP-26-02 2	Total/NA	Solid	8015M/D	45390
885-45728-13	TP-26-02 3	Total/NA	Solid	8015M/D	45390
885-45728-14	TP-26-02 4	Total/NA	Solid	8015M/D	45390
885-45728-15	TP-26-02 5	Total/NA	Solid	8015M/D	45390

QC Association Summary

Client: Vertex
Project/Site: Todd 36 State #001 ROW

Job ID: 885-45728-1

GC Semi VOA (Continued)

Analysis Batch: 45418 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-16	TP-26-02 6	Total/NA	Solid	8015M/D	45390
885-45728-17	TP-26-02 7	Total/NA	Solid	8015M/D	45390
885-45728-18	TP-26-02 8	Total/NA	Solid	8015M/D	45390
MB 885-45390/1-A	Method Blank	Total/NA	Solid	8015M/D	45390
LCS 885-45390/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	45390
885-45728-18 MS	TP-26-02 8	Total/NA	Solid	8015M/D	45390
885-45728-18 MSD	TP-26-02 8	Total/NA	Solid	8015M/D	45390

General Chemistry

Leach Batch: 45573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-1	TP-26-01 1	Soluble	Solid	DI Leach	
885-45728-2	TP-26-01 2	Soluble	Solid	DI Leach	
885-45728-3	TP-26-01 3	Soluble	Solid	DI Leach	
885-45728-4	TP-26-01 4	Soluble	Solid	DI Leach	
885-45728-5	TP-26-01 5	Soluble	Solid	DI Leach	
885-45728-6	TP-26-01 6	Soluble	Solid	DI Leach	
885-45728-7	TP-26-01 7	Soluble	Solid	DI Leach	
MB 885-45573/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 885-45573/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Leach Batch: 45598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-8	TP-26-01 8	Soluble	Solid	DI Leach	
885-45728-9	TP-26-01 9	Soluble	Solid	DI Leach	
885-45728-10	TP-26-01 10	Soluble	Solid	DI Leach	
885-45728-11	TP-26-02 1	Soluble	Solid	DI Leach	
885-45728-12	TP-26-02 2	Soluble	Solid	DI Leach	
885-45728-13	TP-26-02 3	Soluble	Solid	DI Leach	
885-45728-14	TP-26-02 4	Soluble	Solid	DI Leach	
885-45728-15	TP-26-02 5	Soluble	Solid	DI Leach	
885-45728-16	TP-26-02 6	Soluble	Solid	DI Leach	
885-45728-17	TP-26-02 7	Soluble	Solid	DI Leach	
885-45728-18	TP-26-02 8	Soluble	Solid	DI Leach	
885-45728-19	TP-26-02 9	Soluble	Solid	DI Leach	
885-45728-20	TP-26-02 10	Soluble	Solid	DI Leach	
MB 885-45598/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 885-45598/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
885-45728-8 MS	TP-26-01 8	Soluble	Solid	DI Leach	
885-45728-8 MSD	TP-26-01 8	Soluble	Solid	DI Leach	
885-45728-10 MS	TP-26-01 10	Soluble	Solid	DI Leach	
885-45728-10 MSD	TP-26-01 10	Soluble	Solid	DI Leach	

Analysis Batch: 45600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-1	TP-26-01 1	Soluble	Solid	SM 4500 Cl- E	45573
885-45728-2	TP-26-01 2	Soluble	Solid	SM 4500 Cl- E	45573
885-45728-3	TP-26-01 3	Soluble	Solid	SM 4500 Cl- E	45573
885-45728-4	TP-26-01 4	Soluble	Solid	SM 4500 Cl- E	45573
885-45728-5	TP-26-01 5	Soluble	Solid	SM 4500 Cl- E	45573

QC Association Summary

Client: Vertex Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

General Chemistry (Continued)

Analysis Batch: 45600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-6	TP-26-01 6	Soluble	Solid	SM 4500 Cl- E	45573
885-45728-7	TP-26-01 7	Soluble	Solid	SM 4500 Cl- E	45573
MB 885-45573/1-A	Method Blank	Soluble	Solid	SM 4500 Cl- E	45573
LCS 885-45573/2-A	Lab Control Sample	Soluble	Solid	SM 4500 Cl- E	45573

Analysis Batch: 45655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-45728-8	TP-26-01 8	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-9	TP-26-01 9	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-10	TP-26-01 10	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-11	TP-26-02 1	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-12	TP-26-02 2	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-13	TP-26-02 3	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-14	TP-26-02 4	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-15	TP-26-02 5	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-16	TP-26-02 6	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-17	TP-26-02 7	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-18	TP-26-02 8	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-19	TP-26-02 9	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-20	TP-26-02 10	Soluble	Solid	SM 4500 Cl- E	45598
MB 885-45598/1-A	Method Blank	Soluble	Solid	SM 4500 Cl- E	45598
LCS 885-45598/2-A	Lab Control Sample	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-8 MS	TP-26-01 8	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-8 MSD	TP-26-01 8	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-10 MS	TP-26-01 10	Soluble	Solid	SM 4500 Cl- E	45598
885-45728-10 MSD	TP-26-01 10	Soluble	Solid	SM 4500 Cl- E	45598

Lab Chronicle

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 1
Lab Sample ID: 885-45728-1
Date Collected: 03/18/26 10:00
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 16:05
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 16:05
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 05:59
Soluble	Leach	DI Leach			45573	MA	EET ALB	03/26/26 12:46
Soluble	Analysis	SM 4500 Cl- E		1	45600	MS	EET ALB	03/26/26 16:23

Client Sample ID: TP-26-01 2
Lab Sample ID: 885-45728-2
Date Collected: 03/18/26 10:05
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 16:27
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 16:27
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 06:10
Soluble	Leach	DI Leach			45573	MA	EET ALB	03/26/26 12:46
Soluble	Analysis	SM 4500 Cl- E		1	45600	MS	EET ALB	03/26/26 16:23

Client Sample ID: TP-26-01 3
Lab Sample ID: 885-45728-3
Date Collected: 03/18/26 10:10
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 16:48
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 16:48
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 06:22
Soluble	Leach	DI Leach			45573	MA	EET ALB	03/26/26 12:46
Soluble	Analysis	SM 4500 Cl- E		1	45600	MS	EET ALB	03/26/26 16:24

Client Sample ID: TP-26-01 4
Lab Sample ID: 885-45728-4
Date Collected: 03/18/26 10:15
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 17:10

Lab Chronicle

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 4
Lab Sample ID: 885-45728-4
Date Collected: 03/18/26 10:15
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 17:10
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 06:33
Soluble	Leach	DI Leach			45573	MA	EET ALB	03/26/26 12:46
Soluble	Analysis	SM 4500 Cl- E		1	45600	MS	EET ALB	03/26/26 16:24

Client Sample ID: TP-26-01 5
Lab Sample ID: 885-45728-5
Date Collected: 03/18/26 10:20
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 17:32
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 17:32
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 06:45
Soluble	Leach	DI Leach			45573	MA	EET ALB	03/26/26 12:46
Soluble	Analysis	SM 4500 Cl- E		1	45600	MS	EET ALB	03/26/26 16:25

Client Sample ID: TP-26-01 6
Lab Sample ID: 885-45728-6
Date Collected: 03/18/26 10:25
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 17:53
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 17:53
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 06:56
Soluble	Leach	DI Leach			45573	MA	EET ALB	03/26/26 12:46
Soluble	Analysis	SM 4500 Cl- E		1	45600	MS	EET ALB	03/26/26 16:25

Client Sample ID: TP-26-01 7
Lab Sample ID: 885-45728-7
Date Collected: 03/18/26 10:30
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 18:15
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 18:15

Lab Chronicle

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 7
Lab Sample ID: 885-45728-7
Date Collected: 03/18/26 10:30
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 07:08
Soluble	Leach	DI Leach			45573	MA	EET ALB	03/26/26 12:46
Soluble	Analysis	SM 4500 Cl- E		1	45600	MS	EET ALB	03/26/26 16:26

Client Sample ID: TP-26-01 8
Lab Sample ID: 885-45728-8
Date Collected: 03/18/26 10:35
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 18:37
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 18:37
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 07:19
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		1	45655	MA	EET ALB	03/27/26 10:53

Client Sample ID: TP-26-01 9
Lab Sample ID: 885-45728-9
Date Collected: 03/18/26 10:40
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 19:20
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 19:20
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 07:31
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		10	45655	MA	EET ALB	03/27/26 11:17

Client Sample ID: TP-26-01 10
Lab Sample ID: 885-45728-10
Date Collected: 03/18/26 10:45
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 19:42
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 19:42
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 07:42

Lab Chronicle

Client: Vertex Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-01 10 Lab Sample ID: 885-45728-10

Date Collected: 03/18/26 10:45 **Matrix: Solid**
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		10	45655	MA	EET ALB	03/27/26 11:17

Client Sample ID: TP-26-02 1 Lab Sample ID: 885-45728-11

Date Collected: 03/18/26 11:00 **Matrix: Solid**
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 20:03
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 20:03
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 07:53
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		1	45655	MA	EET ALB	03/27/26 10:57

Client Sample ID: TP-26-02 2 Lab Sample ID: 885-45728-12

Date Collected: 03/18/26 11:05 **Matrix: Solid**
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 20:25
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 20:25
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 08:05
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		1	45655	MA	EET ALB	03/27/26 10:58

Client Sample ID: TP-26-02 3 Lab Sample ID: 885-45728-13

Date Collected: 03/18/26 11:10 **Matrix: Solid**
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 20:47
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 20:47
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 08:16
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		1	45655	MA	EET ALB	03/27/26 10:58

Lab Chronicle

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 4
Lab Sample ID: 885-45728-14
Date Collected: 03/18/26 11:15
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 21:09
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 21:09
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 08:28
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		1	45655	MA	EET ALB	03/27/26 10:59

Client Sample ID: TP-26-02 5
Lab Sample ID: 885-45728-15
Date Collected: 03/18/26 11:20
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 21:30
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 21:30
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 08:39
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		1	45655	MA	EET ALB	03/27/26 11:00

Client Sample ID: TP-26-02 6
Lab Sample ID: 885-45728-16
Date Collected: 03/18/26 11:25
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 21:52
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 21:52
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 08:51
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		1	45655	MA	EET ALB	03/27/26 11:00

Client Sample ID: TP-26-02 7
Lab Sample ID: 885-45728-17
Date Collected: 03/18/26 11:30
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 22:14

Lab Chronicle

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 7
Lab Sample ID: 885-45728-17
Date Collected: 03/18/26 11:30
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 22:14
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 09:02
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		10	45655	MA	EET ALB	03/27/26 11:19

Client Sample ID: TP-26-02 8
Lab Sample ID: 885-45728-18
Date Collected: 03/18/26 11:35
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8015M/D		1	45632	AT	EET ALB	03/27/26 22:35
Total/NA	Prep	5030C			45335	VP	EET ALB	03/23/26 14:25
Total/NA	Analysis	8021B		1	45642	AT	EET ALB	03/27/26 22:35
Total/NA	Prep	SHAKE			45390	BV	EET ALB	03/24/26 10:09
Total/NA	Analysis	8015M/D		1	45418	DB	EET ALB	03/25/26 09:13
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		10	45655	MA	EET ALB	03/27/26 11:19

Client Sample ID: TP-26-02 9
Lab Sample ID: 885-45728-19
Date Collected: 03/18/26 11:40
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45340	VP	EET ALB	03/23/26 15:22
Total/NA	Analysis	8015M/D		1	45500	VP	EET ALB	03/25/26 15:58
Total/NA	Prep	5030C			45340	VP	EET ALB	03/23/26 15:22
Total/NA	Analysis	8021B		1	45501	VP	EET ALB	03/25/26 15:58
Total/NA	Prep	SHAKE			45385	JE	EET ALB	03/24/26 09:31
Total/NA	Analysis	8015M/D		1	45387	DB	EET ALB	03/25/26 09:47
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		10	45655	MA	EET ALB	03/27/26 11:20

Client Sample ID: TP-26-02 10
Lab Sample ID: 885-45728-20
Date Collected: 03/18/26 11:45
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45340	VP	EET ALB	03/23/26 15:22
Total/NA	Analysis	8015M/D		1	45500	VP	EET ALB	03/25/26 17:09
Total/NA	Prep	5030C			45340	VP	EET ALB	03/23/26 15:22
Total/NA	Analysis	8021B		1	45501	VP	EET ALB	03/25/26 17:09

Lab Chronicle

Client: Vertex
Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Client Sample ID: TP-26-02 10
Lab Sample ID: 885-45728-20

Date Collected: 03/18/26 11:45
Matrix: Solid
Date Received: 03/20/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			45385	JE	EET ALB	03/24/26 09:31
Total/NA	Analysis	8015M/D		1	45387	DB	EET ALB	03/25/26 09:58
Soluble	Leach	DI Leach			45598	JR	EET ALB	03/26/26 15:52
Soluble	Analysis	SM 4500 Cl- E		10	45655	MA	EET ALB	03/27/26 11:20

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex Job ID: 885-45728-1
Project/Site: Todd 36 State #001 ROW

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-26 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015M/D	5030C	Solid	Gasoline Range Organics (GRO)-C6-C10
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
SM 4500 Cl- E		Solid	Chloride

Oregon	NELAP	NM100001	02-25-27

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 Cl- E		Solid	Chloride

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain-of-Custody Record

Client: **Vertex Resource** (direct bill to Devon)

Mailing Address: 3101 Boyd Dr, Carlsbad NM, 88220

Phone #: 575-725-5001

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush 5 Day

Project Name: **Todd 36 State #001 ROW**

Project #: **25A-01349**

Project Manager: Kent Stallings, Sally Carttar

kstallings@vertex.ca, Scarttar@vertex.CA

Sampler: K. Taylor

On Ice: ☒ Yes ☐ No

# of Coolers: 1 Ice

Cooler Temp(including CF): 3.2+0.2=3.4

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

885-45728 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)
3/18/26	10:00	Soil	TP26-01 1	1, 4oz jar	ICE		X	X					X			
3/18/26	10:05	Soil	TP26-01 2	1, 4oz jar	ICE		X	X					X			
3/18/26	10:10	Soil	TP26-01 3	1, 4oz jar	ICE		X	X					X			
3/18/26	10:15	Soil	TP26-01 4	1, 4oz jar	ICE		X	X					X			
3/18/26	10:20	Soil	TP26-01 5	1, 4oz jar	ICE		X	X					X			
3/18/26	10:25	Soil	TP26-01 6	1, 4oz jar	ICE		X	X					X			
3/18/26	10:30	Soil	TP26-01 7	1, 4oz jar	ICE		X	X					X			
3/18/26	10:35	Soil	TP26-01 8	1, 4oz jar	ICE		X	X					X			
3/18/26	10:40	Soil	TP26-01 9	1, 4oz jar	ICE		X	X					X			
3/18/26	10:45	Soil	TP26-01 10	1, 4oz jar	ICE		X	X					X			
3/18/26	11:00	Soil	TP26-02 1	1, 4oz jar	ICE		X	X					X			
3/18/26	11:05	Soil	TP26-02 2	1, 4oz jar	ICE		X	X					X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
					3/19/26	900
3/19/26	1900			Courier	3/20/26	8:00

Remarks: ATTN Jim Raley
Direct bill to Devon work order 3001520341 Jim Raley
cc. permian@vertexresource.com, **SCarttar@vertexresource.com**, **kstallings@vertexresource.com**, LPullman@vertexresource.com, Katrina.Taylor@vertexresource.com for Final Report

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: **Vertex Resource** (direct bill to Devon)

Mailing Address: 3101 Boyd Dr, Carlsbad NM, 88220

Phone #: 575-725-5001

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: **Todd 36 State #001 ROW**

Project #: **25A-01349**

Project Manager: Kent Stallings, Sally Carttar

kstallings@vertex.ca, Scarttar@vertex.CA

Sampler: K. Taylor

On Ice: ~~☐ Yes~~ ☐ No

# of Coolers: Joe

Cooler Temp(including CF): 3.2+0.2=3.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)
3/18/26	11:10	Soil	TP26-02 3	1, 4oz jar	ICE		X	X					X			
3/18/26	11:15	Soil	TP26-02 4	1, 4oz jar	ICE		X	X					X			
3/18/26	11:20	Soil	TP26-02 5	1, 4oz jar	ICE		X	X					X			
3/18/26	11:25	Soil	TP26-02 6	1, 4oz jar	ICE		X	X					X			
3/18/26	11:30	Soil	TP26-02 7	1, 4oz jar	ICE		X	X					X			
3/18/26	11:35	Soil	TP26-02 8	1, 4oz jar	ICE		X	X					X			
3/18/26	11:40	Soil	TP26-02 9	1, 4oz jar	ICE		X	X					X			
3/18/26	11:45	Soil	TP26-02 10	1, 4oz jar	ICE		X	X					X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
		Kent Taylor			3/19/26	900
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
				Courier	3/20/26	8:00

Remarks: ATTN Jim Raley
Direct bill to Devon work order 3001520341 Jim Raley
cc. permian@vertexresource.com, **SCarttar@vertexresource.com**, **kstallings@vertexresource.com**, LPullman@vertexresource.com, Katrina.Taylor@vertexresource.com for Final Report

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.

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-45728-1

Login Number: 45728 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 577913

QUESTIONS

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1703948537**
Incident Name	**NAB1703948537 TODD 36 STATE #001 @ 30-015-20341**
Incident Type	**Produced Water Release**
Incident Status	**Re-vegetation Report Received**
Incident Well	**[30-015-20341] TODD 36 STATE #001**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	TODD 36 STATE #001
Date Release Discovered	01/28/2017
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water 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	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Other (Specify) | Produced Water | Released: 70 BBL | Recovered: 2 BBL | Lost: 68 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.*

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

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 Title: Business Manager Email: rkidd@buckhornproduction.com Date: 04/21/2026

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

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	NM OSE iWaters Database Search
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	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 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 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (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	Yes

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)	5800
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
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	04/21/2023
On what date will (or did) the final sampling or liner inspection occur	04/21/2023
On what date will (or was) the remediation complete(d)	04/21/2023
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0
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.	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

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.)	*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)	Yes
Other Non-listed Remedial Process. Please specify	No remediation was required due to low contaminant concentrations in the top 4 feet.
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 Title: Business Manager Email: rkidd@buckhornproduction.com Date: 04/21/2026
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.	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Deferral Requests Only *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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**454276**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**04/21/2023**
What was the (estimated) number of samples that were to be gathered	**15**
What was the sampling surface area in square feet	**2803**

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	0
What was the total volume (cubic yards) remediated	0
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	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	No remediation or reclamation were required.

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 Title: Business Manager Email: rkidd@buckhornproduction.com Date: 04/21/2026

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	0
What was the total volume of replacement material (in cubic yards) for this site	0
Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	04/21/2023
Summarize any additional reclamation activities not included by answers (above)	The area was only disturbed to delineate and all soil was replaced.
The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 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 Title: Business Manager Email: rkidd@buckhornproduction.com Date: 04/21/2026

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.	
Requesting a restoration complete approval with this submission	Yes
What was the total revegetation surface area (in square feet) for this site	0
Per Paragraph (2) of Subsection D of 19.15.29.13 NMAC the responsible party must reseed disturbed area in the first favorable growing season following closure of the site.	
On what date did the reseeding commence	04/21/2023
On what date was the vegetative cover inspected	05/02/2025
What was the life form ratio compared to pre-disturbance levels	90
What was the total percent plant cover compared to pre-disturbance levels	90
Summarize any additional revegetation activities not included by answers (above)	Little to no disturbance was caused to the vegetation during delineation and no excavation occurred.
The responsible party must attach information demonstrating they have complied with all applicable re-vegetation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any life form ratio and percent plant cover sampling diagrams or other relevant field notes, photographs of re-vegetated areas, and a narrative of the re-vegetation activities. Refer to 19.15.29.13 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 Title: Business Manager Email: rkidd@buckhornproduction.com Date: 04/21/2026
Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 577913
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your remediation closure/reclamation/revegetation report for Incident #nAB1703948537 TODD 36 STATE #001, thank you. The remediation closure/reclamation/revegetation report is approved.	4/29/2026