



Incident Numbers: nJMW1231248032,  
nJMW1317034502, nAB1516753239

## Amended Release Assessment and Closure

Todd 24 B Federal #002

Section 24, Township 23 South, Range 31 East

API: 30-015-27691

County: Eddy

Vertex File Number: 25A-01218

**Prepared for:**

Devon Energy Production Company, LP

**Prepared by:**

Vertex Resource Services Inc.

**Date:**

October 2025

**Devon Energy Production Company, LP**  
Todd 24 B Federal #002

**Release Assessment and Closure**  
October 2025

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**Release Assessment and Closure**  
**Todd 24 B Federal #002**  
**Section 24, Township 23 South, Range 31 East**  
**API: 30-015-27691**  
**County: Eddy**

Prepared for:  
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October 29, 2025  
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Date

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## 0.0 Amendment to Closure Report

The following report has been updated and includes a summary of efforts and justification to amend closure denial concerns notated by New Mexico Oil Conservation Division on September 23, 2025.

## 1.0 Introduction

Devon Energy Production Company, LP (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct Release Assessment and Closures for three produced water releases that occurred at Todd 24 B Federal #002 API 30-015-27691 (hereafter referred to as the "site"). Devon submitted initial C-141 Release Notifications (Appendix A) to New Mexico Oil Conservation Division (NMOCD) District 2. Incident ID numbers nJMW1231248032, nJMW1317034502, and nAB1516753239 and respective administrative work orders 2RP-1391, 2RP-1686, and 2RP-3051 were 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 the releases, with the understanding that restoration of the release site will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13.

## 2.0 Incident Description

### 2.1 nJMW1231248032

The release occurred May 23, 2012, due to transfer pump malfunctions that resulted in tank overflow. The incident was reported on November 1, 2012, and involved the release of approximately 70 barrels (bbl) of produced water into the unlined earthen containment. Approximately 70 bbl of free fluid was removed during initial clean-up.

### 2.2 nJMW1317034502

The release occurred June 12, 2013, due to a plugged transfer pump discharge line that resulted in tank overflow. The incident was reported on June 17, 2013, and involved the release of approximately 35 bbl of produced water into the unlined earthen containment. Approximately 30 bbl of free fluid was removed during initial clean-up.

### 2.3 nAB1516753239

The release occurred February 23, 2015, due to transfer pump not operating properly that resulted in tank overflow. The incident was reported on June 15, 2015, and involved the release of approximately 80 barrels (bbl) of produced water into the unlined earthen containment. Approximately 75 bbl of free fluid was removed during initial clean-up.

All three releases occurred inside the earthen tank battery containment. Additional details relevant to the releases are presented in the C 141 Reports (Appendix A).

### 3.0 Site Characteristics

The site is located approximately 31 miles west-northwest of Loving, New Mexico. The legal location for the site is Section 24, Township 23 South and Range 31 East in Eddy County, New Mexico. The release area is located on Bureau of Land Management (BLM) 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 oil and gas production and storage. The following sections specifically describe the release area inside the containment in proximity to the tank battery (Figure 1).

*The Geological Map of New Mexico* indicates the site's surface geology primarily comprises Qep - Eolian and piedmont deposits (New Mexico Bureau of Geology and Mineral Resources, 2025). The karst geology potential for the site is low. The surrounding landscape is associated with plains and fan piedmonts with elevations ranging between 2,000 and 5,700 feet. The climate is semiarid with average annual precipitation ranging between 6 and 14 inches. Predominant soil textures around the site are well-drained loamy fine sands and sandy clay loams with low runoff potential (United States Department of Agriculture, Natural Resources Conservation Service, 2025). Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grasses interspersed with shrubs and half-shrubs (United States Department of Agriculture, Natural Resources Conservation Service, 2025). Limited to no vegetation is allowed to grow on the compacted facility pad.

### 4.0 Closure Criteria Determination

The depth to groundwater was determined by drilling a borehole permitted by the New Mexico Office of the State Engineer (NMOSE) within a 0.5-mile radius of the site. The borehole was advanced to a depth of 55 feet. The borehole was left to recover per the requirements on the WR-07 Application for Permit to Drill a Well with No Water Rights, and an interface probe was utilized to determine whether groundwater was present at the conclusion of the 72-hour recovery period. No water was found to be present at that time. The borehole was plugged and abandoned according to the WR-08 permit, Well Plugging Plan of Operations, filed with NMOSE. Documentation related to the exploratory borehole is included in Appendix B.

The nearest active water well to the site is designated for prospecting or development of natural resources and is located 1.59 miles to the southwest (New Mexico Office of the State Engineer, 2025). 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 2.89 miles northwest of the site (United States Fish and Wildlife Service, 2025). 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.

Devon Energy Production Company, LP  
Todd 24 B Federal #002

Release Assessment and Closure  
October 2025

<b>Table 1. Closure Criteria Determination</b>			
<b>Site Name: Todd 24 B Federal #002</b>			
<b>Release Coordinates: 32.2952957,-103.7293777</b>		<b>X: 619635</b>	<b>Y: 3573877</b>
<b>Site Specific Conditions</b>		<b>Value</b>	<b>Unit</b>
1	Depth to Groundwater (nearest reference)	>55	feet
	Distance between release and nearest DTGW reference	50	feet
		0.01	miles
	Date of nearest DTGW reference measurement	March 9, 2023	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	15,259	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	10,190	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	28,100	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	11,289	feet
	ii) Within 1000 feet of any fresh water well or spring	8,424	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	20,222	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	51,800	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest High Karst	32,064	feet
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	38,970	feet
11	Soil Type	Fine sand, sandy clay loam	
12	Ecological Classification	Loamy Sand	
13	Geology	Eolian and piedmont deposits	
	<b>NMAC 19.15.29.12 E (Table 1) Closure Criteria</b>	51-100'	<50' 51-100' >100'

The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

<b>Table 2. Closure Criteria for Soils Impacted by a Release</b>		
<b>Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS</b>	<b>Constituent</b>	<b>Limit</b>
51 feet - 100 feet	Chloride	10,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids

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

Characterization of the historical release area inside and in proximity to the tank battery containment was conducted by Vertex between May 16, 2022, and February 17, 2023, including vertical and horizontal delineation. The total impacted area was determined to be 87 square feet. The Daily Field Reports (DFRs) associated with the site visits are included in Appendix C. Characterization sample locations and approximate release areas are presented on Figure 1. Characterization laboratory results are summarized in Table 3.

Remediation efforts began and were finalized on August 12, 2025. Vertex personnel supervised the excavation of impacted soils. Field screening results were used to identify areas requiring further remediation. Field screening consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and silver nitrate titration (chloride). Soils were removed to depths of 1 to 3 feet below ground surface (bgs). Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. Daily Field Reports documenting final remediation and completed backfill are presented in Appendix C.

Notifications that confirmatory samples were being collected were provided to the NMOCD for August 12 and October 2, 2025. Confirmatory composite samples were collected from the base and walls of the excavation in increments no greater than 200 square feet. Three excavation areas were established to address all contamination found above strictest criteria. The areas of the excavation bases and walls totaled approximately 120 square feet on pad and 69 square feet in pasture. A total of three base samples and three wall samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Eurofins Environment Testing in Albuquerque, New Mexico, under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix D.

Upon completion of remedial actions, approximately 189 square feet and 20 cubic yards of the impacted area was remediated to applicable closure criteria. All confirmation samples collected from the remediation area were below strictest closure criteria.

### 5.1 Conditional Acceptance Compliance

On May 8, 2025, Devon submitted a Remediation Work Plan to NMOCD. On May 21, 2025, the Remediation Work Plan was approved with conditions:

- (1) *"Referring to Google Earth historical imagery, between 3/2012 and 2/2014, something occurred to cause vegetation to die to the north of the tank battery. Collect delineation samples at the following locations: 32.295831, -103.730106 and 32.295709, -103.730192. For each, samples must be discrete and collected at surface, 1', 2', 3' and 4'. These samples must be submitted to a laboratory for testing for all Table I constituents. Should exceedances be found these will be required to be remediated pursuant to 19.15.29.12 NMAC."*

Additional boreholes BH25-13 and BH25-14 were advanced to 4 feet bgs at the specified coordinates in the pasture northwest of the site. Laboratory analysis showed both boreholes to have no contamination.

- (2) *"As these releases go back 13 years, two boreholes are required to be drilled within the tank battery and discrete samples collected at surface, 1', 2', etc. down to 10' depth. These samples must be submitted to a laboratory for testing for all Table I constituents. One of the boreholes must be drilled at 32.295651, -103.729932 as it appears this portion of the tank battery had staining in Google Earth imagery and this corner appears to have the lowest elevation. The second borehole should be drilled somewhere in the middle to southern portion of the tank battery. Should exceedances be found, remediation is required to the maximum extent practicable."*

Additional borehole BH25-15 was advanced to 8 feet bgs with a hand auger inside the containment at the northwest end of the battery at the specified coordinates. Refusal with a hand auger was hit at 8 ft. Due the coordinates being less than 10 ft from the tank battery and concerns about destabilization, it was deemed to be unsafe to operate with machinery to a depth of 10 ft. All nine depth samples (0 to 8 ft) were found to be below closure criteria. Results at depths of 1 through 8 feet bgs were below laboratory detection limits. Vertex on behalf of Devon kindly asks that this be considered in compliance with the request for deeper delineation inside the northern area of the tank battery.

Additional borehole BH25-16 was advanced to 10 feet bgs along the inside edge of the containment at the south-middle portion of the tank battery. The placement of BH25-16 followed the guidelines and allowed equipment access to collect samples at the required depths. Samples were collected in 1 foot intervals from surface to the requested depth. Characterization sample locations and laboratory results are presented on Figure 1 and in Table 3, respectively. Delineation in this area revealed contamination above closure criteria to 1 ft bgs. and below strictest to 3 ft bgs. The area was remediated to strictest criteria.

## 5.2 Remediation Closure Denial

On September 23, 2025, Devon submitted a Closure Report to NMOCD. The Closure report was denied for the following reasons:

- 1) *The 5/21/25 approved remediation plan was not followed which proposed the area of BH22-01 was going to be excavated to 3' depth as TPH was found above the reclamation limits at 2' depth. As shown in the photos on pg. 69 this area is off pad and must meet the reclamation limits per 19.15.29.13 NMAC.*
- 2) *Per 19.15.29.12.E NMAC, Photographs of the excavations prior to backfill are missing from remediation summary for the excavation that took place at BH25-16 which exceeded Closure Criteria with a TPH concentration of 11,000 mg/kg. Include these photos in resubmission. Submit updated remediation closure report to the OCD by 11/24/25.*

The area of BH22-01 was excavated to 3 feet bgs meeting the reclamation limits per 19.15.29.13 NMAC and confirmatory composite samples were collected from the base and wall of the excavation on October 6, 2025. The area was previously excavated to 1 foot and then samples were mistakenly labeled as 2 feet bgs as indicated on Table 4. The samples collected from advanced excavation to 3 feet are presented in Table 4 and Lab Report: 885-35134-1 (Appendix D). Corrective actions are documented and presented in Appendix C.

Photos of the additional excavations to the south of the containment, around BH22-03, and the middle of the containment which includes BH25-16, in addition to the vertical delineation of BH25-16 to 10 feet bgs, can be found in Daily Field Report for August 12, 2025 (Appendix C).

## 6.0 Closure Request

Vertex recommends no additional remediation action to address the release at Todd 24 B Federal #002. Laboratory analyses of the final confirmatory samples showed constituent of concern concentration levels below NMOCD remediation closure criteria for areas where depth to groundwater is between 51 and 100 feet bgs as shown in Table 2. There are no anticipated risks to human, ecological or hydrological receptors associated with the release sites. The excavation was backfilled with non-waste-containing, uncontaminated, earthen material, sourced locally, and placed to meet the site's existing grade to prevent ponding of water and erosion.

Devon Energy Production Company, LP, requests that these incidents (nJMW1231248032, nJMW1317034502, and nAB1516753239) remediation closure be approved as all criteria set forth in Subsection E of 19.15.29.12 has been met. Devon certifies that all information in this report and the attachments is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the May 23, 2012, June 12, 2013, and February 23, 2015, releases at Todd 24 B Federal #002.

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.



Devon Energy Production Company, LP  
Todd 24 B Federal #002

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## 7.0 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. (2025). *Interactive Geologic Map*. Retrieved from <https://maps.nmt.edu/>
- New Mexico Energy, Minerals and Natural Resources Department. (2025). *OCD Permitting - Spill Search*. Retrieved from <https://wwwapps.emnrd.nm.gov/ocd/ocdpermitting/Data/Spills/Spills.aspx>
- New Mexico Office of the State Engineer. (2025). *New Mexico Water Rights Reporting System*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.html>
- 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. (2025). *Web Soil Survey*. Retrieved from <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- United States Department of Homeland Security, Federal Emergency Management Agency. (2025). *FEMA Flood Map Service: Search by Address*. Retrieved from <https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor>
- United States Fish and Wildlife Service. (2025). *National Wetland Inventory - Surface Waters and Wetlands*. Retrieved from <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>

Devon Energy Production Company, LP  
Todd 24 B Federal #002

Release Assessment and Closure  
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## 8.0 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 and the Bureau of Land Management, 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**



Map Center:  
Lat/Long: 32.295524°N, 103.729801°W  
Date: Sep 02/25  
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet



### Characterization Sampling Site Schematic Todd 24 B Federal #002

FIGURE:

1

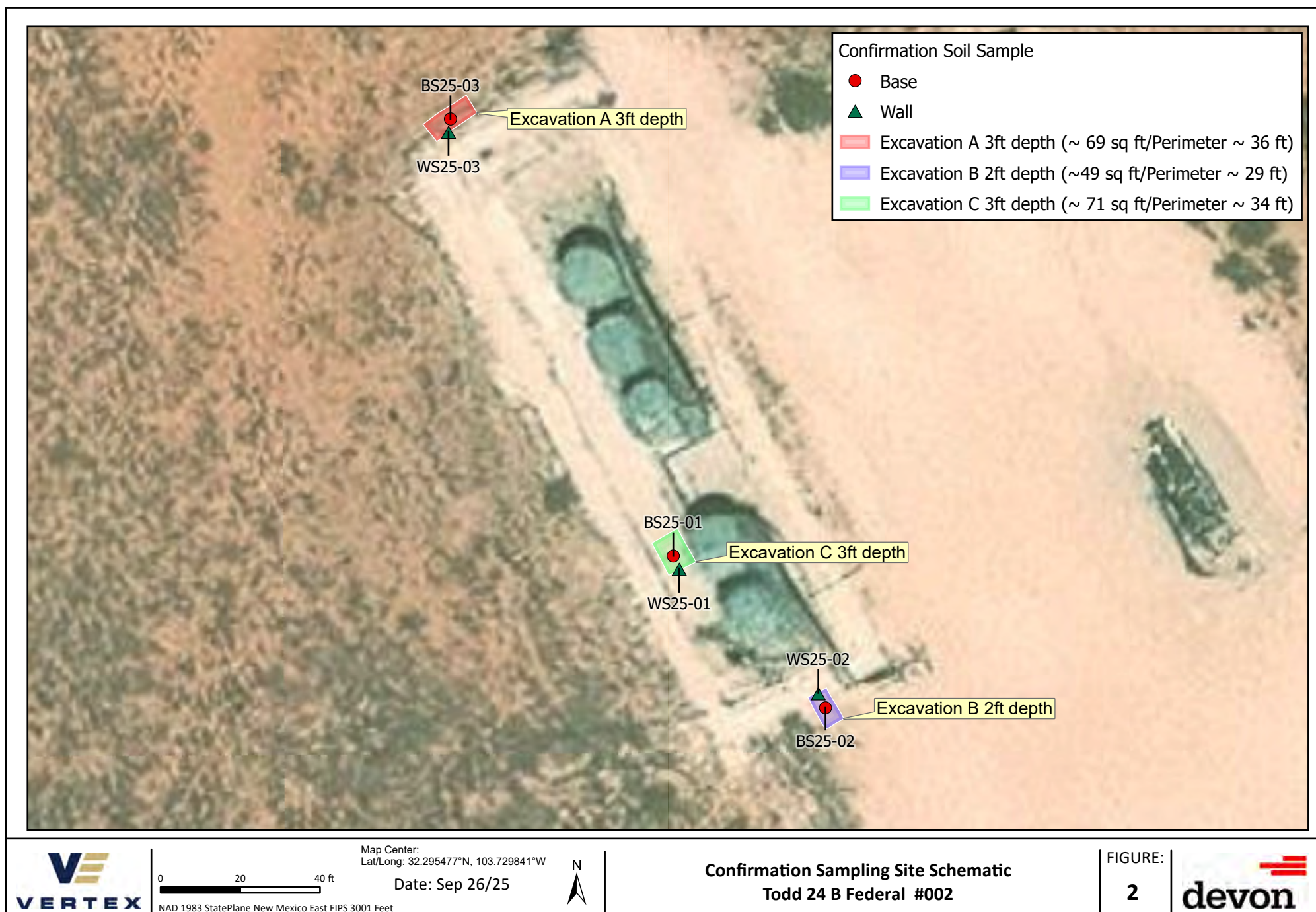


Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

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

VERSATILITY. EXPERTISE.





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

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## **TABLES**

Client Name: Devon Energy Production Company, LP  
 Site Name: Todd 24 B Federal #002  
 NMOCD Tracking #: nJMW1231248032, nJMW1317034502, nAB1516753239  
 Project #: 25A-01218  
 Lab Reports: 2205800, 2205A95, 2302857, 885-28078-1, and 885-31126-1

Table 3. Characterization Laboratory Results - Depth to Groundwater 51-100 feet bgs

Table 3. Characterization Laboratory Results - Depth to Groundwater 51-100 feet bgs										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
BH22-01	0	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	60
	2	May 16, 2022	ND	ND	ND	19	100	19	119	ND
	4	February 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH22-02	0	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-03	0	May 16, 2022	ND	ND	ND	17	290	17	307	ND
	2	February 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	4	February 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH22-04	0	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-05	0	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-06	0	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	May 16, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-07	0	May 20, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	May 20, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-08	0	May 20, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	May 20, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-09	0	May 20, 2022	ND	ND	ND	ND	ND	ND	ND	ND
	2	May 20, 2022	ND	ND	ND	ND	ND	ND	ND	ND
BH22-10	0	February 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH22-11	0	February 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH22-12	0	February 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH25-13*	0	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	4	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BH25-14*	0	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	4	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND

Client Name: Devon Energy Production Company, LP  
 Site Name: Todd 24 B Federal #002  
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 Project #: 25A-01218  
 Lab Reports: 2205800, 2205A95, 2302857, 885-28078-1, and 885-31126-1

Table 3. Characterization Laboratory Results - Depth to Groundwater 51-100 feet bgs										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
BH25-15*	0	July 1, 2025	ND	ND	ND	220	610	220	610	ND
	1	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	4	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	5	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	6	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	7	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND
8**	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	ND	
BH25-16*	0	July 1, 2025	ND	ND	ND	6000	5000	6000	11000	3800
	1	July 1, 2025	ND	ND	ND	440	1400	440	1840	610
	2	July 1, 2025	ND	ND	ND	1000	2100	1000	3100	240
	3	July 1, 2025	ND	ND	ND	16	ND	16	16	440
	4	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	560
	5	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	590
	6	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	340
	7	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	170
	8	July 1, 2025	ND	ND	ND	ND	ND	ND	ND	730
	9	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	10	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	290

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

"\*" Boreholes were taken in compliance with the OCD Conditional Acceptance

"\*\*" Maximum depth safely obtainable. See section 5.0 of report for more details.

**Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria**

**Bold and green shaded indicates exceedance outside of NMOCD Reclamation Closure Criteria**

Client Name: Devon Energy Production Company, LP  
 Site Name: Todd 24B Federal #002  
 NM OCD Tracking #: nJMW1231248032, nJMW1317034502, nAB1516753239  
 Project #: 25A-01218  
 Lab Report: 885-31126-1 and 885-35134-1

Table 4. Confirmatory Sample Laboratory Results										
Sample Description			Petroleum Hydrocarbons							Inorganic Chloride Concentration (mg/kg)
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
Depth to Groundwater 51 - 100 feet bgs										
Base Samples										
BS25-01	3	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	170
BS25-02	1	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	110
BS25-03	2*	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	3	October 6, 2025	ND	ND	ND	ND	ND	ND	ND	ND
Wall Samples										
WS25-01	0-3	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	100
WS25-02	0-2	August 12, 2025	ND	ND	ND	ND	77	ND	77	95
WS25-03	0-2*	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	ND
	0-3	October 6, 2025	ND	ND	ND	ND	ND	ND	ND	ND
Backfill Samples										
BS25-04	0	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	150
BS25-05	0	August 12, 2025	ND	ND	ND	ND	ND	ND	ND	160

"\*" indicates error in depth

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

**Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria**

## **APPENDIX A - NMOCD C-141 Reports**



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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

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

## Release Notification and Corrective Action

nJMW1231248032

## OPERATOR

☒ Initial Report ☐ Final Report

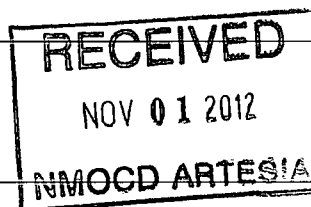
Name of Company: Devon Energy Production LP 6137	Contact: Daniel Suniga
Address: P.O. Box 250 Artesia, N.M. 88211	Telephone No. (575)390-5850
Facility Name: Todd 24B # 2	Facility Type: Oil Well # 30-015-27691
Surface Owner	Mineral Owner
Lease No. NM0533177-A	

## LOCATION OF RELEASE

Unit Letter B	Section 24	Township 23S	Range 31E	Feet from the 660'	North/South Line North	Feet from the 1980'	East/West Line East	County Eddy
------------------	---------------	-----------------	--------------	-----------------------	---------------------------	------------------------	------------------------	----------------

## NATURE OF RELEASE

Type of Release: Spill	Volume of Release: 70 bbls	Volume Recovered: 70 bbls
Source of Release: transfer pump malfunction	Date and Hour of Occurrence: 5/23/2012, 8:00 AM	Date and Hour of Discovery 5/23/2012, 8:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jim Amos, BLM-Eddy County	
By Whom? Daniel Suniga-Production Foreman	Date and Hour: 10/27/12, 3:55 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.* N/A		



## Describe Cause of Problem and Remedial Action Taken.\*

At the Todd 24B # 2 battery, a contract Lease Operator discovered produced water spilling over the tank due to a transfer pump malfunction that caused a 70 bbl. produced water spill with 70 bbls. recovered.

## Describe Area Affected and Cleanup Action Taken.\*

The affected location was the Todd 24B # 2 battery. The Lease Operator contacted a vacuum truck to haul the produced water and then contacted his foreman where he was advised to shut in the location. The transfer pump was repaired and put back into service.

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: <u>Rebecca Raga</u>	OIL CONSERVATION DIVISION	
Printed Name: Rebecca Raga	Approved by District Supervisor:	Signed By: <u>M. H. Benavente</u>
Title: Field Tech	Approval Date: <u>NOV 07 2012</u>	Expiration Date:
E-mail Address: rebecca.raga@dv.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 10/30/2012 Phone: (575) 746-5564		

\* Attach Additional Sheets If Necessary

2RP-1391

Remediation per OCD Rules &  
Guidelines. SUBMIT REMEDIATION  
PROPOSAL NOT LATER THAN:  
Dec. 7th 2012

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

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

### Release Notification and Corrective Action

*NTM* *1317034502 Energy* **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company <b>DEVON ENERGY</b> <i>6137</i>	Contact <b>DAN SUNIGA</b>
Address <b>PO BOX 250</b> <b>ARTESIA NM 88211</b>	Telephone No. <b>575-746-5555</b>
Facility Name <b>TODD 24 FED 2 BATTERY</b>	Facility Type <b>OIL WELL</b>
Surface Owner	Mineral Owner
API No. <b>3001527691</b>	

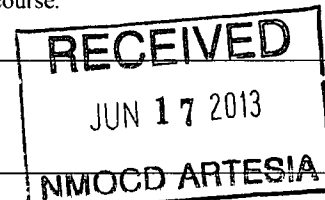
### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>B</b>	<b>24</b>	<b>23S</b>	<b>31E</b>	<b>660'</b>	<b>North</b>	<b>1980"</b>	<b>East</b>	<b>Eddy</b>

Latitude: **32.2952956145063** Longitude: **-103.7294101096522**

### NATURE OF RELEASE

Type of Release <b>Produced Water</b>	Volume of Release <b>35bbbls</b>	Volume Recovered <b>30bbbls</b>
Source of Release <b>Spill</b>	Date and Hour of Occurrence <b>June 12, 2013</b>	Date and Hour of Discovery <b>June 12, 2013</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Mike Bratcher/OCD, Jennifer Van Curen/BLM</b>	
By Whom? <b>Wesley Ryan</b>	Date and Hour: <b>June 13, 2013 8:15am/8:30am</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*  N/A		
Describe Cause of Problem and Remedial Action Taken.* <b>At the Todd 24 Fed 2 Battery, a transfer pumps discharge line plugged off from a slug of paraffin causing a produced water tank to run over resulting in a spill of 35 bbls of produced water.</b>		
Describe Area Affected and Cleanup Action Taken.* <b>The lease operator arrived to discover the produced water tank running over. The operator discovered that a slug of paraffin had built up in a 90 on the discharge side of the pump. The pump was unable to transfer the produced water off location and the tank filled up and ran over. The spill was estimated to be 35bbbls of produced water within the containment around the tanks. A vacuum truck was dispatched and the driver recovered 30bbbls. The operator then notified the Asst. Foreman and made arrangements to have the line cleaned, replace the pump and remove the contaminated soil around the tank. Also, the spill was contained within the unlined containment on the caliche pad.</b>		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		



Signature: <i>Veronica Teel</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Veronica Teel</b>		Approved by Environmental Specialist: <i>Mike Bratcher</i>	
Title: <b>Field Admin Support</b>		Approval Date: <b>JUN 19 2013</b>	Expiration Date:
E-mail Address: <b>Veronica.Teel@dmn.com</b>		Conditions of Approval: Remediation per OCD Rule & Guidelines. <b>SUBMIT REMEDIATION PROPOSAL NO LATER THAN:</b>	
Date: <b>June 14, 2013</b> Phone: <b>575-748-9933</b>		Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

**2RP-1686**  
*July 19, 2013*

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

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

Form C-141  
Revised August 8, 2011

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

### Release Notification and Corrective Action

**0481516753239** **OPERATOR** ☒ Initial Report ☐ Final Report

<b>Name of Company</b> Devon Energy Production <b>6137</b>	<b>Contact</b> Randy Gladden
<b>Address</b> 6488 Seven Rivers Hwy Artesia, NM 88220	<b>Telephone No.</b> 575.513.9463
<b>Facility Name</b> Todd 24-B Battery 2	<b>Facility Type</b> OIL

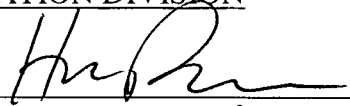
<b>Surface Owner</b> BLM	<b>Mineral Owner</b> BLM	<b>API No.</b> 30-015-27691
--------------------------	--------------------------	-----------------------------

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	24	23S	31E	660	North	1980	East	EDDY

Latitude: 32.29523 Longitude: -103.72888

### NATURE OF RELEASE

<b>Type of Release Spill</b> Produced Water	<b>Volume of Release</b> 80 BBL	<b>Volume Recovered</b> 75 BBL
<b>Source of Release</b> A water transfer pump went down causing water tank to overflow.	<b>Date and Hour of Occurrence</b> 2.23.15 4:00 am	<b>Date and Hour of Discovery</b> 2.23.15 11:10 am
<b>Was Immediate Notice Given?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	<b>If YES, To Whom?</b> Jeff Robertson BLM Mike Bratcher OCD	
<b>By Whom?</b> Randy Gladden	<b>Date and Hour</b> 2.23.15 @ 11:20 am	
<b>Was a Watercourse Reached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If YES, Volume Impacting the Watercourse</b>	
<b>If a Watercourse was Impacted, Describe Fully.*</b>		
<b>Describe Cause of Problem and Remedial Action Taken.*</b> Result of transfer pump not operating properly approximately 80 barrels of produced water spilled inside containment. Lobo trucking recovered 75 BBLS and the transfer pump was repaired and returned to normal operations.		
<b>Describe Area Affected and Cleanup Action Taken.*</b> Unlined Containment 15x80 all inside containment. Environmental service will be called on.		
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.		
<b>Signature:</b> Jeanette Barron	<b>OIL CONSERVATION DIVISION</b>	
<b>Printed Name:</b> Jeanette Barron	<b>Approved by Environmental Specialist:</b> 	
<b>Title:</b> Field Admin Support	<b>Approval Date:</b> 6/16/15	<b>Expiration Date:</b> N/A
<b>E-mail Address:</b> Jeanette.barron@dmv.com	<b>Conditions of Approval:</b>	
<b>Date:</b> 2.26.15 <b>Phone:</b> 575.748.1813	<b>Remediation per O.C.D. Rules &amp; Guidelines</b>	
<b>SUBMIT REMEDIATION PROPOSAL NO</b>		
<b>LATER THAN:</b> 7/17/15		

\* Attach Additional Sheets If Necessary

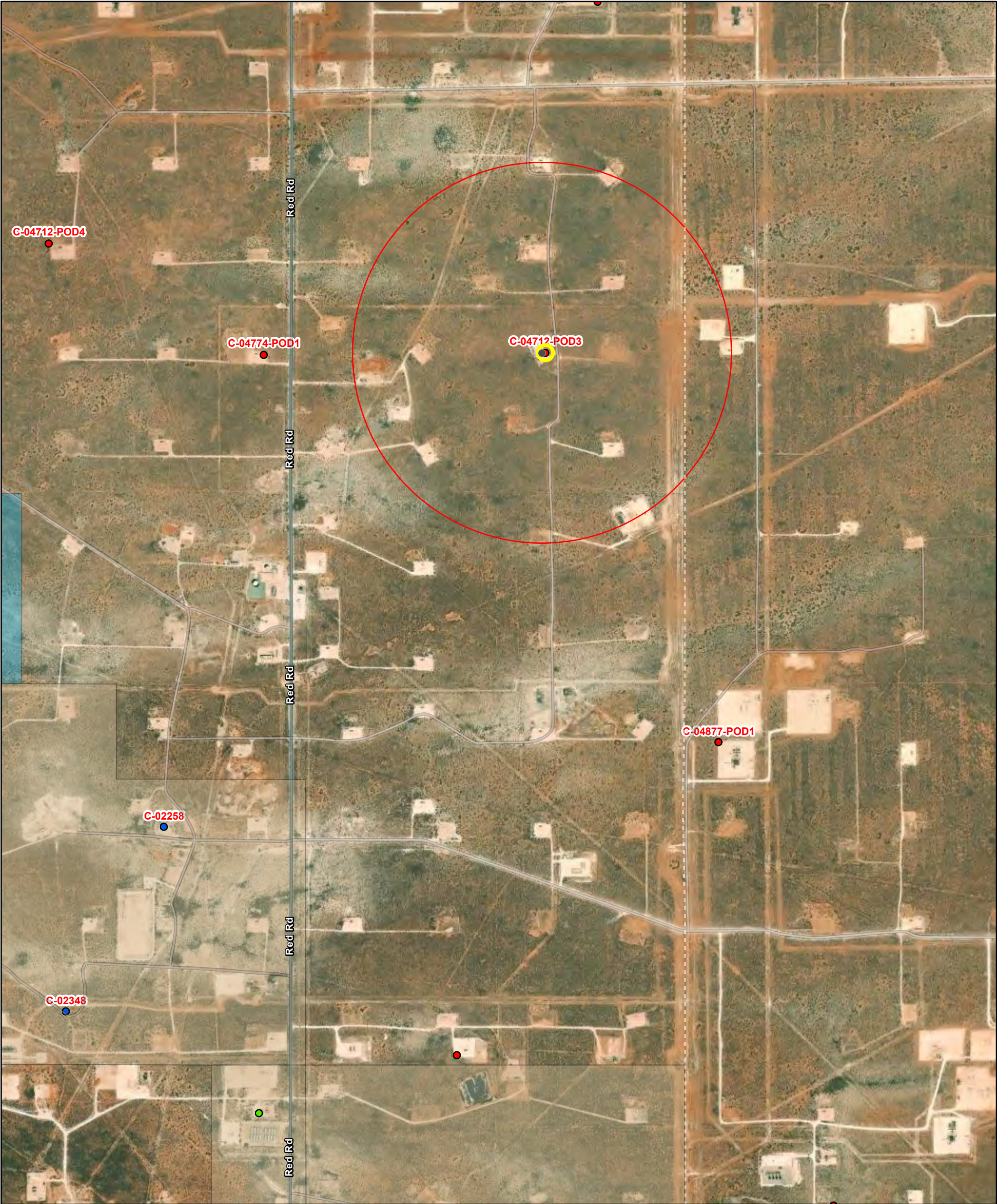
2RP-3051

## **APPENDIX B – Closure Criteria Research Documentation**

Closure Criteria Determination			
Site Name: Todd 24 B Federal #002			
Release Coordinates: 32.2952957,-103.7293777		X: 619635	Y: 3573877
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	>55	feet
	Distance between release and nearest DTGW reference	50	feet
		0.01	miles
	Date of nearest DTGW reference measurement		March 9, 2023
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	15,259	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	10,190	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	28,100	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	11,289	feet
	ii) Within 1000 feet of any fresh water well or spring	8,424	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	20,222	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	51,800	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest High Karst	32,064	feet
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	38,970	feet
11	Soil Type	Fine sand, sandy clay loam	
12	Ecological Classification	Loamy Sand	
13	Geology	Eolian and piedmont deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	51-100'	<50' 51-100' >100'



# OSE POD 0.5 miles



7/6/2025, 5:39:04 PM

GIS WATERS PODs

● Active

● Pending

● Plugged

OSE District Boundary

New Mexico State Trust Lands

Subsurface Estate

Both Estates

1:18,056

00.170.350.7 mi

00.280.551.1 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Maxar

Released to Imaging: 11/13/2025 2:42:45 PM

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



Water Column/Average Depth to Water

(A CLW#####  
in the POD  
suffix indicates  
the POD has  
been replaced  
& no longer  
serves a water  
right file.)

(R=POD has  
been  
replaced,  
O=orphaned,  
C=the file is  
closed)

(quarters are  
smallest to largest)

(NAD83 UTM in meters)

(In feet)

(In feet)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
<a href="#">C 04712 POD3</a>		CUB	ED	SE	NW	NE	24	23S	31E	619650.7	3573877.9		15	55		
<a href="#">C 04774 POD1</a>		CUB	ED	SE	NE	NE	23	23S	31E	618456.0	3573856.4		1179	105		
<a href="#">C 04704 POD1</a>		CUB	ED	SW	NE	NE	13	23S	31E	619854.4	3575363.5		1502			
<a href="#">C 04877 POD1</a>		CUB	LE	SE	NW	NW	30	23S	32E	620404.8	3572240.0		1808	105		
<a href="#">C 04712 POD4</a>		CUB	ED	NW	SE	SW	14	23S	31E	617535.4	3574316.2		2145	55		
<a href="#">C 02258</a>		C	ED		SW	NE	26	23S	31E	618055.0	3571853.0 *		2567	662		
<a href="#">C 04790 POD1</a>		CUB	ED	SE	SE	SW	25	23S	31E	619309.4	3570904.8		2989	55		
<a href="#">C 04855 POD1</a>		CUB	ED	NE	SW	SW	11	23S	31E	617417.6	3575936.7		3026	105		
<a href="#">C 02777</a>		CUB	ED	SE	SE	SE	10	23S	31E	616973.8	3575662.1		3204	890		
<a href="#">C 03749 POD1</a>		CUB	ED		NE	NE	15	23S	31E	616973.8	3575662.1		3204	865	639	226
<a href="#">C 02348</a>		C	ED	NW	SE	SW	26	23S	31E	617647.5	3571068.0		3441	700	430	270
<a href="#">C 03851 POD1</a>		CUB	LE	SW	SW	SE	20	23S	32E	622879.6	3572660.0		3465	1392	713	679
<a href="#">C 04815 POD1</a>		CUB	LE	NW	SE	SW	08	23S	32E	622391.9	3576025.7		3495	55		
<a href="#">C 04712 POD2</a>		CUB	LE	SE	SE	SE	17	23S	32E	623331.9	3574331.5		3724	55		
<a href="#">C 04712 POD1</a>		CUB	LE	NW	SE	NW	31	23S	32E	620917.2	3570289.2		3810	55		
<a href="#">C 04942 POD1</a>		CUB	LE	NW	NE	NE	07	23S	32E	621622.2	3577279.8		3940	55	55	0
<a href="#">C 03529 POD1</a>		C	LE	NE	SE	SW	29	23S	32E	622651.2	3571212.5		4024	550		
<a href="#">C 04709 POD1</a>		CUB	ED	SW	NW	NW	15	23S	31E	615508.8	3575262.4		4352			
<a href="#">C 04746 POD1</a>		CUB	ED	SW	SE	SW	36	23S	31E	619225.7	3569417.8		4477	105		
<a href="#">C 04951 POD1</a>		CUB	LE	SW	NW	NE	06	23S	32E	621111.1	3578594.6		4943	110		
<a href="#">C 04726 POD1</a>		CUB	ED	NW	NW	SE	01	23S	31E	619538.3	3578821.3		4945			

Average Depth to Water: 459 fe

Minimum Depth: 55 feet

Maximum Depth: 713 feet




Record Count: 21

# Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE  
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
NA	C 04712 POD3	SE	NW	NE	24	23S	31E	619650.7	3573877.9	

\* UTM location was derived from PLSS - see Help

Driller License:	1833	Driller Company:	VISION RESOURCES, INC
Driller Name:	JASON MALEY		
Drill Start Date:	2023-03-09	Drill Finish Date:	2023-03-09
Log File Date:	2023-04-04	PCW Rcv Date:	Source:
Pump Type:		Pipe Discharge Size:	Estimated Yield:
Casing Size:	6.00	Depth Well:	55
		Depth Water:	

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



# Water Right Summary



[get image](#)  
[list](#)

WR File Number: C 04712		Subbasin: CUB	Cross Reference:
Primary Purpose: MON MONITORING WELL			
Primary Status: PMT Permit			
Total Acres:		Subfile:	Header:
Total Diversion: 0.000		Cause/Case:	
Owner:	VERTEX RESOURCES	Owner Class:	Owner
Owner:	HARVARD PETROLEUM COMPANY LLC	Owner Class:	User
Contact:	JUSTIN WARREN		

## Documents on File

(acre-feet per annum)

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
<a href="#">_get images</a>	<a href="#">743189</a>	EXPL	2023-02-21	PMT	APR	C 04712 POD1-6	T	0.000	0.000	

## Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
<a href="#">C 04712 POD1</a>	NA		NW	SE	NW	31	23S	32E	620917.2	3570289.2		SDE
<a href="#">C 04712 POD2</a>	NA		SE	SE	SE	17	23S	32E	623331.9	3574331.5		TOMCAT17
<a href="#">C 04712 POD3</a>	NA		SE	NW	NE	24	23S	31E	619650.7	3573877.9		TODD24
<a href="#">C 04712 POD4</a>	NA		NW	SE	SW	14	23S	31E	617535.4	3574316.2		TODD14
<a href="#">C 04712 POD5</a>	NA		SE	SE	SW	09	23S	31E	614392.9	3575754.4		NPG9
<a href="#">C 04712 POD6</a>	NA		SW	SW	SE	08	23S	31E	613146.6	3575740.1		NPG8

\* UTM location was derived from PLSS - see Help

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



## WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

**www.ose.state.nm.us**

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <u>C-04712-P003</u>			WELL TAG ID NO.		OSE FILE NO(S). <u>C-4712</u>				
	WELL OWNER NAME(S) <u>Harvard Petroleum Company</u>					PHONE (OPTIONAL)				
	WELL OWNER MAILING ADDRESS <u>P.O. Box 936</u>					CITY <u>Roswell</u>		STATE <u>NM</u>	ZIP <u>88202</u>	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <u>32</u>		MINUTES <u>17</u>	SECONDS <u>43.1</u>	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE <u>103</u>		<u>43</u>	<u>45.2</u>	W	* DATUM REQUIRED: WGS 84			
	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE									
2. DRILLING & CASING INFORMATION	LICENSE NO. <u>1833</u>		NAME OF LICENSED DRILLER <u>Jason Maley</u>			NAME OF WELL DRILLING COMPANY <u>Vision Resources</u>				
	DRILLING STARTED <u>3-9-2023</u>		DRILLING ENDED <u>3-9-2023</u>		DEPTH OF COMPLETED WELL (FT) <u>55</u>		BORE HOLE DEPTH (FT) <u>55</u>		DEPTH WATER FIRST ENCOUNTERED (FT) <u>Dry</u>	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) <u>Dry</u>		DATE STATIC MEASURED <u>Dry</u>	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:									
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER – SPECIFY:						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>			
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)		
	FROM	TO								
	<u>0</u>	<u>45</u>	<u>6"</u>	<u>2" PVC Sch 40</u>	<u>Thread</u>	<u>2"</u>	<u>Sch 40</u>	<u>—</u>		
	<u>45</u>	<u>55</u>	<u>6"</u>	<u>2" PVC Sch 40 (screen)</u>	<u>Thread</u>	<u>2"</u>	<u>Sch 40</u>	<u>.02</u>		
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)		AMOUNT (cubic feet)	METHOD OF PLACEMENT			
	FROM	TO								
				<u>None Pulled and Plugged</u>						

FOR OSE INTERNAL USE

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

FILE NO.	C-4712-POD3	POD NO.	3	TRN NO.	743189
LOCATION	Non 23.21.24.412	WELL TAG ID NO.	PAGE 1 OF 2		

#### 4. HYDROGEOLOGIC LOG OF WELL

### 5. TEST: RIG SUPERVISION

## 6. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO. C-4712-POD3	POD NO. 3	TRN NO. 743189	
LOCATION Neom 23.31.24.412	WELL TAG ID NO. _____	PAGE 2 OF 2	



Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

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

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD3

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

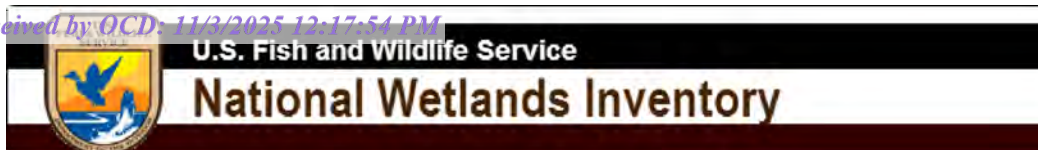
If you have any questions, please feel free to contact us.

Sincerely,

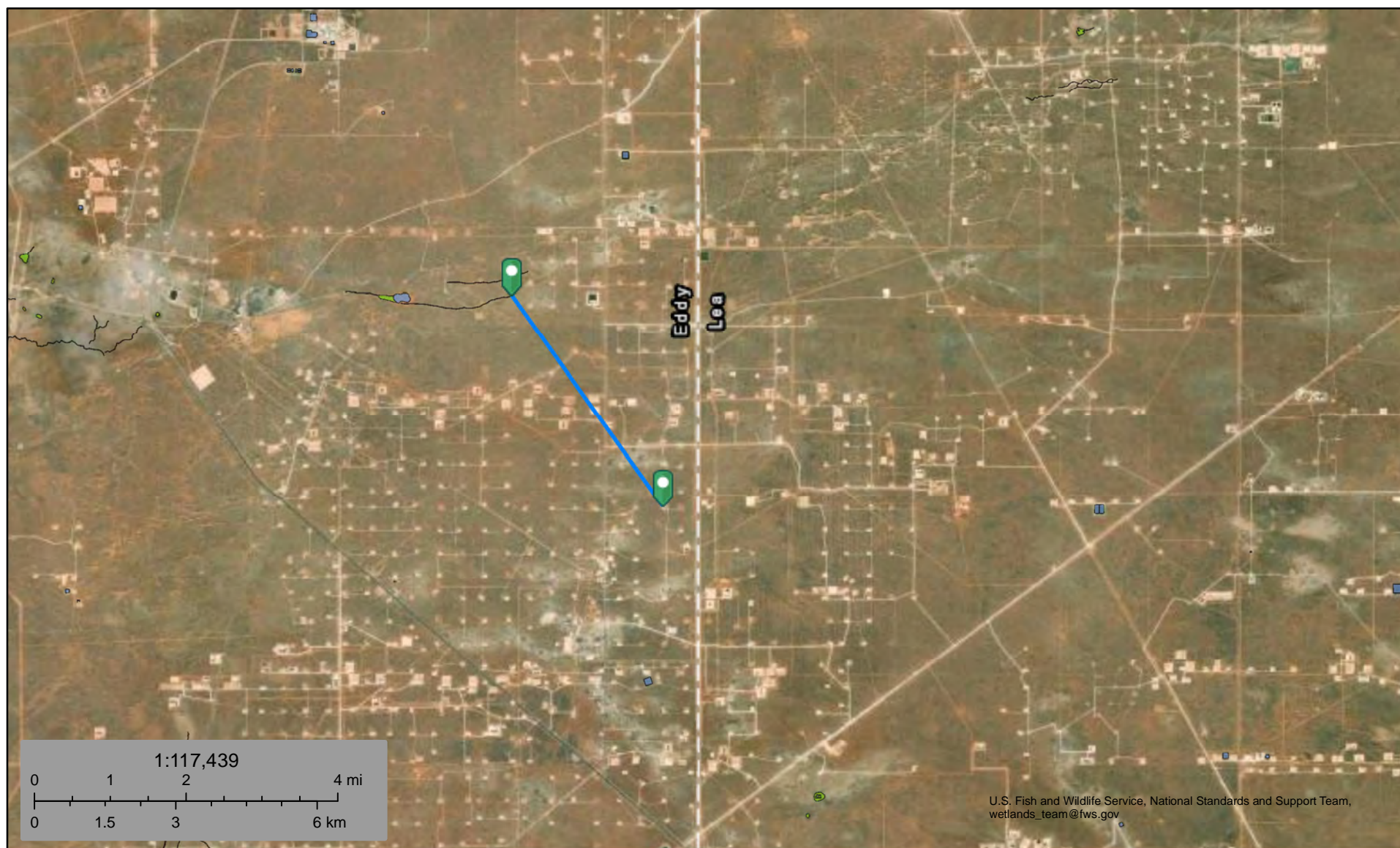
A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell



## Todd 24B Fed2 Riverine 2.89 Miles



March 9, 2023

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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





## Todd 24B Fed2 Pond 1.93 Miles



March 9, 2023

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine



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

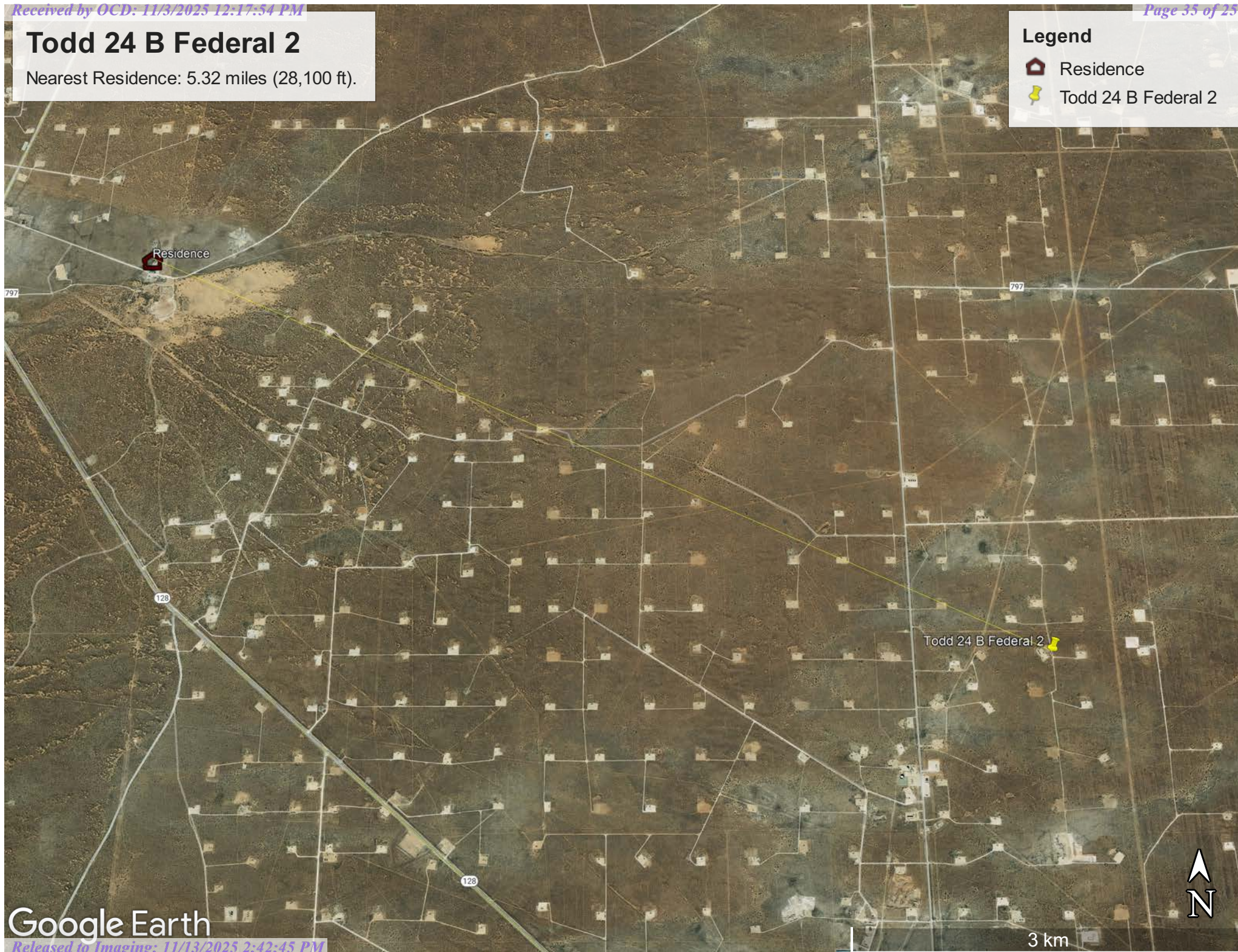


## Todd 24 B Federal 2

Nearest Residence: 5.32 miles (28,100 ft).

### Legend

-  Residence
-  Todd 24 B Federal 2



Google Earth

3 km



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
<a href="#">C 04712</a>	CUB	MON	0.000	HARVARD PETROLEUM COMPANY LLC	ED	<a href="#">C 04712 POD3</a>	NA				SE	NW	NE	24	23S	31E	619650.7	3573877.9		15.7
<a href="#">C 04774</a>	CUB	MON	0.000	DEVON ENERGY RESOURCES	ED	<a href="#">C 04774 POD1</a>	NA				SE	NE	NE	23	23S	31E	618456.0	3573856.4		1,179.2
<a href="#">C 04704</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04704 POD1</a>	NA				SW	NE	NE	13	23S	31E	619854.4	3575363.5		1,502.6
<a href="#">C 04877</a>	CUB	EXP	0.000	DEVON ENERGY CORP	LE	<a href="#">C 04877 POD1</a>	NA				SE	NW	NW	30	23S	32E	620404.8	3572240.0		1,809.0
<a href="#">C 04712</a>	CUB	MON	0.000	HARVARD PETROLEUM COMPANY LLC	ED	<a href="#">C 04712 POD4</a>	NA				NW	SE	SW	14	23S	31E	617535.4	3574316.2		2,145.0
<a href="#">C 04770</a>	CUB	MON	0.000	FOUNDATION ENERGY MANAGEMENT	LE	<a href="#">C 04770 POD1</a>	NA				NE	SE	NE	18	23S	32E	621778.3	3575132.8		2,484.1
<a href="#">C 02258</a>	C	PRO	0.000	DEVON ENERGY CORP. (NEVADA)	ED	<a href="#">C 02258</a>						SW	NE	26	23S	31E	618055.0	3571853.0 *		2,567.7
<a href="#">C 04790</a>	CUB	MON	0.000	DEVON ENERGY RESOURCES	ED	<a href="#">C 04790 POD1</a>	NA				SE	SE	SW	25	23S	31E	619309.4	3570904.8		2,990.0
<a href="#">C 04855</a>	CUB	MON	0.000	DEVON ENERGY PRODUCTION	ED	<a href="#">C 04855 POD1</a>	NA				NE	SW	SW	11	23S	31E	617417.6	3575936.7		3,026.4
<a href="#">C 02777</a>	CUB	MON	0.000	US DEPT OF ENERGY WIPP	ED	<a href="#">C 02777</a>					SE	SE	SE	10	23S	31E	616973.8	3575662.1		3,204.5
<a href="#">C 03749</a>	CUB	MON	0.000	US DEPARTMENT OF ENERGY	ED	<a href="#">C 03749 POD1</a>				Shallow		NE	NE	15	23S	31E	616973.8	3575662.1		3,204.5
<a href="#">C 02602</a>	C	SAN	0.000	POGO PRODUCING COMPANY	ED	<a href="#">C 02602</a>						NE	NE	35	23S	31E	618471.0	3570650.0 *		3,430.5
<a href="#">C 02348</a>	C	STK	3.000	NGL NORTH RANCH LLC A TX LLC	ED	<a href="#">C 02348</a>				Shallow	NW	SE	SW	26	23S	31E	617647.5	3571068.0		3,441.0
<a href="#">C 03851</a>	CUB	MON	0.000	US DEPARTMENT OF ENERGY	LE	<a href="#">C 03851 POD1</a>				Artesian	SW	SW	SE	20	23S	32E	622879.6	3572660.0		3,465.3
<a href="#">C 04815</a>	CUB	MON	0.000	DEVON ENERGY RESOURCES	LE	<a href="#">C 04815 POD1</a>	NA				NW	SE	SW	08	23S	32E	622391.9	3576025.7		3,495.3
<a href="#">C 04712</a>	CUB	MON	0.000	HARVARD PETROLEUM COMPANY LLC	LE	<a href="#">C 04712 POD2</a>	NA				SE	SE	SE	17	23S	32E	623331.9	3574331.5		3,724.7
					LE	<a href="#">C 04712 POD1</a>	NA				NW	SE	NW	31	23S	32E	620917.2	3570289.2		3,810.0
<a href="#">C 04942</a>	CUB	EXP	0.000	DEVON ENERGY PRODUCTION CO, LP	LE	<a href="#">C 04942 POD1</a>	NA			Shallow	NW	NE	NE	07	23S	32E	621622.2	3577279.8		3,940.6
<a href="#">C 03529</a>	C	STK	0.000	U.S. DEPT. OF INTERIOR--BLM	LE	<a href="#">C 03529 POD1</a>					NE	SE	SW	29	23S	32E	622651.2	3571212.5		4,024.6
<a href="#">C 04703</a>	CUB	MON	0.000	DEVON ENERGY PRODUCTION CO.	LE	<a href="#">C 04703 POD1</a>	NA				NW	SE	SE	08	26S	32E	623195.6	3576072.4		4,183.0
<a href="#">C 04724</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04724 POD1</a>	NA				SE	SW	SW	10	23S	31E	615709.7	3575738.3		4,344.2
<a href="#">C 04709</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04709 POD1</a>	NA				SW	NW	NW	15	23S	31E	615508.8	3575262.4		4,352.6
<a href="#">C 04746</a>	CUB	MON	0.000	DEVON ENERGY RESOURCES	ED	<a href="#">C 04746 POD1</a>	NA				SW	SE	SW	36	23S	31E	619225.7	3569417.8		4,477.9
<a href="#">C 04951</a>	CUB	EXP	0.000	DEVON ENERGY PRODUCTION COMPANY, LP	LE	<a href="#">C 04951 POD1</a>	NA				SW	NW	NE	06	23S	32E	621111.1	3578594.6		4,943.1
<a href="#">C 04726</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04726 POD1</a>	NA				NW	NW	SE	01	23S	31E	619538.3	3578821.3		4,945.2

Record Count: 25

Filters Applied:

UTM Filters (in meters):

Easting: 619635

Northing: 3573877

Radius: 005000

Sorted By: Distance


\* UTM location was derived from PLSS - see Help



# Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE  
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
	C 02348	NW	SE	SW	26	23S	31E	617647.5	3571068.0	

\* UTM location was derived from PLSS - see Help

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

## Water Bearing Stratifications:

Top	Bottom	Description
15	125	Sandstone/Gravel/Conglomerate
315	700	Sandstone/Gravel/Conglomerate

## Casing Perforations:

Top	Bottom
560	620
680	700

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

# 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:	3.000	Cause/Case:		
Owner:	NGL NORTH RANCH LLC A TX LLC	Owner Class:	Owner	
Contact:	JIM WINTER			

## Documents on File

(acre-feet per annum)

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
<a href="#">get images</a> <a href="#">755955</a>		COWNF	2024-01-31	CHG	PRC	C-2348	T	0.000	0.000	
<a href="#">get images</a> <a href="#">633178</a>		COWNF	2018-09-17	CHG	PRC	C-2348	T		0.000	
<a href="#">get images</a> <a href="#">491413</a>		72121	2011-12-14	PMT	LOG	C-2348: SUBSEQUENT STK PERMIT	T		3.000	
	<a href="#">422940</a>	COWNF	2009-02-02	CHG	PRC	C-2348	T		0.000	
	<a href="#">154822</a>	COWNF	1998-09-09	CHG	PRC	C-2348	T	0.000	0.000	
	<a href="#">154817</a>	DCL	1998-09-09	DCL	PRC	C-2348	T	0.000	3.000	

## Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map	Other Location Desc
<a href="#">C 02348</a>		Shallow	NW	SE	SW	26	23S	31E	617647.5	3571068.0		


\* UTM location was derived from PLSS - see [Help](#)

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

# Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE  
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
	C 02258		SW	NE	26	23S	31E	618055.0	3571853.0 *	

\* UTM location was derived from PLSS - see Help

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

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

# 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:	0.000	Cause/Case:			
Owner:	DEVON ENERGY CORP.(NEVADA)	Owner Class:	O	w	n
			e	r	
Contact:	CHARLES W. HORSMAN				

## Documents on File

(acre-feet per annum)

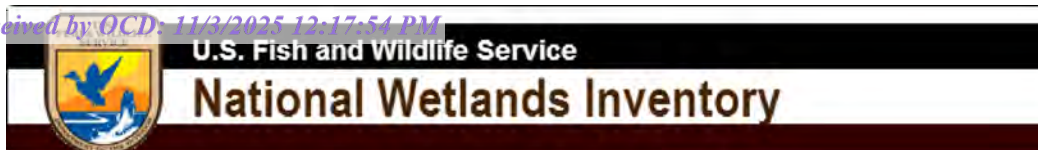
Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
<a href="#">get images</a>	<a href="#">469242</a>	72121	1992-05-27	EXP	EXP	C 02258	T		3.000	

## Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
<a href="#">C 02258</a>				SW	NE	26	23S	31E	618055.0	3571853.0 *		

\* UTM location was derived from PLSS - see Help

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



## Todd 24B Fed2 Wetland 3.83 Miles



March 9, 2023

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

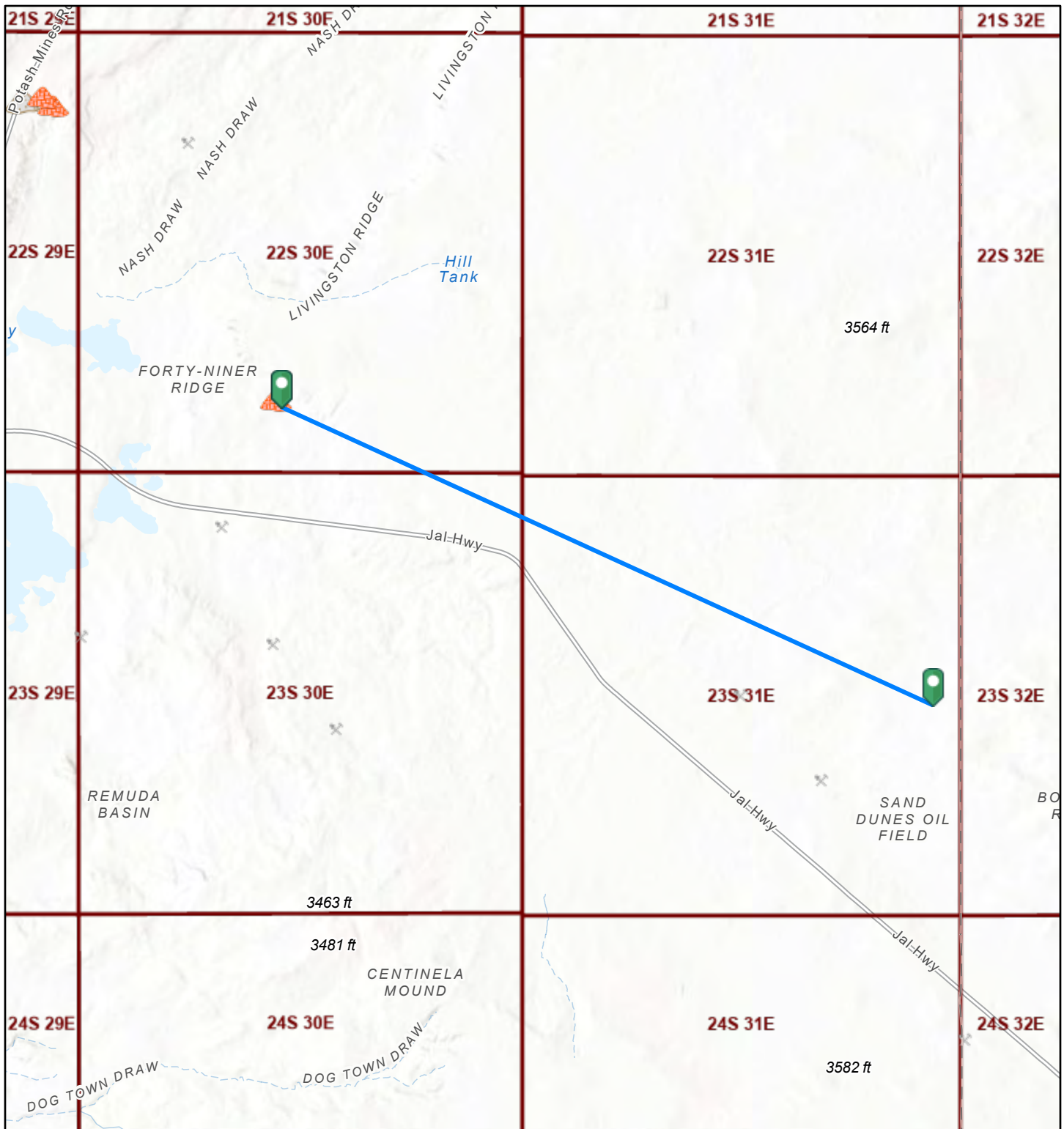
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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



## Potash Mine 51,800 feet



7/6/2025, 6:55:37 PM

Registered Mines



Potash



Aggregate, Stone etc.



Salt

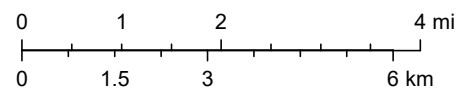


Aggregate, Stone etc.



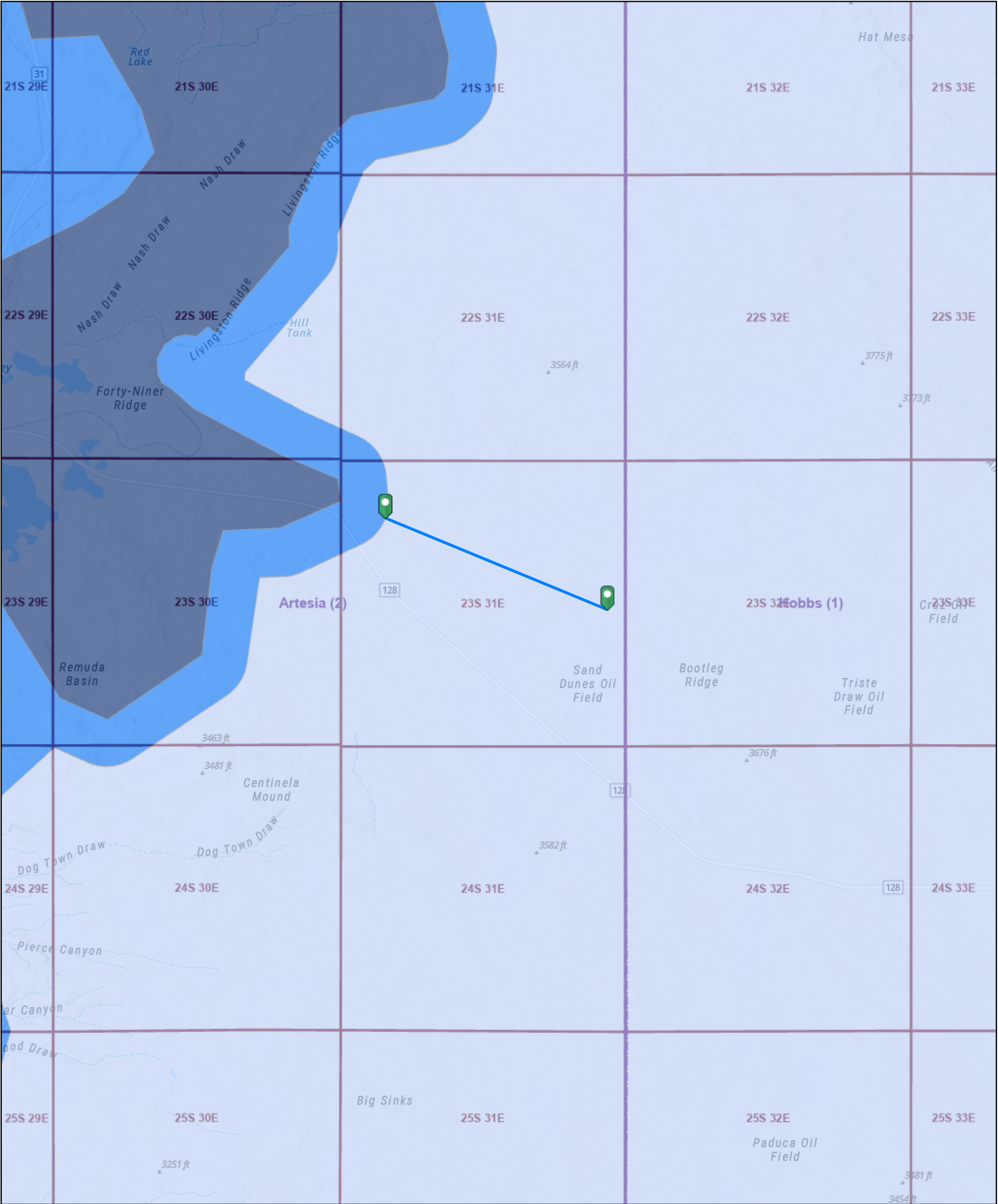
PLSS Townships

1:144,448



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

# Medium Karst 26,770 feet

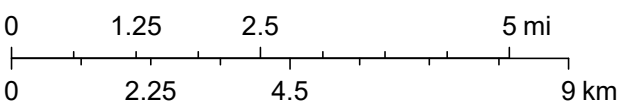


7/6/2025, 6:05:07 PM

Karst Occurrence Potential

- High
- Medium
- Low
- OCD Districts
- PLSS Townships

1:144,448






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



# Todd 24 B Federal #002

Nearest FEMA Zone A (100-year floodplain)

## Legend

-  FEMA Zone A (100-year floodplain)
-  Nearest FEMA Zone A 38,970 feet (7.38 miles)
-  Todd 24 B Federal #002 Releases

Todd 24 B Federal #002 Releases

ject Gnome

Google Earth

Released to Imaging: 11/13/2025 2:42:45 PM

Image © 2025 Airbus



3 mi



# National Flood Hazard Layer FIRMette



103°44'3"W 32°17'58"N



### Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		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 <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

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 4/27/2023 at 6:31 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



April 27, 2023




# Custom Soil Resource Report Soil Map



## Custom Soil Resource Report

## 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.

## Custom Soil Resource Report

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BA	Berino loamy fine sand, 0 to 3 percent slopes	0.1	3.6%
BB	Berino complex, 0 to 3 percent slopes, eroded	1.7	96.4%
<b>Totals for Area of Interest</b>		<b>1.8</b>	<b>100.0%</b>

## Map Unit Descriptions

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

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

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

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

## Custom Soil Resource Report

**Eddy Area, New Mexico****BA—Berino loamy fine sand, 0 to 3 percent slopes****Map Unit Setting***National map unit symbol:* 1w42*Elevation:* 2,000 to 5,700 feet*Mean annual precipitation:* 6 to 14 inches*Mean annual air temperature:* 57 to 70 degrees F*Frost-free period:* 180 to 260 days*Farmland classification:* Not prime farmland**Map Unit Composition***Berino and similar soils:* 99 percent*Minor components:* 1 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***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 12 inches:* loamy fine sand*H2 - 12 to 58 inches:* sandy clay loam*H3 - 58 to 60 inches:* clay loam**Properties and qualities***Slope:* 0 to 3 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Well drained*Runoff class:* Low*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)*Depth to water table:* More than 80 inches*Frequency of flooding:* None*Frequency of ponding:* None*Calcium carbonate, maximum content:* 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 8.4 inches)**Interpretive groups***Land capability classification (irrigated):* 3e*Land capability classification (nonirrigated):* 7e*Hydrologic Soil Group:* B*Ecological site:* R070BC007NM - Loamy*Hydric soil rating:* No



## Custom Soil Resource Report

**Minor Components****Pajarito***Percent of map unit: 1 percent**Ecological site: R070BD003NM - Loamy Sand**Hydric soil rating: No***BB—Berino complex, 0 to 3 percent slopes, eroded****Map Unit Setting***National map unit symbol: 1w43**Elevation: 2,000 to 5,700 feet**Mean annual precipitation: 5 to 15 inches**Mean annual air temperature: 57 to 70 degrees F**Frost-free period: 180 to 260 days**Farmland classification: Not prime farmland***Map Unit Composition***Berino and similar soils: 60 percent**Pajarito and similar soils: 25 percent**Minor components: 15 percent**Estimates are based on observations, descriptions, and transects of the mapunit.***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 58 inches: sandy clay loam**H3 - 58 to 60 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*

## Custom Soil Resource Report

Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

**Interpretive groups**

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

**Description of Pajarito****Setting**

Landform: Dunes, plains, interdunes

Landform position (three-dimensional): Side slope

Down-slope shape: Convex, linear

Across-slope shape: Convex, linear

Parent material: Mixed alluvium and/or eolian sands

**Typical profile**

H1 - 0 to 9 inches: loamy fine sand

H2 - 9 to 72 inches: fine sandy loam

**Properties and qualities**

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

**Interpretive groups**

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

**Minor Components****Pajarito**

Percent of map unit: 4 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

**Wink**

Percent of map unit: 4 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

**Cacique**

Percent of map unit: 4 percent

Custom Soil Resource Report

*Ecological site:* R070BD004NM - Sandy

*Hydric soil rating:* No

**Kermit**

*Percent of map unit:* 3 percent

*Ecological site:* R070BD005NM - Deep Sand

*Hydric soil rating:* No



# Ecological site R070BD003NM

## Loamy Sand

Accessed: 04/27/2023

### 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.

### Associated sites

R070BD004NM	<b>Sandy</b> Sandy
R070BD005NM	<b>Deep Sand</b> Deep Sand

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

### Physiographic features

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

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

Table 2. Representative physiographic features

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

### Climatic features

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

The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 207 to 220 days. The last killing frost being late March or early April and the first killing frost being in later October or early November.

Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest from January through June, which accelerates soil drying during a critical period for cool season plant growth.

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

**Table 3. Representative climatic features**

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

## Influencing water features

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

## Soil features

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

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

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

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

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

Characteristic soils are:

Maljamar  
Berino  
Parjarito  
Palomas  
Wink  
Pyote

**Table 4. Representative soil features**

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



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

## Ecological dynamics

### Overview

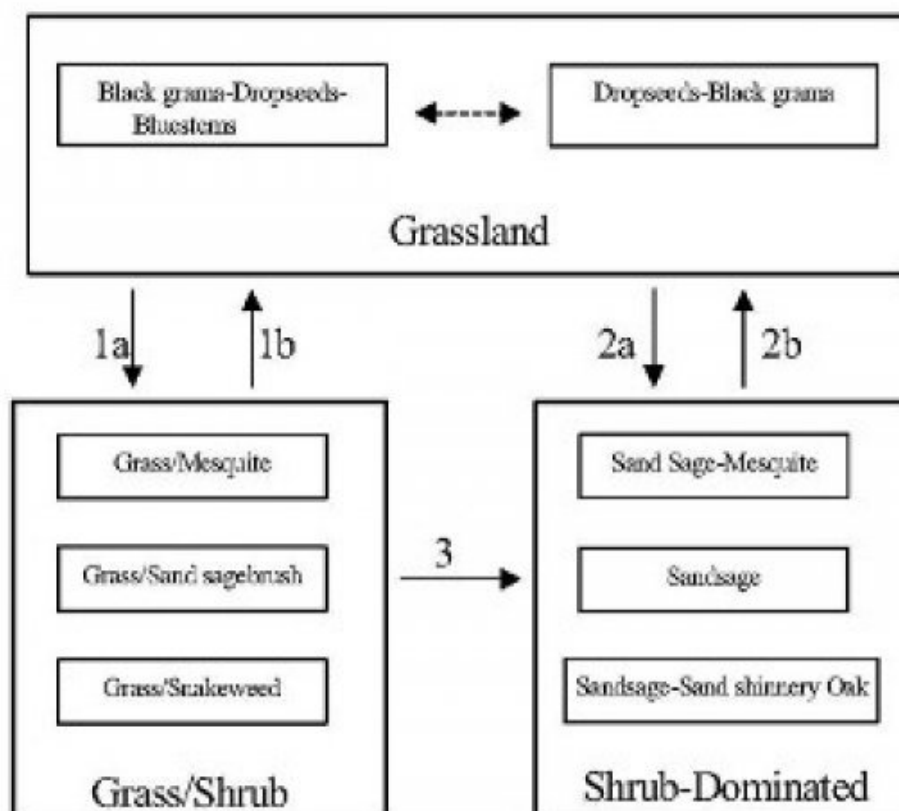
The Loamy Sand site intergrades with the Deep Sand and Sandy sites (SD-3). These sites can be differentiated by surface soil texture and depth to a textural change. Loamy Sand and Deep Sand sites have coarse textured (sands and loamy sand) surface soils while Sandy sites have moderately coarse textured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

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

## State and transition model

## Plant Communities and Transitional Pathways (diagram):

### MLRA-42, SD-3, Loamy Sand



1a. Drought, over grazing, fire suppression.

1b. Brush control, prescribed grazing

2.a Severe loss of grass cover, fire suppression, erosion.

2b. Brush control, seeding, prescribed grazing.

3. Continued loss of grass cover, erosion.

### State 1

#### Historic Climax Plant Community

#### Community 1.1

#### Historic Climax Plant Community

Grassland: The historic plant community is a uniformly distributed grassland dominated by black grama, dropseeds, and bluestems. Sand sage and shinnery oak are evenly dispersed throughout the grassland due to the coarse soil

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

Table 5. Annual production by plant type

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

Table 6. Ground cover

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

Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - Warm season plant community .

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

State 2  
Grass/Shrub

Community 2.1  
Grass/Shrub



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

### **State 3 Shrub Dominated**

#### **Community 3.1 Shrub Dominated**

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



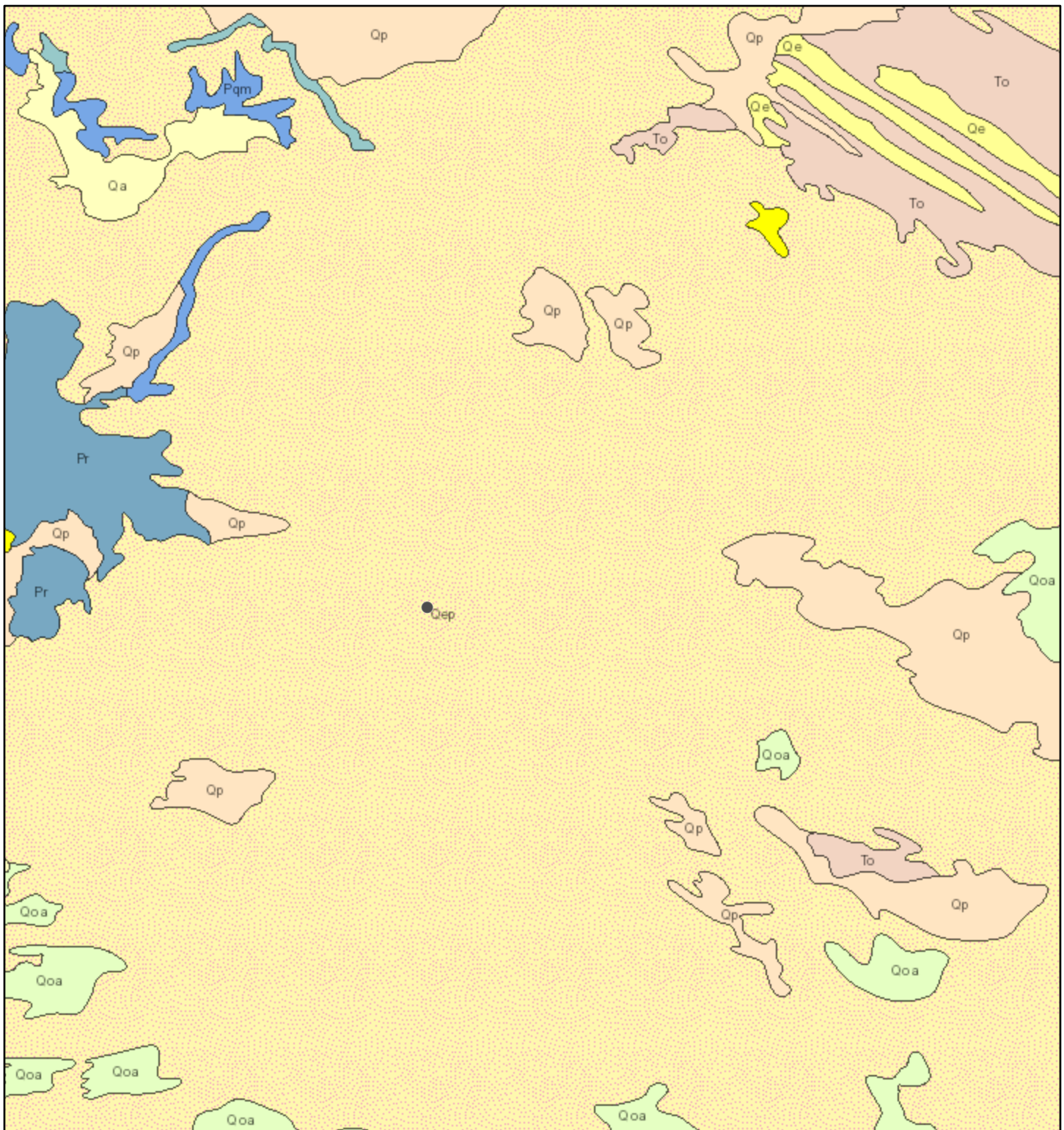
aggressive rhizome system. Shinnery oak's extensive root system promotes competitive exclusion of grasses and forbs. Sand sage, shinnery oak, and mesquite can be controlled with herbicide (Herbel et al. 1979, Pettit 1986). Transition to Shrub-Dominated (2a): Severe loss of grass species with increased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

## Additional community tables

Table 7. Community 1.1 plant community composition

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

## Todd 24 B Federal 2

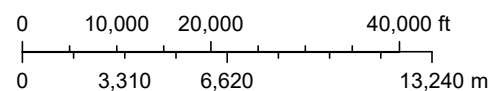


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## Lithologic Units

- Playa—Alluvium and evaporite deposits (Holocene)
- Water—Perennial standing water
- Qa—Alluvium (Holocene to upper Pleistocene)



New Mexico Bureau of Geology and Mineral Resources, Esri, NASA, NGA, USGS, 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;

ArcGIS Web AppBuilder

## **APPENDIX C – Daily Field Reports**



## Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Todd 24 B Federal 2	API #:	
Inspection Date:	7/1/2025		

### Summary of Times

Arrived at Site	7/1/2025 6:43 AM
Departed Site	7/1/2025 4:57 PM

### Field Notes

- 6:55** Completed JSA on arrival. On site to advance boreholes and collect samples requested by OCD for addition vertical delineation.
- 7:07** Additional borehole locations were determined by OCD and communicated in Remediation Work Plan "Approval with Conditions". Swept additional borehole locations BH25-13, BH25-14, BH25-15, and BH25-16 with magnetic locator prior to ground disturbance.
- 11:05** Advanced BH25-13 and BH25-14 in pasture at coordinates provided by OCD. Boreholes were advanced with hand tools to 4 feet bgs. Samples were collected at 0, 1, 2, 3, and 4 feet bgs.
- 12:14** Advanced BH25-15 inside tank battery containment at coordinates provided by OCD. Borehole was advanced with hand tools. Samples were collected at 0, 1, 2, 3, 4, 5, 6, 7, and 8 feet bgs. The final borehole depth was intended to be 10 feet. In the process of increasing borehole depth to 9 feet bgs, the hand auger to be stuck and is unable to removed by hand. Refusal was ultimately hit at 8 feet bgs. Proximity to the tank battery complicates additional mechanical excavation. The project managers will be consulted for next steps.
- 12:17** Advanced BH25-16 at accessible location within south-central portion of tank battery containment per OCD request. Borehole was advanced with hand tools to 8 feet bgs. Samples were collected at 0, 1, 2, 3, 4, 5, 6, 7, and 8 feet bgs. The final borehole depth of 10 feet will need to be completed with equipment at time of remediation.
- 16:16** Field screening results for all samples collected in pasture at BH25-13 and BH25-14 were below NMOCD strictest criteria for chloride and TPH.
- 16:20** Field screening results for all samples collected at BH25-15 were below NMOCD strictest criterion for chloride. Field screening results for all samples collected at BH25-16 were below NMOCD standards for chloride where DTGW is between 51 and 100 feet bgs. Samples collected at BH25-15 and BH25-16 were not field screened for TPH.





## Daily Site Visit Report

**16:20** All samples were packaged for laboratory testing.

### Next Steps & Recommendations

- 1 Submit collected soil samples to laboratory for analyses.
- 2 Use heavy equipment to increase depths of boreholes BH25-15 and BH25-16 to 10 feet bgs and collect samples at 9 and 10 feet bgs.

## Daily Site Visit Report



## Site Photos

Viewing Direction: Southwest



Northeast of tank battery containment facing southwest.

Viewing Direction: Northeast



Southwest of tank battery containment facing northeast.

Viewing Direction: East



In pasture northwest of tank battery facing east. Advanced BH25-13 at specified location.

Viewing Direction: Southeast



In pasture northwest of tank battery facing southeast. Advanced BH25-14 at specified location.



## Daily Site Visit Report

**Viewing Direction: South**



Inside north end of tank battery containment facing south. Advanced BH25-15 at specified location.

**Viewing Direction: West**



Inside north end of tank battery containment facing west. Hand auger stuck at BH25-15.

**Viewing Direction: East**



Inside north end of tank battery containment facing east. Hand auger stuck at BH25-15.

**Viewing Direction: North**



Inside north end of tank battery containment facing north. Hand auger stuck at BH25-15.





## Daily Site Visit Report

**Viewing Direction: Southeast**



Inside edge of battery containment berm facing southeast. Advanced BH25-16 per OCD request.

**Viewing Direction: Northwest**



Inside edge of battery containment berm facing north-northwest. Advanced BH25-16 per OCD request.

**Viewing Direction: East**



Inside north end of tank battery containment facing east. Marked hole with stakes and white ribbon.



## Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Lakin Pullman

**Signature:**

A handwritten signature in black ink, appearing to be 'LP', written over a horizontal line. Below the line, the word 'Signature' is printed in a small, light gray font.



## Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Todd 24 B Federal 2	API #:	
Inspection Date:	8/12/2025		

### Summary of Times

Arrived at Site	8/12/2025 9:43 AM
Departed Site	8/12/2025 5:31 PM

### Field Notes

**17:13** JSA has been filled out by Vertex Env Tech and Kelley Services Inc.

**17:13** To excavate the North and South proposed excavation areas and field screen

**17:14** Aquire BH25-16 at 9ft and 10ft. Field screen and jar samples

**17:20** Excavations have been fenced off for safety.

### Next Steps & Recommendations

1 Samples have been jarred and sent to the lab

## Daily Site Visit Report



## Site Photos

## Viewing Direction: Northwest



Site view of the North excavation. Excavation is at 1ft. Image taken from the Southeast corner.

## Viewing Direction: Northeast



Site view of the North excavation. Excavation is at 1ft. Image taken from the Southwest corner.

## Viewing Direction: Southeast



Site view of the North excavation. Excavation is at 1ft. Image taken from the Northwest corner.

## Viewing Direction: Southwest



Site view of the North excavation. Excavation is at 1ft. Image taken from the Northeast corner.





## Daily Site Visit Report

**Viewing Direction: East**



BH25-16 has been acquired using a hand auger to 9ft and 10ft. Site view of the Middle excavation. Excavation is at 3ft. Image taken from the Southwest corner.

**Viewing Direction: Northwest**



Site view of the South excavation. Excavation is at 1ft. Image taken from the Southeast corner.

**Viewing Direction: Northwest**



Site view of the South excavation. Excavation is at 1ft. Image taken from the South end.

**Viewing Direction: Northeast**



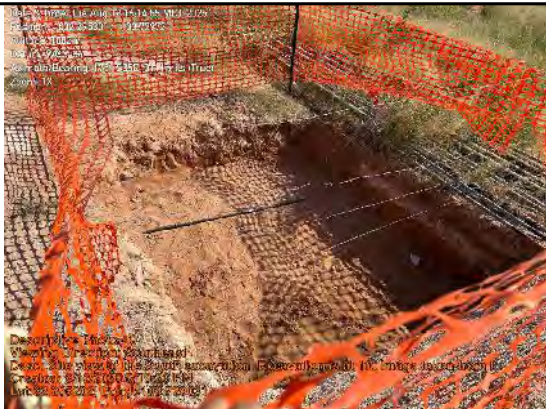
Site view of the South excavation. Excavation is at 1ft. Image taken from the Southwest corner.





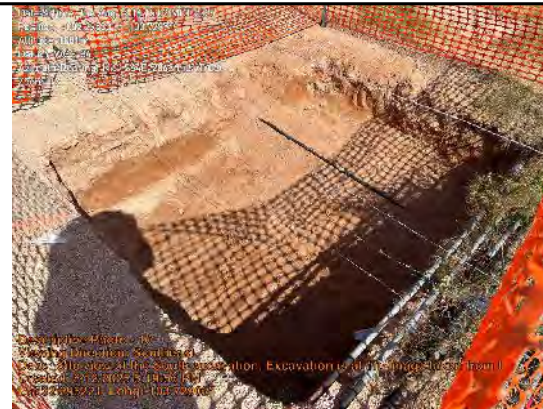
## Daily Site Visit Report

**Viewing Direction: Southeast**



Site view of the South excavation. Excavation is at 1ft. Image taken from the Northeast corner.

**Viewing Direction: Southeast**



Site view of the South excavation. Excavation is at 1ft. Image taken from the Northwest corner.

**Viewing Direction: Northeast**



North excavation has been fenced off

## Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Sharon Minnix

**Signature:**

A handwritten signature in black ink, appearing to read 'Sharon Minnix', written over a horizontal line. The word 'Signature' is faintly visible below the line.



## Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Todd 24 B Federal 2	API #:	
Inspection Date:	9/8/2025		

### Summary of Times

Arrived at Site	9/8/2025 11:07 AM
Departed Site	9/8/2025 11:39 AM

### Field Notes

**11:18** JSA has been filled out by Vertex Resources Environmental Technician

**11:19** All three (3) excavations have been backfilled

**11:23** Purpose: to do a site visit of excavations that have been backfilled

### Next Steps & Recommendations

1

# Daily Site Visit Report



## Site Photos

### Viewing Direction: Northwest



South 2ft excavation has been backfilled.  
Image taken from the south end of where the  
excavation was towards the North looking at  
the tanks.

### Viewing Direction: Southwest



South 2ft excavation has been backfilled.  
Image taken from the east end of where the  
excavation was towards the west looking at  
the pasture.





## Daily Site Visit Report

### Viewing Direction: Southwest



South 2ft excavation has been backfilled. Image taken from the northeast corner of where the excavation was towards the south.



### Viewing Direction: Northwest



3ft excavation behind the tanks has been backfilled. Image taken from the southeast corner of the where the excavation was looking towards the northwest corner



## Daily Site Visit Report

Viewing Direction: Southwest	Viewing Direction: Southeast
 <p>3ft excavation behind the tanks has been backfilled. Image taken from the east end of the where the excavation was looking towards the west end</p>	 <p>3ft excavation behind the tanks has been backfilled. Image taken from the north end of the where the excavation was looking towards the south end</p>



## Daily Site Visit Report

### Viewing Direction: Northwest



1ft excavation towards the north has been backfilled. Image taken from the south end near the tanks of the where the excavation was looking towards the north end

### Viewing Direction: Southwest



1ft excavation towards the north has been backfilled. Image taken from the southeast corner near the tanks of the where the excavation was looking towards the northwest corner



## Daily Site Visit Report

### Viewing Direction: Southwest



1ft excavation towards the north has been backfilled. Image taken from the northeast corner of the where the excavation was looking towards the southwest corner



## Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Sharon Minnix

**Signature:**

A handwritten signature in black ink, appearing to read 'Sharon Minnix', written over a horizontal line.



## Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Todd 24 B Federal 2	API #:	
Inspection Date:	10/6/2025		

### Summary of Times

Arrived at Site	10/6/2025 9:02 AM
Departed Site	10/6/2025 2:26 PM

### Field Notes

**9:37** JSA has been filled out at 9:10 am by all employees in site

**9:38** Purpose: to excavate the North end excavation to the proposed 3ft excavation. Previously had been excavated to 1ft.

**14:19** Collected a base and wall sample

**14:19** Samples will be field screened and sent to lab

### Next Steps & Recommendations

1

## Daily Site Visit Report



## Site Photos

## Viewing Direction: Northwest



Site view of the 30ml liner and soil from the 3' excavation

## Viewing Direction: Southwest



Area of excavation. Excavation is 3'

## Viewing Direction: Northeast



Area of 3ft excavation, image taken from the northeast corner

## Viewing Direction: Southeast

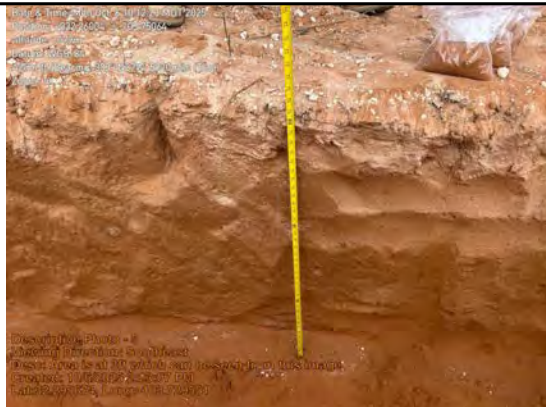


Area of 3ft excavation. Northeast end facing the tank batteries



## Daily Site Visit Report

### Viewing Direction: Northwest



Area is at 3ft which can be seen from this image

### Viewing Direction: Southwest



Collected five point composite base and wall sample

### Viewing Direction: Southwest



Area has been fenced off

### Viewing Direction: Southeast



Area has been fenced off. Northeast corner facing the tank batteries



## Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Sharon Minnix

**Signature:**

A handwritten signature in black ink, appearing to read 'Sharon Minnix', written over a thin horizontal line. The word 'Signature' is faintly visible below the line.

## **APPENDIX D – Laboratory Data Reports and Chain of Custody Forms**



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 03, 2023

Kent Stallings

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: Todd 24B Federal 2

OrderNo.: 2302857

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/21/2023 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2302857

Date Reported: 3/3/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-03 2ft

Project: Todd 24B Federal 2

Collection Date: 2/17/2023 10:00:00 AM

Lab ID: 2302857-001

Matrix: SOIL

Received Date: 2/21/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/27/2023 7:13:23 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/27/2023 7:13:23 PM
Surr: DNOP	98.0	69-147		%Rec	1	2/27/2023 7:13:23 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/25/2023 7:31:29 AM
Surr: BFB	95.5	37.7-212		%Rec	1	2/25/2023 7:31:29 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	2/25/2023 7:31:29 AM
Toluene	ND	0.047		mg/Kg	1	2/25/2023 7:31:29 AM
Ethylbenzene	ND	0.047		mg/Kg	1	2/25/2023 7:31:29 AM
Xylenes, Total	ND	0.095		mg/Kg	1	2/25/2023 7:31:29 AM
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	2/25/2023 7:31:29 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	2/25/2023 6:26:48 AM

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		



## Analytical Report

Lab Order 2302857

Date Reported: 3/3/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-03 4ft

Project: Todd 24B Federal 2

Collection Date: 2/17/2023 10:05:00 AM

Lab ID: 2302857-002

Matrix: SOIL

Received Date: 2/21/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/27/2023 7:45:05 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/27/2023 7:45:05 PM
Surr: DNOP	102	69-147		%Rec	1	2/27/2023 7:45:05 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/25/2023 10:14:58 AM
Surr: BFB	95.8	37.7-212		%Rec	1	2/25/2023 10:14:58 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	2/25/2023 10:14:58 AM
Toluene	ND	0.048		mg/Kg	1	2/25/2023 10:14:58 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/25/2023 10:14:58 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/25/2023 10:14:58 AM
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	2/25/2023 10:14:58 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	2/25/2023 7:04:03 AM

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

## Analytical Report

Lab Order 2302857

Date Reported: 3/3/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-01 4ft

Project: Todd 24B Federal 2

Collection Date: 2/17/2023 10:10:00 AM

Lab ID: 2302857-003

Matrix: SOIL

Received Date: 2/21/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/27/2023 8:17:04 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/27/2023 8:17:04 PM
Surr: DNOP	104	69-147		%Rec	1	2/27/2023 8:17:04 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/25/2023 11:25:28 AM
Surr: BFB	97.3	37.7-212		%Rec	1	2/25/2023 11:25:28 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	2/25/2023 11:25:28 AM
Toluene	ND	0.048		mg/Kg	1	2/25/2023 11:25:28 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/25/2023 11:25:28 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/25/2023 11:25:28 AM
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	2/25/2023 11:25:28 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	2/25/2023 7:41:16 AM

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

## Analytical Report

Lab Order 2302857

Date Reported: 3/3/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-10 0ft

Project: Todd 24B Federal 2

Collection Date: 2/17/2023 10:15:00 AM

Lab ID: 2302857-004

Matrix: SOIL

Received Date: 2/21/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/27/2023 8:27:48 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/27/2023 8:27:48 PM
Surr: DNOP	108	69-147		%Rec	1	2/27/2023 8:27:48 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2023 12:36:21 PM
Surr: BFB	98.2	37.7-212		%Rec	1	2/25/2023 12:36:21 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	2/25/2023 12:36:21 PM
Toluene	ND	0.049		mg/Kg	1	2/25/2023 12:36:21 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2023 12:36:21 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/25/2023 12:36:21 PM
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	2/25/2023 12:36:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	61		mg/Kg	20	2/25/2023 7:53:41 AM

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

## Analytical Report

Lab Order 2302857

Date Reported: 3/3/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-10 2ft

Project: Todd 24B Federal 2

Collection Date: 2/17/2023 10:20:00 AM

Lab ID: 2302857-005

Matrix: SOIL

Received Date: 2/21/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/27/2023 8:38:32 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/27/2023 8:38:32 PM
Surr: DNOP	106	69-147		%Rec	1	2/27/2023 8:38:32 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2023 1:00:03 PM
Surr: BFB	99.5	37.7-212		%Rec	1	2/25/2023 1:00:03 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	2/25/2023 1:00:03 PM
Toluene	ND	0.050		mg/Kg	1	2/25/2023 1:00:03 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2023 1:00:03 PM
Xylenes, Total	ND	0.099		mg/Kg	1	2/25/2023 1:00:03 PM
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	2/25/2023 1:00:03 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	2/25/2023 8:30:55 AM

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		



## Analytical Report

Lab Order 2302857

Date Reported: 3/3/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-11 0ft

Project: Todd 24B Federal 2

Collection Date: 2/17/2023 10:25:00 AM

Lab ID: 2302857-006

Matrix: SOIL

Received Date: 2/21/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/2/2023 8:55:02 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2023 8:55:02 AM
Surr: DNOP	116	69-147		%Rec	1	3/2/2023 8:55:02 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/25/2023 1:23:47 PM
Surr: BFB	99.9	37.7-212		%Rec	1	2/25/2023 1:23:47 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	2/25/2023 1:23:47 PM
Toluene	ND	0.046		mg/Kg	1	2/25/2023 1:23:47 PM
Ethylbenzene	ND	0.046		mg/Kg	1	2/25/2023 1:23:47 PM
Xylenes, Total	ND	0.092		mg/Kg	1	2/25/2023 1:23:47 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	2/25/2023 1:23:47 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	ND	60		mg/Kg	20	2/25/2023 8:43:20 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

## Analytical Report

Lab Order 2302857

Date Reported: 3/3/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-12 0ft

Project: Todd 24B Federal 2

Collection Date: 2/17/2023 10:30:00 AM

Lab ID: 2302857-007

Matrix: SOIL

Received Date: 2/21/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/27/2023 9:00:02 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/27/2023 9:00:02 PM
Surr: DNOP	104	69-147		%Rec	1	2/27/2023 9:00:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/25/2023 1:47:34 PM
Surr: BFB	98.2	37.7-212		%Rec	1	2/25/2023 1:47:34 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.023		mg/Kg	1	2/25/2023 1:47:34 PM
Toluene	ND	0.047		mg/Kg	1	2/25/2023 1:47:34 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/25/2023 1:47:34 PM
Xylenes, Total	ND	0.094		mg/Kg	1	2/25/2023 1:47:34 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	2/25/2023 1:47:34 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	2/25/2023 8:55:45 AM

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

<b>Qualifiers:</b>	*	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 Quantitative 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#: 2302857  
03-Mar-23

Client: Devon Energy  
Project: Todd 24B Federal 2

Sample ID: MB-73383	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 73383	RunNo: 94885								
Prep Date: 2/25/2023	Analysis Date: 2/25/2023	SeqNo: 3429558	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-73383	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 73383	RunNo: 94885								
Prep Date: 2/25/2023	Analysis Date: 2/25/2023	SeqNo: 3429559	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	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 Quantitative 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#: 2302857

03-Mar-23

**Client:** Devon Energy**Project:** Todd 24B Federal 2

Sample ID: <b>LCS-73309</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73309</b>			RunNo: <b>94848</b>						
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/23/2023</b>			SeqNo: <b>3427958</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.7	61.9	130			
Surr: DNOP	3.7		5.000		73.3	69	147			

Sample ID: <b>MB-73309</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73309</b>			RunNo: <b>94848</b>						
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/23/2023</b>			SeqNo: <b>3427961</b>			Units: <b>mg/Kg</b>			
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	8.3		10.00		83.1	69	147			

Sample ID: <b>LCS-73337</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73337</b>			RunNo: <b>94894</b>						
Prep Date: <b>2/23/2023</b>	Analysis Date: <b>2/27/2023</b>			SeqNo: <b>3430270</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.6	61.9	130			
Surr: DNOP	3.7		5.000		74.8	69	147			

Sample ID: <b>MB-73337</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73337</b>			RunNo: <b>94894</b>						
Prep Date: <b>2/23/2023</b>	Analysis Date: <b>2/27/2023</b>			SeqNo: <b>3430276</b>			Units: <b>mg/Kg</b>			
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	9.2		10.00		91.7	69	147			

Sample ID: <b>2302857-002AMS</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>BH22-03 4ft</b>	Batch ID: <b>73337</b>			RunNo: <b>94894</b>						
Prep Date: <b>2/23/2023</b>	Analysis Date: <b>2/27/2023</b>			SeqNo: <b>3431125</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.6	47.89	0	86.8	54.2	135			
Surr: DNOP	4.4		4.789		92.7	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 Quantitative 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#: 2302857

03-Mar-23

**Client:** Devon Energy**Project:** Todd 24B Federal 2

Sample ID: <b>2302857-002AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-03 4ft</b>	Batch ID: <b>73337</b>	RunNo: <b>94894</b>								
Prep Date: <b>2/23/2023</b>	Analysis Date: <b>2/27/2023</b>	SeqNo: <b>3431126</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.0	45.17	0	83.4	54.2	135	9.80	29.2	
Surr: DNOP	4.0		4.517		87.8	69	147	0	0	

Sample ID: <b>MB-73474</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73474</b>	RunNo: <b>94965</b>								
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/2/2023</b>	SeqNo: <b>3434009</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		84.0	69	147			

Sample ID: <b>LCS-73474</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73474</b>	RunNo: <b>94965</b>								
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/2/2023</b>	SeqNo: <b>3434010</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.1	69	147			

Sample ID: <b>MB-73456</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73456</b>	RunNo: <b>94965</b>								
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>	SeqNo: <b>3434451</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		113	69	147			

Sample ID: <b>LCS-73456</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73456</b>	RunNo: <b>94965</b>								
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>	SeqNo: <b>3434452</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	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 Quantitative 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#: 2302857

03-Mar-23

**Client:** Devon Energy**Project:** Todd 24B Federal 2

Sample ID: <b>2302857-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>BH22-03 4ft</b>	Batch ID: <b>73320</b>	RunNo: <b>94858</b>								
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/25/2023</b>	SeqNo: <b>3429423</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.06	0	94.4	70	130			
Surr: BFB	1900		962.5		194	37.7	212			

Sample ID: <b>2302857-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>BH22-03 4ft</b>	Batch ID: <b>73320</b>	RunNo: <b>94858</b>								
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/25/2023</b>	SeqNo: <b>3429424</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.18	0	93.8	70	130	0.113	20	
Surr: BFB	1900		967.1		195	37.7	212	0	0	

Sample ID: <b>lcs-73299</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73299</b>	RunNo: <b>94858</b>								
Prep Date: <b>2/21/2023</b>	Analysis Date: <b>2/24/2023</b>	SeqNo: <b>3429444</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.1	72.3	137			
Surr: BFB	1900		1000		191	37.7	212			

Sample ID: <b>lcs-73320</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73320</b>	RunNo: <b>94858</b>								
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/25/2023</b>	SeqNo: <b>3429445</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.2	72.3	137			
Surr: BFB	1900		1000		191	37.7	212			

Sample ID: <b>mb-73299</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73299</b>	RunNo: <b>94858</b>								
Prep Date: <b>2/21/2023</b>	Analysis Date: <b>2/24/2023</b>	SeqNo: <b>3429446</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.2	37.7	212			

Sample ID: <b>mb-73320</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73320</b>	RunNo: <b>94858</b>								
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/25/2023</b>	SeqNo: <b>3429447</b> Units: <b>mg/Kg</b>								
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 Quantitative 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#: 2302857  
03-Mar-23

Client: Devon Energy  
Project: Todd 24B Federal 2

Sample ID: mb-73320	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 73320	RunNo: 94858								
Prep Date: 2/22/2023	Analysis Date: 2/25/2023	SeqNo: 3429447		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		96.8	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 Quantitative 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#: 2302857

03-Mar-23

**Client:** Devon Energy**Project:** Todd 24B Federal 2

Sample ID: <b>2302857-003ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-01 4ft</b>	Batch ID: <b>73320</b>		RunNo: <b>94858</b>							
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/25/2023</b>		SeqNo: <b>3429471</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9625	0	89.2	68.8	120			
Toluene	0.89	0.048	0.9625	0.01736	90.3	73.6	124			
Ethylbenzene	0.87	0.048	0.9625	0	90.8	72.7	129			
Xylenes, Total	2.6	0.096	2.887	0	91.7	75.7	126			
Surr: 4-Bromofluorobenzene	0.91		0.9625		94.7	70	130			

Sample ID: <b>2302857-003amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-01 4ft</b>	Batch ID: <b>73320</b>		RunNo: <b>94858</b>							
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/25/2023</b>		SeqNo: <b>3429472</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9653	0	89.7	68.8	120	0.815	20	
Toluene	0.89	0.048	0.9653	0.01736	90.6	73.6	124	0.538	20	
Ethylbenzene	0.88	0.048	0.9653	0	91.4	72.7	129	0.937	20	
Xylenes, Total	2.6	0.097	2.896	0	91.2	75.7	126	0.280	20	
Surr: 4-Bromofluorobenzene	0.91		0.9653		94.1	70	130	0	0	

Sample ID: <b>LCS-73299</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73299</b>		RunNo: <b>94858</b>							
Prep Date: <b>2/21/2023</b>	Analysis Date: <b>2/24/2023</b>		SeqNo: <b>3429488</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.5	80	120			
Toluene	0.94	0.050	1.000	0	93.7	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.2	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		95.6	70	130			

Sample ID: <b>LCS-73320</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73320</b>		RunNo: <b>94858</b>							
Prep Date: <b>2/22/2023</b>	Analysis Date: <b>2/25/2023</b>		SeqNo: <b>3429489</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.4	80	120			
Toluene	0.90	0.050	1.000	0	90.2	80	120			
Ethylbenzene	0.89	0.050	1.000	0	89.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.9	80	120			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.6	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 Quantitative 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#: 2302857  
03-Mar-23

Client: Devon Energy  
Project: Todd 24B Federal 2

Sample ID: mb-73299	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 73299	RunNo: 94858								
Prep Date: 2/21/2023	Analysis Date: 2/24/2023	SeqNo: 3429490 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	0.94		1.000		93.5	70	130			

Sample ID: mb-73320	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 73320	RunNo: 94858								
Prep Date: 2/22/2023	Analysis Date: 2/25/2023	SeqNo: 3429491 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	0.92		1.000		92.0	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 Quantitative 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  
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: 2302857

RcptNo: 1

Received By: Tracy Casarrubias 2/21/2023 7:20:00 AM

Completed By: Tracy Casarrubias 2/21/2023 9:17:23 AM

Reviewed By: *JA 2-21-23*

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: *JA 2/21/23*

### 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	5.2	Good	Yes	Yogi		
2	5.4	Good	Yes	Yogi		





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 27, 2022

Monica Peppin

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: Todd 24 B Federal 2

OrderNo.: 2205800

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 11 sample(s) on 5/18/2022 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-01 0'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 10:25:00 AM

Lab ID: 2205800-001

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/23/2022 12:45:42 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/23/2022 12:45:42 PM
Surr: DNOP	128	51.1-141		%Rec	1	5/23/2022 12:45:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/19/2022 9:46:00 PM
Surr: BFB	86.5	37.7-212		%Rec	1	5/19/2022 9:46:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.025		mg/Kg	1	5/19/2022 9:46:00 PM
Toluene	ND	0.049		mg/Kg	1	5/19/2022 9:46:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/19/2022 9:46:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	5/19/2022 9:46:00 PM
Surr: 4-Bromofluorobenzene	86.9	70-130		%Rec	1	5/19/2022 9:46:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	60	59		mg/Kg	20	5/20/2022 12:17:26 PM

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

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

## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-01 2'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 10:30:00 AM

Lab ID: 2205800-002

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	5/23/2022 12:56:46 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	5/23/2022 12:56:46 PM
Surr: DNOP	128	51.1-141		%Rec	1	5/23/2022 12:56:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/19/2022 10:45:00 PM
Surr: BFB	91.1	37.7-212		%Rec	1	5/19/2022 10:45:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.023		mg/Kg	1	5/19/2022 10:45:00 PM
Toluene	ND	0.047		mg/Kg	1	5/19/2022 10:45:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	5/19/2022 10:45:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	5/19/2022 10:45:00 PM
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	5/19/2022 10:45:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 12:29:51 PM

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

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

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## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-02 0'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 10:10:00 AM

Lab ID: 2205800-003

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	19	8.8		mg/Kg	1	5/23/2022 1:07:46 PM
Motor Oil Range Organics (MRO)	100	44		mg/Kg	1	5/23/2022 1:07:46 PM
Surr: DNOP	127	51.1-141		%Rec	1	5/23/2022 1:07:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/19/2022 11:05:00 PM
Surr: BFB	89.7	37.7-212		%Rec	1	5/19/2022 11:05:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.025		mg/Kg	1	5/19/2022 11:05:00 PM
Toluene	ND	0.050		mg/Kg	1	5/19/2022 11:05:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/19/2022 11:05:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	5/19/2022 11:05:00 PM
Surr: 4-Bromofluorobenzene	88.0	70-130		%Rec	1	5/19/2022 11:05:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 1:07:06 PM

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

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

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## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-02 2'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 10:15:00 AM

Lab ID: 2205800-004

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/23/2022 1:29:28 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/23/2022 1:29:28 PM
Surr: DNOP	119	51.1-141		%Rec	1	5/23/2022 1:29:28 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/19/2022 11:24:00 PM
Surr: BFB	90.1	37.7-212		%Rec	1	5/19/2022 11:24:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/19/2022 11:24:00 PM
Toluene	ND	0.047		mg/Kg	1	5/19/2022 11:24:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	5/19/2022 11:24:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	5/19/2022 11:24:00 PM
Surr: 4-Bromofluorobenzene	90.8	70-130		%Rec	1	5/19/2022 11:24:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 1:19:30 PM

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

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



## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-03 0'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 11:30:00 AM

Lab ID: 2205800-005

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	17	10		mg/Kg	1	5/23/2022 1:40:27 PM
Motor Oil Range Organics (MRO)	290	50		mg/Kg	1	5/23/2022 1:40:27 PM
Surr: DNOP	121	51.1-141		%Rec	1	5/23/2022 1:40:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/19/2022 11:44:00 PM
Surr: BFB	89.5	37.7-212		%Rec	1	5/19/2022 11:44:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.025		mg/Kg	1	5/19/2022 11:44:00 PM
Toluene	ND	0.049		mg/Kg	1	5/19/2022 11:44:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/19/2022 11:44:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	5/19/2022 11:44:00 PM
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	5/19/2022 11:44:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	61		mg/Kg	20	5/20/2022 1:31:55 PM

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

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

## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-04 0'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 11:10:00 AM

Lab ID: 2205800-006

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/25/2022 10:08:54 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/25/2022 10:08:54 AM
Surr: DNOP	102	51.1-141		%Rec	1	5/25/2022 10:08:54 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/20/2022 12:04:00 AM
Surr: BFB	91.3	37.7-212		%Rec	1	5/20/2022 12:04:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/20/2022 12:04:00 AM
Toluene	ND	0.048		mg/Kg	1	5/20/2022 12:04:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	5/20/2022 12:04:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	5/20/2022 12:04:00 AM
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	5/20/2022 12:04:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 1:44:19 PM

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

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

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## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-04 2'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 11:15:00 AM

Lab ID: 2205800-007

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/23/2022 1:51:24 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/23/2022 1:51:24 PM
Surr: DNOP	108	51.1-141		%Rec	1	5/23/2022 1:51:24 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/20/2022 12:23:00 AM
Surr: BFB	90.3	37.7-212		%Rec	1	5/20/2022 12:23:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/20/2022 12:23:00 AM
Toluene	ND	0.048		mg/Kg	1	5/20/2022 12:23:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	5/20/2022 12:23:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	5/20/2022 12:23:00 AM
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	5/20/2022 12:23:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 1:56:43 PM

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

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

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## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-05 0'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 11:00:00 AM

Lab ID: 2205800-008

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/23/2022 2:02:19 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/23/2022 2:02:19 PM
Surr: DNOP	109	51.1-141		%Rec	1	5/23/2022 2:02:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/20/2022 12:43:00 AM
Surr: BFB	88.1	37.7-212		%Rec	1	5/20/2022 12:43:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/20/2022 12:43:00 AM
Toluene	ND	0.048		mg/Kg	1	5/20/2022 12:43:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	5/20/2022 12:43:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	5/20/2022 12:43:00 AM
Surr: 4-Bromofluorobenzene	91.5	70-130		%Rec	1	5/20/2022 12:43:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 2:09:08 PM

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

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



## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-05 2'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 11:05:00 AM

Lab ID: 2205800-009

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/23/2022 2:13:15 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/23/2022 2:13:15 PM
Surr: DNOP	113	51.1-141		%Rec	1	5/23/2022 2:13:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/20/2022 1:03:00 AM
Surr: BFB	87.9	37.7-212		%Rec	1	5/20/2022 1:03:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/20/2022 1:03:00 AM
Toluene	ND	0.047		mg/Kg	1	5/20/2022 1:03:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	5/20/2022 1:03:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	5/20/2022 1:03:00 AM
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	5/20/2022 1:03:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 2:21:32 PM

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

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

## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-06 0'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 10:40:00 AM

Lab ID: 2205800-010

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/23/2022 2:24:08 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/23/2022 2:24:08 PM
Surr: DNOP	99.6	51.1-141		%Rec	1	5/23/2022 2:24:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/20/2022 1:42:00 AM
Surr: BFB	88.7	37.7-212		%Rec	1	5/20/2022 1:42:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/20/2022 1:42:00 AM
Toluene	ND	0.048		mg/Kg	1	5/20/2022 1:42:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	5/20/2022 1:42:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	5/20/2022 1:42:00 AM
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	5/20/2022 1:42:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 2:33:57 PM

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

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

## Analytical Report

Lab Order 2205800

Date Reported: 5/27/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-06 2'

Project: Todd 24 B Federal 2

Collection Date: 5/16/2022 10:45:00 AM

Lab ID: 2205800-011

Matrix: SOIL

Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/23/2022 2:35:01 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/23/2022 2:35:01 PM
Surr: DNOP	113	51.1-141		%Rec	1	5/23/2022 2:35:01 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/20/2022 2:02:00 AM
Surr: BFB	83.9	37.7-212		%Rec	1	5/20/2022 2:02:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/20/2022 2:02:00 AM
Toluene	ND	0.048		mg/Kg	1	5/20/2022 2:02:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	5/20/2022 2:02:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	5/20/2022 2:02:00 AM
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	5/20/2022 2:02:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/20/2022 2:46:22 PM

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205800

27-May-22

Client: Devon Energy  
Project: Todd 24 B Federal 2

Sample ID: MB-67596		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 67596		RunNo: 88190						
Prep Date: 5/20/2022		Analysis Date: 5/20/2022		SeqNo: 3126542			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-67596		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 67596		RunNo: 88190						
Prep Date: 5/20/2022		Analysis Date: 5/20/2022		SeqNo: 3126543			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.7	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 Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2205800

27-May-22

**Client:** Devon Energy  
**Project:** Todd 24 B Federal 2

Sample ID: <b>LCS-67548</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67548</b>			RunNo: <b>88170</b>						
Prep Date: <b>5/19/2022</b>	Analysis Date: <b>5/20/2022</b>			SeqNo: <b>3126893</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.8	64.4	127			
Surr: DNOP	5.0		5.000		101	51.1	141			

Sample ID: <b>MB-67548</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>67548</b>			RunNo: <b>88170</b>						
Prep Date: <b>5/19/2022</b>	Analysis Date: <b>5/20/2022</b>			SeqNo: <b>3126897</b>		Units: <b>mg/Kg</b>				
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	11		10.00		112	51.1	141			

Sample ID: <b>LCS-67607</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67607</b>			RunNo: <b>88200</b>						
Prep Date: <b>5/20/2022</b>	Analysis Date: <b>5/23/2022</b>			SeqNo: <b>3127567</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.4		5.000		127	51.1	141			

Sample ID: <b>MB-67607</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>67607</b>			RunNo: <b>88200</b>						
Prep Date: <b>5/20/2022</b>	Analysis Date: <b>5/23/2022</b>			SeqNo: <b>3127570</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		132	51.1	141			

Sample ID: <b>LCS-67667</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67667</b>			RunNo: <b>88262</b>						
Prep Date: <b>5/24/2022</b>	Analysis Date: <b>5/25/2022</b>			SeqNo: <b>3129962</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.2		5.000		124	51.1	141			

Sample ID: <b>LCS-67670</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67670</b>			RunNo: <b>88262</b>						
Prep Date: <b>5/24/2022</b>	Analysis Date: <b>5/25/2022</b>			SeqNo: <b>3129963</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	50.00	0	115	64.4	127			
Surr: DNOP	6.5		5.000		129	51.1	141			

**Qualifiers:**

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

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

WO#: 2205800

27-May-22

**Client:** Devon Energy  
**Project:** Todd 24 B Federal 2

Sample ID: <b>MB-67667</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>67667</b>		RunNo: <b>88262</b>							
Prep Date: <b>5/24/2022</b>	Analysis Date: <b>5/25/2022</b>		SeqNo: <b>3129964</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.2	51.1	141			

Sample ID: <b>MB-67670</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>67670</b>		RunNo: <b>88262</b>							
Prep Date: <b>5/24/2022</b>	Analysis Date: <b>5/25/2022</b>		SeqNo: <b>3129965</b>		Units: <b>mg/Kg</b>					
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	9.7		10.00		96.8	51.1	141			

Sample ID: <b>MB-67666</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>67666</b>		RunNo: <b>88263</b>							
Prep Date: <b>5/24/2022</b>	Analysis Date: <b>5/26/2022</b>		SeqNo: <b>3131422</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	51.1	141			

Sample ID: <b>LCS-67666</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>67666</b>		RunNo: <b>88263</b>							
Prep Date: <b>5/24/2022</b>	Analysis Date: <b>5/26/2022</b>		SeqNo: <b>3131423</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.4		5.000		108	51.1	141			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2205800

27-May-22

**Client:** Devon Energy  
**Project:** Todd 24 B Federal 2

Sample ID: <b>lcs-67545</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67545</b>	RunNo: <b>88144</b>								
Prep Date: <b>5/18/2022</b>	Analysis Date: <b>5/19/2022</b>	SeqNo: <b>3124750</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	72.3	137			
Surr: BFB	1900		1000		191	37.7	212			

Sample ID: <b>mb-67545</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67545</b>	RunNo: <b>88144</b>								
Prep Date: <b>5/18/2022</b>	Analysis Date: <b>5/19/2022</b>	SeqNo: <b>3124752</b> Units: <b>mg/Kg</b>								
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			

### Qualifiers:

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

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

WO#: 2205800

27-May-22

**Client:** Devon Energy  
**Project:** Todd 24 B Federal 2

Sample ID: <b>ics-67545</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>67545</b>		RunNo: <b>88144</b>							
Prep Date: <b>5/18/2022</b>	Analysis Date: <b>5/19/2022</b>		SeqNo: <b>3124827</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.1	80	120			
Toluene	0.97	0.050	1.000	0	96.9	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.2	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130			

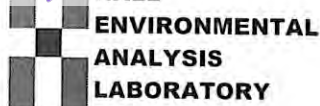
Sample ID: <b>mb-67545</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>67545</b>		RunNo: <b>88144</b>							
Prep Date: <b>5/18/2022</b>	Analysis Date: <b>5/19/2022</b>		SeqNo: <b>3124828</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	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	0.90		1.000		89.7	70	130			

Sample ID: <b>2205800-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-01 0'</b>	Batch ID: <b>67545</b>		RunNo: <b>88144</b>							
Prep Date: <b>5/18/2022</b>	Analysis Date: <b>5/19/2022</b>		SeqNo: <b>3124831</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	0.9843	0	101	68.8	120			
Toluene	1.0	0.049	0.9843	0	103	73.6	124			
Ethylbenzene	1.0	0.049	0.9843	0	102	72.7	129			
Xylenes, Total	3.0	0.098	2.953	0	102	75.7	126			
Surr: 4-Bromofluorobenzene	0.88		0.9843		89.1	70	130			

Sample ID: <b>2205800-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-01 0'</b>	Batch ID: <b>67545</b>		RunNo: <b>88144</b>							
Prep Date: <b>5/18/2022</b>	Analysis Date: <b>5/19/2022</b>		SeqNo: <b>3124832</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	0.9833	0	99.5	68.8	120	1.44	20	
Toluene	1.0	0.049	0.9833	0	101	73.6	124	1.40	20	
Ethylbenzene	0.99	0.049	0.9833	0	101	72.7	129	1.31	20	
Xylenes, Total	3.0	0.098	2.950	0	100	75.7	126	1.57	20	
Surr: 4-Bromofluorobenzene	0.86		0.9833		87.6	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	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 Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



## Sample Log-In Check List

Client Name: Devon Energy

Work Order Number: 2205800

RcptNo: 1

Received By: Joseph Alderette 5/18/2022 8:27:00 AM

Completed By: Desiree Dominguez 5/18/2022 9:28:26 AM

Reviewed By: KPA 5.18.22

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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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:

(&lt;2 or &gt;12 unless noted)

Adjusted?

Checked by: JMS/18/22

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	5.5	Good				



Released to Imaging: 11/13/2025 2:42:45 PM

5 down

on file

Todd 24B Federal #2

21E-02816-16

pernican@Vertex.ca

Monica Peppin

- ☐ Level 4 (Full Validation)

☐ Other☐ No

# of Coolers: 1

Cooler Temp (including CF): 55-0-55 (°C)

HEAL No.  
2205800

5/10	10:25	Soil	BH22-01 0'
	10:30		BH22-01 2'
	10:10		BH22-02 0'
	10:15		BH22-02 2'
	11:30		BH22-03 0'
	11:10		BH22-04 0'
	11:15		BH22-04 2'
	11:00		BH22-05 0'
	11:05		BH22-05
	10:40		BH22-06
	10:45		BH22-06

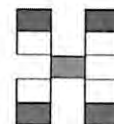
-001

1000000

No work order #

Invoice to be sent to Laura Calderwood and Dale Woodard

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

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

June 03, 2022

Monica Peppin

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: Todd 24B Federal 2

OrderNo.: 2205A95

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/25/2022 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2205A95

Date Reported: 6/3/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-07 0'

Project: Todd 24B Federal 2

Collection Date: 5/20/2022 8:50:00 AM

Lab ID: 2205A95-001

Matrix: SOIL

Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/28/2022 12:09:51 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/28/2022 12:09:51 AM
Surr: DNOP	76.6	51.1-141		%Rec	1	5/28/2022 12:09:51 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2022 5:44:25 PM
Surr: BFB	103	37.7-212		%Rec	1	5/27/2022 5:44:25 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/27/2022 5:44:25 PM
Toluene	ND	0.048		mg/Kg	1	5/27/2022 5:44:25 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2022 5:44:25 PM
Xylenes, Total	ND	0.096		mg/Kg	1	5/27/2022 5:44:25 PM
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	5/27/2022 5:44:25 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	6/1/2022 12:52:25 AM

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

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

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## Analytical Report

Lab Order 2205A95

Date Reported: 6/3/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-07 2'

Project: Todd 24B Federal 2

Collection Date: 5/20/2022 9:00:00 AM

Lab ID: 2205A95-002

Matrix: SOIL

Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/28/2022 12:23:34 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/28/2022 12:23:34 AM
Surr: DNOP	108	51.1-141		%Rec	1	5/28/2022 12:23:34 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2022 6:08:08 PM
Surr: BFB	99.6	37.7-212		%Rec	1	5/27/2022 6:08:08 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/27/2022 6:08:08 PM
Toluene	ND	0.048		mg/Kg	1	5/27/2022 6:08:08 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2022 6:08:08 PM
Xylenes, Total	ND	0.097		mg/Kg	1	5/27/2022 6:08:08 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/27/2022 6:08:08 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	59		mg/Kg	20	6/1/2022 1:04:50 AM

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

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

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## Analytical Report

Lab Order 2205A95

Date Reported: 6/3/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-08 0'

Project: Todd 24B Federal 2

Collection Date: 5/20/2022 9:10:00 AM

Lab ID: 2205A95-003

Matrix: SOIL

Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/28/2022 12:37:32 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/28/2022 12:37:32 AM
Surr: DNOP	98.2	51.1-141		%Rec	1	5/28/2022 12:37:32 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2022 6:31:48 PM
Surr: BFB	98.4	37.7-212		%Rec	1	5/27/2022 6:31:48 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/27/2022 6:31:48 PM
Toluene	ND	0.048		mg/Kg	1	5/27/2022 6:31:48 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2022 6:31:48 PM
Xylenes, Total	ND	0.095		mg/Kg	1	5/27/2022 6:31:48 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	5/27/2022 6:31:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	6/1/2022 2:06:51 AM

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

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

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## Analytical Report

Lab Order 2205A95

Date Reported: 6/3/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-08 2'

Project: Todd 24B Federal 2

Collection Date: 5/20/2022 9:20:00 AM

Lab ID: 2205A95-004

Matrix: SOIL

Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/28/2022 12:51:17 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/28/2022 12:51:17 AM
Surr: DNOP	99.8	51.1-141		%Rec	1	5/28/2022 12:51:17 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2022 6:55:25 PM
Surr: BFB	100	37.7-212		%Rec	1	5/27/2022 6:55:25 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/27/2022 6:55:25 PM
Toluene	ND	0.049		mg/Kg	1	5/27/2022 6:55:25 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2022 6:55:25 PM
Xylenes, Total	ND	0.097		mg/Kg	1	5/27/2022 6:55:25 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/27/2022 6:55:25 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	6/1/2022 2:19:16 AM

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

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

## Analytical Report

Lab Order 2205A95

Date Reported: 6/3/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-09 0'

Project: Todd 24B Federal 2

Collection Date: 5/20/2022 10:50:00 AM

Lab ID: 2205A95-005

Matrix: SOIL

Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>ED</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/27/2022 7:02:55 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/27/2022 7:02:55 PM
Surr: DNOP	106	51.1-141		%Rec	1	5/27/2022 7:02:55 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2022 7:49:00 PM
Surr: BFB	86.3	37.7-212		%Rec	1	5/27/2022 7:49:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/27/2022 7:49:00 PM
Toluene	ND	0.048		mg/Kg	1	5/27/2022 7:49:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2022 7:49:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	5/27/2022 7:49:00 PM
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	1	5/27/2022 7:49:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	6/1/2022 2:31:40 AM

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

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

## Analytical Report

Lab Order 2205A95

Date Reported: 6/3/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-09 2'

Project: Todd 24B Federal 2

Collection Date: 5/20/2022 11:00:00 AM

Lab ID: 2205A95-006

Matrix: SOIL

Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>ED</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/27/2022 8:14:41 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2022 8:14:41 PM
Surr: DNOP	105	51.1-141		%Rec	1	5/27/2022 8:14:41 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2022 8:48:00 PM
Surr: BFB	87.1	37.7-212		%Rec	1	5/27/2022 8:48:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>BRM</b>
Benzene	ND	0.024		mg/Kg	1	5/27/2022 8:48:00 PM
Toluene	ND	0.048		mg/Kg	1	5/27/2022 8:48:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2022 8:48:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	5/27/2022 8:48:00 PM
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	5/27/2022 8:48:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	6/1/2022 2:44:04 AM

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205A95

03-Jun-22

Client: Vertex Resources Services, Inc.

Project: Todd 24B Federal 2

Sample ID: MB-67796	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 67796	RunNo: 88375
Prep Date: 5/31/2022	Analysis Date: 5/31/2022	SeqNo: 3135693 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-67796	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 67796	RunNo: 88375
Prep Date: 5/31/2022	Analysis Date: 6/1/2022	SeqNo: 3135694 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.8 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 Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2205A95

03-Jun-22

**Client:** Vertex Resources Services, Inc.**Project:** Todd 24B Federal 2

Sample ID: <b>MB-67680</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>67680</b>			RunNo: <b>88246</b>						
Prep Date: <b>5/25/2022</b>	Analysis Date: <b>5/26/2022</b>			SeqNo: <b>3132682</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.1	51.1	141			

Sample ID: <b>LCS-67680</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67680</b>			RunNo: <b>88246</b>						
Prep Date: <b>5/25/2022</b>	Analysis Date: <b>5/26/2022</b>			SeqNo: <b>3132685</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.1	51.1	141			

Sample ID: <b>MB-67736</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>67736</b>			RunNo: <b>88246</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133612</b>		Units: <b>mg/Kg</b>				
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	11		10.00		108	51.1	141			

Sample ID: <b>LCS-67736</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67736</b>			RunNo: <b>88246</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133613</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	64.4	127			
Surr: DNOP	4.7		5.000		93.7	51.1	141			

Sample ID: <b>2205A95-005AMS</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>BH22-09 0'</b>	Batch ID: <b>67736</b>			RunNo: <b>88246</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133615</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.4	46.77	8.478	95.1	36.1	154			
Surr: DNOP	4.5		4.677		95.5	51.1	141			

Sample ID: <b>2205A95-005AMSD</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>BH22-09 0'</b>	Batch ID: <b>67736</b>			RunNo: <b>88246</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133616</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.1	45.29	8.478	93.8	36.1	154	3.84	33.9	

**Qualifiers:**

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



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

WO#: 2205A95

03-Jun-22

**Client:** Vertex Resources Services, Inc.**Project:** Todd 24B Federal 2

Sample ID: <b>2205A95-005AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-09 0'</b>	Batch ID: <b>67736</b>	RunNo: <b>88246</b>								
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>	SeqNo: <b>3133616</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		4.529		94.5	51.1	141	0	0	

Sample ID: <b>MB-67735</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67735</b>	RunNo: <b>88333</b>								
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>	SeqNo: <b>3134442</b> Units: <b>mg/Kg</b>								
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	9.9		10.00		98.7	51.1	141			

Sample ID: <b>LCS-67735</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67735</b>	RunNo: <b>88333</b>								
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>	SeqNo: <b>3134443</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.2	64.4	127			
Surr: DNOP	4.6		5.000		92.0	51.1	141			

**Qualifiers:**

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

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

WO#: 2205A95

03-Jun-22

**Client:** Vertex Resources Services, Inc.**Project:** Todd 24B Federal 2

Sample ID: <b>mb-67725</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>67725</b>			RunNo: <b>88348</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133375</b>		Units: <b>mg/Kg</b>				
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		99.8	37.7	212			

Sample ID: <b>lcs-67725</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67725</b>			RunNo: <b>88348</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133376</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	119	72.3	137			
Surr: BFB	2100		1000		210	37.7	212			

Sample ID: <b>lcs-67728</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>67728</b>			RunNo: <b>88349</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133510</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.0	72.3	137			
Surr: BFB	1800		1000		184	37.7	212			

Sample ID: <b>mb-67728</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>67728</b>			RunNo: <b>88349</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133511</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.5	37.7	212			

Sample ID: <b>2205a95-005ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>BH22-09 0'</b>	Batch ID: <b>67728</b>			RunNo: <b>88349</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133513</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.7	23.72	0	108	70	130			
Surr: BFB	1900		948.8		200	37.7	212			

Sample ID: <b>2205a95-005amsd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>BH22-09 0'</b>	Batch ID: <b>67728</b>			RunNo: <b>88349</b>						
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>			SeqNo: <b>3133514</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205A95

03-Jun-22

Client: Vertex Resources Services, Inc.

Project: Todd 24B Federal 2

Sample ID: 2205a95-005amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-09 0'		Batch ID: 67728			RunNo: 88349					
Prep Date: 5/26/2022		Analysis Date: 5/27/2022			SeqNo: 3133514		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.70	0	105	70	130	2.42	20	
Surr: BFB	1800		947.9		192	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 Quantitative Limit

S

% Recovery outside of range due to dilution or matrix interference

- B

Analyte detected in the associated Method Blank
- E

Estimated value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2205A95

03-Jun-22

**Client:** Vertex Resources Services, Inc.**Project:** Todd 24B Federal 2

Sample ID: <b>mb-67725</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>67725</b>		RunNo: <b>88348</b>							
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>		SeqNo: <b>3133428</b>		Units: <b>mg/Kg</b>					
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		104	70	130			

Sample ID: <b>LCS-67725</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>67725</b>		RunNo: <b>88348</b>							
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>		SeqNo: <b>3133429</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	80	120			
Toluene	0.98	0.050	1.000	0	97.7	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: <b>lcs-67728</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>67728</b>		RunNo: <b>88349</b>							
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>		SeqNo: <b>3133559</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.2	80	120			
Toluene	0.94	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.9	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.2	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.2	70	130			

Sample ID: <b>mb-67728</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>67728</b>		RunNo: <b>88349</b>							
Prep Date: <b>5/26/2022</b>	Analysis Date: <b>5/27/2022</b>		SeqNo: <b>3133560</b>		Units: <b>mg/Kg</b>					
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	0.89		1.000		88.7	70	130			

**Qualifiers:**

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

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

WO#: 2205A95

03-Jun-22

**Client:** Vertex Resources Services, Inc.**Project:** Todd 24B Federal 2

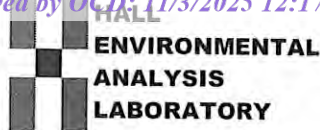
Sample ID: 2205a95-006ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-09 2'	Batch ID: 67728	RunNo: 88349								
Prep Date: 5/26/2022	Analysis Date: 5/27/2022	SeqNo: 3133563 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9653	0	98.7	68.8	120			
Toluene	0.97	0.048	0.9653	0	100	73.6	124			
Ethylbenzene	0.95	0.048	0.9653	0	98.8	72.7	129			
Xylenes, Total	2.8	0.097	2.896	0	97.3	75.7	126			
Surr: 4-Bromofluorobenzene	0.84		0.9653		87.1	70	130			

Sample ID: 2205a95-006amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-09 2'	Batch ID: 67728	RunNo: 88349								
Prep Date: 5/26/2022	Analysis Date: 5/27/2022	SeqNo: 3133564 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.024	0.9718	0	96.7	68.8	120	1.33	20	
Toluene	0.95	0.049	0.9718	0	98.2	73.6	124	1.14	20	
Ethylbenzene	0.93	0.049	0.9718	0	96.1	72.7	129	2.05	20	
Xylenes, Total	2.8	0.097	2.915	0	95.7	75.7	126	0.893	20	
Surr: 4-Bromofluorobenzene	0.83		0.9718		85.9	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 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 Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix interference	





## Sample Log-In Check List

Client Name: Vertex Resources  
 Services, Inc.

Work Order Number: 2205A95

RcptNo: 1

Received By: Juan Rojas

5/25/2022 7:15:00 AM

*Juan Rojas*

Completed By: Sean Livingston

5/25/2022 8:53:16 AM

*Sean Livingston*

Reviewed By:

*jn 5/25/22*

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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: *JN 5-25-22*

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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good	Not Present			







Environment Testing

- 1
- 2
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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 7/14/2025 5:05:29 PM

## JOB DESCRIPTION

Todd 24 B Federal #002  
25A-01218

## JOB NUMBER

885-28078-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# 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  
7/14/2025 5:05:29 PM

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

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Laboratory Job ID: 885-28078-1  
SDG: 25A-01218

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Definitions/Glossary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

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 24 B Federal #002

Job ID: 885-28078-1

**Job ID: 885-28078-1**

**Eurofins Albuquerque**

### Job Narrative 885-28078-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 7/3/2025 7:45 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 2.5°C.

#### Receipt Exceptions

#### 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

Method 8015D\_DRO: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-29732 and analytical batch 885-29757 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015D\_DRO: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 885-29732 and analytical batch 885-29757 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015D\_DRO: The following sample was diluted due to the nature of the sample matrix: BH25-16 0' (885-28078-20)

Method 8015D\_DRO: The following samples required a dilution due to the nature of the sample matrix: BH25-16 1' (885-28078-21) and BH25-16 2' (885-28078-22). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8015D\_DRO: The continuing calibration verification (CCV) associated with batch 885-29794 recovered above the upper control limit for Motor Oil Range Organics [C28-C40]. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: BH25-16 8' (885-28078-28) and (CCV 885-29794/36).

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

#### HPLC/IC

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

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-13 0'

Lab Sample ID: 885-28078-1

Date Collected: 07/01/25 07:10

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 18:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			07/03/25 12:42	07/07/25 18:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/07/25 18:54	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 18:54	1
Toluene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 18:54	1
Xylenes, Total	ND		0.10	mg/Kg		07/03/25 12:42	07/07/25 18:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			07/03/25 12:42	07/07/25 18:54	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		07/08/25 16:00	07/09/25 19:51	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		07/08/25 16:00	07/09/25 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			07/08/25 16:00	07/09/25 19:51	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 13:35	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-13 1'

Lab Sample ID: 885-28078-2

Date Collected: 07/01/25 07:13

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 20:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/07/25 20:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/07/25 20:05	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 20:05	1
Toluene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 20:05	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 12:42	07/07/25 20:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			07/03/25 12:42	07/07/25 20:05	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		9.8	mg/Kg		07/08/25 16:00	07/09/25 20:14	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		07/08/25 16:00	07/09/25 20:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			07/08/25 16:00	07/09/25 20:14	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		07/07/25 10:24	07/07/25 14:05	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-13 2'

Lab Sample ID: 885-28078-3

Date Collected: 07/01/25 07:15

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 21:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			07/03/25 12:42	07/07/25 21:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/07/25 21:16	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 12:42	07/07/25 21:16	1
Toluene	ND		0.049	mg/Kg		07/03/25 12:42	07/07/25 21:16	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 12:42	07/07/25 21:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			07/03/25 12:42	07/07/25 21:16	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		07/08/25 16:00	07/09/25 20:38	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		07/08/25 16:00	07/09/25 20:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			07/08/25 16:00	07/09/25 20:38	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 14:15	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-13 3'

Lab Sample ID: 885-28078-4

Date Collected: 07/01/25 07:17

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150	07/03/25 12:42	07/07/25 21:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/07/25 21:40	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 12:42	07/07/25 21:40	1
Toluene	ND		0.049	mg/Kg		07/03/25 12:42	07/07/25 21:40	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 12:42	07/07/25 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150	07/03/25 12:42	07/07/25 21:40	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		07/08/25 16:00	07/09/25 21:02	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		07/08/25 16:00	07/09/25 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134	07/08/25 16:00	07/09/25 21:02	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 14:25	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-13 4'

Lab Sample ID: 885-28078-5

Date Collected: 07/01/25 07:22

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 22:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150	07/03/25 12:42	07/07/25 22:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		07/03/25 12:42	07/07/25 22:03	1
Ethylbenzene	ND		0.047	mg/Kg		07/03/25 12:42	07/07/25 22:03	1
Toluene	ND		0.047	mg/Kg		07/03/25 12:42	07/07/25 22:03	1
Xylenes, Total	ND		0.093	mg/Kg		07/03/25 12:42	07/07/25 22:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150	07/03/25 12:42	07/07/25 22:03	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		9.9	mg/Kg		07/08/25 16:00	07/09/25 21:50	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		07/08/25 16:00	07/09/25 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134	07/08/25 16:00	07/09/25 21:50	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 14:34	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-14 0'

Lab Sample ID: 885-28078-6

Date Collected: 07/01/25 07:30

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 22:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			07/03/25 12:42	07/07/25 22:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/07/25 22:27	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 22:27	1
Toluene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 22:27	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 12:42	07/07/25 22:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 12:42	07/07/25 22:27	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		8.4	mg/Kg		07/08/25 16:00	07/09/25 22:14	1
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		07/08/25 16:00	07/09/25 22:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			07/08/25 16:00	07/09/25 22:14	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 14:44	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-14 1'

Lab Sample ID: 885-28078-7

Date Collected: 07/01/25 07:32

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 22:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			07/03/25 12:42	07/07/25 22:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/07/25 22:51	1
Ethylbenzene	ND		0.047	mg/Kg		07/03/25 12:42	07/07/25 22:51	1
Toluene	ND		0.047	mg/Kg		07/03/25 12:42	07/07/25 22:51	1
Xylenes, Total	ND		0.095	mg/Kg		07/03/25 12:42	07/07/25 22:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/07/25 22:51	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		9.1	mg/Kg		07/08/25 16:00	07/09/25 22:38	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		07/08/25 16:00	07/09/25 22:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			07/08/25 16:00	07/09/25 22:38	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 14:54	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-14 2'

Lab Sample ID: 885-28078-8

Date Collected: 07/01/25 07:35

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 23:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			07/03/25 12:42	07/07/25 23:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/07/25 23:14	1
Ethylbenzene	ND		0.047	mg/Kg		07/03/25 12:42	07/07/25 23:14	1
Toluene	ND		0.047	mg/Kg		07/03/25 12:42	07/07/25 23:14	1
Xylenes, Total	ND		0.095	mg/Kg		07/03/25 12:42	07/07/25 23:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/07/25 23:14	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		8.9	mg/Kg		07/08/25 16:00	07/09/25 23:02	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		07/08/25 16:00	07/09/25 23:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			07/08/25 16:00	07/09/25 23:02	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 15:04	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-14 3'

Lab Sample ID: 885-28078-9

Date Collected: 07/01/25 07:37

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/07/25 23:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			07/03/25 12:42	07/07/25 23:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/07/25 23:38	1
Ethylbenzene	ND		0.048	mg/Kg		07/03/25 12:42	07/07/25 23:38	1
Toluene	ND		0.048	mg/Kg		07/03/25 12:42	07/07/25 23:38	1
Xylenes, Total	ND		0.096	mg/Kg		07/03/25 12:42	07/07/25 23:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			07/03/25 12:42	07/07/25 23:38	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		07/08/25 16:00	07/09/25 23:27	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		07/08/25 16:00	07/09/25 23:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			07/08/25 16:00	07/09/25 23:27	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 15:33	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-14 4'

Lab Sample ID: 885-28078-10

Date Collected: 07/01/25 07:40

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 00:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/08/25 00:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/08/25 00:02	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 00:02	1
Toluene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 00:02	1
Xylenes, Total	ND		0.098	mg/Kg		07/03/25 12:42	07/08/25 00:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 12:42	07/08/25 00:02	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		07/08/25 16:00	07/09/25 23:51	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		07/08/25 16:00	07/09/25 23:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			07/08/25 16:00	07/09/25 23:51	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 10:24	07/07/25 15:43	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 0'

Lab Sample ID: 885-28078-11

Date Collected: 07/01/25 07:47

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 00:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/08/25 00:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/08/25 00:49	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 12:42	07/08/25 00:49	1
Toluene	ND		0.050	mg/Kg		07/03/25 12:42	07/08/25 00:49	1
Xylenes, Total	ND		0.10	mg/Kg		07/03/25 12:42	07/08/25 00:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 12:42	07/08/25 00:49	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]	220		9.6	mg/Kg		07/08/25 16:00	07/10/25 00:39	1
Motor Oil Range Organics [C28-C40]	610		48	mg/Kg		07/08/25 16:00	07/10/25 00:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			07/08/25 16:00	07/10/25 00:39	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		07/07/25 10:24	07/07/25 15:53	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 1'

Lab Sample ID: 885-28078-12

Date Collected: 07/01/25 07:51

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 01:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			07/03/25 12:42	07/08/25 01:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/08/25 01:13	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 01:13	1
Toluene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 01:13	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 12:42	07/08/25 01:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 12:42	07/08/25 01:13	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		07/08/25 16:00	07/10/25 01:51	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		07/08/25 16:00	07/10/25 01:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			07/08/25 16:00	07/10/25 01:51	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61	mg/Kg		07/07/25 10:24	07/07/25 16:03	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 2'

Lab Sample ID: 885-28078-13

Date Collected: 07/01/25 08:02

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150	07/03/25 12:42	07/08/25 01:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/08/25 01:37	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 01:37	1
Toluene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 01:37	1
Xylenes, Total	ND		0.097	mg/Kg		07/03/25 12:42	07/08/25 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150	07/03/25 12:42	07/08/25 01:37	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		9.5	mg/Kg		07/08/25 16:00	07/10/25 02:15	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		07/08/25 16:00	07/10/25 02:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134	07/08/25 16:00	07/10/25 02:15	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61	mg/Kg		07/07/25 10:24	07/07/25 16:13	20

Eurofins Albuquerque



## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 3'

Lab Sample ID: 885-28078-14

Date Collected: 07/01/25 08:05

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 02:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			07/03/25 12:42	07/08/25 02:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/08/25 02:01	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 02:01	1
Toluene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 02:01	1
Xylenes, Total	ND		0.097	mg/Kg		07/03/25 12:42	07/08/25 02:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			07/03/25 12:42	07/08/25 02:01	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		07/08/25 16:00	07/10/25 02:39	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		07/08/25 16:00	07/10/25 02:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			07/08/25 16:00	07/10/25 02:39	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		07/07/25 10:24	07/07/25 16:23	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 4'

Lab Sample ID: 885-28078-15

Date Collected: 07/01/25 08:08

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 02:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			07/03/25 12:42	07/08/25 02:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/08/25 02:25	1
Ethylbenzene	ND		0.048	mg/Kg		07/03/25 12:42	07/08/25 02:25	1
Toluene	ND		0.048	mg/Kg		07/03/25 12:42	07/08/25 02:25	1
Xylenes, Total	ND		0.096	mg/Kg		07/03/25 12:42	07/08/25 02:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			07/03/25 12:42	07/08/25 02:25	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		9.5	mg/Kg		07/08/25 16:00	07/10/25 03:27	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		07/08/25 16:00	07/10/25 03:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			07/08/25 16:00	07/10/25 03:27	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 12:00	07/07/25 16:52	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 5'

Lab Sample ID: 885-28078-16

Date Collected: 07/01/25 08:12

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 02:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/08/25 02:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		07/03/25 12:42	07/08/25 02:49	1
Ethylbenzene	ND		0.047	mg/Kg		07/03/25 12:42	07/08/25 02:49	1
Toluene	ND		0.047	mg/Kg		07/03/25 12:42	07/08/25 02:49	1
Xylenes, Total	ND		0.093	mg/Kg		07/03/25 12:42	07/08/25 02:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			07/03/25 12:42	07/08/25 02:49	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		8.9	mg/Kg		07/08/25 16:00	07/10/25 03:51	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		07/08/25 16:00	07/10/25 03:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			07/08/25 16:00	07/10/25 03:51	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		07/07/25 12:00	07/07/25 17:41	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 6'

Lab Sample ID: 885-28078-17

Date Collected: 07/01/25 08:21

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 03:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 12:42	07/08/25 03:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/08/25 03:13	1
Ethylbenzene	ND		0.048	mg/Kg		07/03/25 12:42	07/08/25 03:13	1
Toluene	ND		0.048	mg/Kg		07/03/25 12:42	07/08/25 03:13	1
Xylenes, Total	ND		0.097	mg/Kg		07/03/25 12:42	07/08/25 03:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			07/03/25 12:42	07/08/25 03:13	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		8.8	mg/Kg		07/08/25 16:00	07/10/25 04:39	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		07/08/25 16:00	07/10/25 04:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			07/08/25 16:00	07/10/25 04:39	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 12:00	07/07/25 17:51	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 7'

Lab Sample ID: 885-28078-18

Date Collected: 07/01/25 08:25

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 03:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/08/25 03:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/08/25 03:37	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 12:42	07/08/25 03:37	1
Toluene	ND		0.050	mg/Kg		07/03/25 12:42	07/08/25 03:37	1
Xylenes, Total	ND		0.10	mg/Kg		07/03/25 12:42	07/08/25 03:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 12:42	07/08/25 03:37	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	F1 F2	9.0	mg/Kg		07/08/25 16:00	07/10/25 05:03	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		07/08/25 16:00	07/10/25 05:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			07/08/25 16:00	07/10/25 05:03	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/07/25 12:00	07/07/25 18:01	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 8'

Lab Sample ID: 885-28078-19

Date Collected: 07/01/25 08:30

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 04:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 12:42	07/08/25 04:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/08/25 04:01	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 12:42	07/08/25 04:01	1
Toluene	ND		0.050	mg/Kg		07/03/25 12:42	07/08/25 04:01	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 12:42	07/08/25 04:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			07/03/25 12:42	07/08/25 04:01	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		07/10/25 09:51	07/11/25 15:51	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		07/10/25 09:51	07/11/25 15:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			07/10/25 09:51	07/11/25 15:51	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		07/07/25 12:00	07/07/25 18:11	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 0'

Lab Sample ID: 885-28078-20

Date Collected: 07/01/25 11:20

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 12:42	07/08/25 04:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			07/03/25 12:42	07/08/25 04:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 12:42	07/08/25 04:24	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 04:24	1
Toluene	ND		0.049	mg/Kg		07/03/25 12:42	07/08/25 04:24	1
Xylenes, Total	ND		0.098	mg/Kg		07/03/25 12:42	07/08/25 04:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/03/25 12:42	07/08/25 04:24	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]	6000		93	mg/Kg		07/10/25 09:51	07/11/25 16:03	10
Motor Oil Range Organics [C28-C40]	5000		470	mg/Kg		07/10/25 09:51	07/11/25 16:03	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	0	S1 - D	62 - 134			07/10/25 09:51	07/11/25 16:03	10

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3800		60	mg/Kg		07/07/25 12:00	07/07/25 18:21	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 1'

Lab Sample ID: 885-28078-21

Date Collected: 07/01/25 11:25

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/07/25 15:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			07/03/25 15:59	07/07/25 15:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 15:59	07/07/25 15:18	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 15:59	07/07/25 15:18	1
Toluene	ND		0.050	mg/Kg		07/03/25 15:59	07/07/25 15:18	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 15:59	07/07/25 15:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			07/03/25 15:59	07/07/25 15:18	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]	440		88	mg/Kg		07/10/25 09:51	07/11/25 15:31	10
Motor Oil Range Organics [C28-C40]	1400		440	mg/Kg		07/10/25 09:51	07/11/25 15:31	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	0	S1 - D	62 - 134			07/10/25 09:51	07/11/25 15:31	10

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	610		60	mg/Kg		07/07/25 12:00	07/07/25 18:31	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 2'

Lab Sample ID: 885-28078-22

Date Collected: 07/01/25 11:30

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/08/25 12:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 15:59	07/08/25 12:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 15:59	07/08/25 12:31	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 15:59	07/08/25 12:31	1
Toluene	ND		0.050	mg/Kg		07/03/25 15:59	07/08/25 12:31	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 15:59	07/08/25 12:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			07/03/25 15:59	07/08/25 12:31	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]	1000		96	mg/Kg		07/10/25 09:51	07/11/25 15:55	10
Motor Oil Range Organics [C28-C40]	2100		480	mg/Kg		07/10/25 09:51	07/11/25 15:55	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	0	S1 - D	62 - 134			07/10/25 09:51	07/11/25 15:55	10

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		60	mg/Kg		07/07/25 12:00	07/07/25 18:40	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 3'

Lab Sample ID: 885-28078-23

Date Collected: 07/01/25 11:35

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/07/25 17:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			07/03/25 15:59	07/07/25 17:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 15:59	07/07/25 17:35	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 15:59	07/07/25 17:35	1
Toluene	ND		0.050	mg/Kg		07/03/25 15:59	07/07/25 17:35	1
Xylenes, Total	ND		0.099	mg/Kg		07/03/25 15:59	07/07/25 17:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			07/03/25 15:59	07/07/25 17:35	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]	16		9.7	mg/Kg		07/10/25 09:51	07/14/25 13:54	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		07/10/25 09:51	07/14/25 13:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			07/10/25 09:51	07/14/25 13:54	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	440		60	mg/Kg		07/07/25 12:00	07/07/25 18:50	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 4'

Lab Sample ID: 885-28078-24

Date Collected: 07/01/25 11:45

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/07/25 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			07/03/25 15:59	07/07/25 17:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 15:59	07/07/25 17:57	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 15:59	07/07/25 17:57	1
Toluene	ND		0.049	mg/Kg		07/03/25 15:59	07/07/25 17:57	1
Xylenes, Total	ND		0.098	mg/Kg		07/03/25 15:59	07/07/25 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			07/03/25 15:59	07/07/25 17:57	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		9.0	mg/Kg		07/10/25 09:51	07/14/25 14:06	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		07/10/25 09:51	07/14/25 14:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			07/10/25 09:51	07/14/25 14:06	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	560		60	mg/Kg		07/07/25 12:00	07/07/25 19:20	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 5'

Lab Sample ID: 885-28078-25

Date Collected: 07/01/25 11:50

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/07/25 18:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			07/03/25 15:59	07/07/25 18:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 15:59	07/07/25 18:19	1
Ethylbenzene	ND		0.049	mg/Kg		07/03/25 15:59	07/07/25 18:19	1
Toluene	ND		0.049	mg/Kg		07/03/25 15:59	07/07/25 18:19	1
Xylenes, Total	ND		0.098	mg/Kg		07/03/25 15:59	07/07/25 18:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			07/03/25 15:59	07/07/25 18:19	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		8.7	mg/Kg		07/10/25 09:51	07/14/25 14:18	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		07/10/25 09:51	07/14/25 14:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			07/10/25 09:51	07/14/25 14:18	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	590		60	mg/Kg		07/07/25 12:00	07/07/25 19:30	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 6'

Lab Sample ID: 885-28078-26

Date Collected: 07/01/25 11:53

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/07/25 18:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 15:59	07/07/25 18:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/03/25 15:59	07/07/25 18:40	1
Ethylbenzene	ND		0.048	mg/Kg		07/03/25 15:59	07/07/25 18:40	1
Toluene	ND		0.048	mg/Kg		07/03/25 15:59	07/07/25 18:40	1
Xylenes, Total	ND		0.095	mg/Kg		07/03/25 15:59	07/07/25 18:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			07/03/25 15:59	07/07/25 18:40	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]	11		9.5	mg/Kg		07/10/25 09:51	07/14/25 14:30	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		07/10/25 09:51	07/14/25 14:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			07/10/25 09:51	07/14/25 14:30	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	340		61	mg/Kg		07/07/25 12:00	07/07/25 19:39	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 7'

Lab Sample ID: 885-28078-27

Date Collected: 07/01/25 12:00

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/07/25 19:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 15:59	07/07/25 19:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		07/03/25 15:59	07/07/25 19:02	1
Ethylbenzene	ND		0.047	mg/Kg		07/03/25 15:59	07/07/25 19:02	1
Toluene	ND		0.047	mg/Kg		07/03/25 15:59	07/07/25 19:02	1
Xylenes, Total	ND		0.094	mg/Kg		07/03/25 15:59	07/07/25 19:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			07/03/25 15:59	07/07/25 19:02	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		07/10/25 09:51	07/11/25 16:19	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		07/10/25 09:51	07/11/25 16:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			07/10/25 09:51	07/11/25 16:19	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		61	mg/Kg		07/07/25 12:00	07/07/25 19:49	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 8'

Lab Sample ID: 885-28078-28

Date Collected: 07/01/25 12:03

Matrix: Solid

Date Received: 07/03/25 07:45

## 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		07/03/25 15:59	07/07/25 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			07/03/25 15:59	07/07/25 19:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		07/03/25 15:59	07/07/25 19:24	1
Ethylbenzene	ND		0.047	mg/Kg		07/03/25 15:59	07/07/25 19:24	1
Toluene	ND		0.047	mg/Kg		07/03/25 15:59	07/07/25 19:24	1
Xylenes, Total	ND		0.093	mg/Kg		07/03/25 15:59	07/07/25 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			07/03/25 15:59	07/07/25 19:24	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	F1	9.2	mg/Kg		07/09/25 11:07	07/09/25 19:40	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		07/09/25 11:07	07/09/25 19:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			07/09/25 11:07	07/09/25 19:40	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	730		60	mg/Kg		07/07/25 12:00	07/07/25 19:59	20

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

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

Lab Sample ID: MB 885-29539/1-A

Matrix: Solid

Analysis Batch: 29661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29539

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		07/03/25 12:42	07/07/25 18:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			07/03/25 12:42	07/07/25 18:31	1

Lab Sample ID: LCS 885-29539/2-A

Matrix: Solid

Analysis Batch: 29661

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	29.9		mg/Kg		120	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	203		15 - 150				

Lab Sample ID: 885-28078-1 MS

Matrix: Solid

Analysis Batch: 29661

Client Sample ID: BH25-13 0'

Prep Type: Total/NA

Prep Batch: 29539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.9	27.2		mg/Kg		109	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	192		15 - 150						

Lab Sample ID: 885-28078-1 MSD

Matrix: Solid

Analysis Batch: 29661

Client Sample ID: BH25-13 0'

Prep Type: Total/NA

Prep Batch: 29539

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		24.9	25.0		mg/Kg		100	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	193		15 - 150								

Lab Sample ID: MB 885-29551/1-A

Matrix: Solid

Analysis Batch: 29611

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29551

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		07/03/25 15:59	07/07/25 14:56	1

Eurofins Albuquerque

## QC Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

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

Lab Sample ID: MB 885-29551/1-A

Matrix: Solid

Analysis Batch: 29611

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29551

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
4-Bromofluorobenzene (Surr)	102		15 - 150	07/03/25 15:59	07/07/25 14:56	1				

Lab Sample ID: LCS 885-29551/2-A

Matrix: Solid

Analysis Batch: 29611

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29551

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			25.0	27.6		mg/Kg		110	70 - 130		
Surrogate	LCS	LCS									
%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	213		15 - 150								

Lab Sample ID: 885-28078-21 MS

Matrix: Solid

Analysis Batch: 29611

Client Sample ID: BH25-16 1'

Prep Type: Total/NA

Prep Batch: 29551

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	ND		24.8	24.4		mg/Kg		98	70 - 130		
Surrogate	MS	MS									
%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	197		15 - 150								

Lab Sample ID: 885-28078-21 MSD

Matrix: Solid

Analysis Batch: 29611

Client Sample ID: BH25-16 1'

Prep Type: Total/NA

Prep Batch: 29551

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		24.8	26.9		mg/Kg		109	70 - 130	10	20
Surrogate	MSD	MSD									
%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	206		15 - 150								

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

Lab Sample ID: MB 885-29539/1-A

Matrix: Solid

Analysis Batch: 29662

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29539

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 12:42	07/07/25 18:31	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 18:31	1
Toluene	ND		0.050	mg/Kg		07/03/25 12:42	07/07/25 18:31	1
Xylenes, Total	ND		0.10	mg/Kg		07/03/25 12:42	07/07/25 18:31	1

Eurofins Albuquerque

## QC Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-29539/1-A

Matrix: Solid

Analysis Batch: 29662

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29539

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150	07/03/25 12:42	07/07/25 18:31	1

Lab Sample ID: LCS 885-29539/3-A

Matrix: Solid

Analysis Batch: 29662

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.02		mg/Kg		102	70 - 130
Ethylbenzene	1.00	0.985		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	2.00	2.10		mg/Kg		105	70 - 130
o-Xylene	1.00	1.02		mg/Kg		102	70 - 130
Toluene	1.00	1.01		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		15 - 150

Lab Sample ID: 885-28078-2 MS

Matrix: Solid

Analysis Batch: 29662

Client Sample ID: BH25-13 1'

Prep Type: Total/NA

Prep Batch: 29539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.996	0.952		mg/Kg		96	70 - 130
Ethylbenzene	ND		0.996	0.924		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	ND		1.99	1.94		mg/Kg		98	70 - 130
o-Xylene	ND		0.996	0.937		mg/Kg		94	70 - 130
Toluene	ND		0.996	0.933		mg/Kg		94	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		15 - 150

Lab Sample ID: 885-28078-2 MSD

Matrix: Solid

Analysis Batch: 29662

Client Sample ID: BH25-13 1'

Prep Type: Total/NA

Prep Batch: 29539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.997	0.949		mg/Kg		95	70 - 130	0	20
Ethylbenzene	ND		0.997	0.920		mg/Kg		92	70 - 130	0	20
m-Xylene & p-Xylene	ND		1.99	1.96		mg/Kg		98	70 - 130	1	20
o-Xylene	ND		0.997	0.926		mg/Kg		93	70 - 130	1	20
Toluene	ND		0.997	0.944		mg/Kg		95	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		15 - 150

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-29551/1-A

Matrix: Solid

Analysis Batch: 29610

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29551

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/03/25 15:59	07/07/25 14:56	1
Ethylbenzene	ND		0.050	mg/Kg		07/03/25 15:59	07/07/25 14:56	1
Toluene	ND		0.050	mg/Kg		07/03/25 15:59	07/07/25 14:56	1
Xylenes, Total	ND		0.10	mg/Kg		07/03/25 15:59	07/07/25 14:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150	07/03/25 15:59	07/07/25 14:56	1

Lab Sample ID: LCS 885-29551/3-A

Matrix: Solid

Analysis Batch: 29610

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.985		mg/Kg		99	70 - 130
Ethylbenzene	1.00	0.993		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	2.00	2.02		mg/Kg		101	70 - 130
o-Xylene	1.00	1.02		mg/Kg		102	70 - 130
Toluene	1.00	0.975		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		15 - 150

Lab Sample ID: 885-28078-22 MS

Matrix: Solid

Analysis Batch: 29689

Client Sample ID: BH25-16 2'

Prep Type: Total/NA

Prep Batch: 29551

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.996	0.892		mg/Kg		90	70 - 130
Ethylbenzene	ND		0.996	0.889		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	ND		1.99	1.78		mg/Kg		89	70 - 130
o-Xylene	ND		0.996	0.882		mg/Kg		89	70 - 130
Toluene	ND		0.996	0.857		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		15 - 150

Lab Sample ID: 885-28078-22 MSD

Matrix: Solid

Analysis Batch: 29689

Client Sample ID: BH25-16 2'

Prep Type: Total/NA

Prep Batch: 29551

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.998	0.897		mg/Kg		90	70 - 130	1	20
Ethylbenzene	ND		0.998	0.878		mg/Kg		88	70 - 130	1	20
m-Xylene & p-Xylene	ND		2.00	1.76		mg/Kg		88	70 - 130	1	20
o-Xylene	ND		0.998	0.883		mg/Kg		88	70 - 130	0	20
Toluene	ND		0.998	0.880		mg/Kg		88	70 - 130	3	20

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-28078-22 MSD

Matrix: Solid

Analysis Batch: 29689

Client Sample ID: BH25-16 2'

Prep Type: Total/NA

Prep Batch: 29551

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		15 - 150

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

Lab Sample ID: MB 885-29732/1-A

Matrix: Solid

Analysis Batch: 29757

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29732

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		07/08/25 16:00	07/09/25 18:15	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		07/08/25 16:00	07/09/25 18:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134	07/08/25 16:00	07/09/25 18:15	1

Lab Sample ID: LCS 885-29732/2-A

Matrix: Solid

Analysis Batch: 29757

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	48.5		mg/Kg		97	51 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	92		62 - 134

Lab Sample ID: 885-28078-18 MS

Matrix: Solid

Analysis Batch: 29757

Client Sample ID: BH25-15 7'

Prep Type: Total/NA

Prep Batch: 29732

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND	F1 F2	43.0	75.7	F1	mg/Kg		176	44 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
Di-n-octyl phthalate (Surr)	175	S1+	62 - 134

Lab Sample ID: 885-28078-18 MSD

Matrix: Solid

Analysis Batch: 29757

Client Sample ID: BH25-15 7'

Prep Type: Total/NA

Prep Batch: 29732

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Diesel Range Organics [C10-C28]	ND	F1 F2	43.4	40.5	F2	mg/Kg		93	44 - 136	61	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Di-n-octyl phthalate (Surr)	93		62 - 134

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

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

Lab Sample ID: MB 885-29780/1-A

Matrix: Solid

Analysis Batch: 29794

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29780

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		07/09/25 11:07	07/09/25 17:36	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		07/09/25 11:07	07/09/25 17:36	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			07/09/25 11:07	07/09/25 17:36	1

Lab Sample ID: LCS 885-29780/2-A

Matrix: Solid

Analysis Batch: 29794

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	43.5		mg/Kg		87	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	84		62 - 134				

Lab Sample ID: 885-28078-28 MS

Matrix: Solid

Analysis Batch: 29794

Client Sample ID: BH25-16 8'

Prep Type: Total/NA

Prep Batch: 29780

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND	F1	46.3	43.1		mg/Kg		93	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	78		62 - 134						

Lab Sample ID: 885-28078-28 MSD

Matrix: Solid

Analysis Batch: 29794

Client Sample ID: BH25-16 8'

Prep Type: Total/NA

Prep Batch: 29780

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	F1	47.4	43.7		mg/Kg		92	44 - 136	1	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	82		62 - 134								

Lab Sample ID: MB 885-29872/1-A

Matrix: Solid

Analysis Batch: 29972

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29872

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		07/10/25 09:51	07/11/25 15:29	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		07/10/25 09:51	07/11/25 15:29	1

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

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

Lab Sample ID: MB 885-29872/1-A

Matrix: Solid

Analysis Batch: 29972

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29872

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134	07/10/25 09:51	07/11/25 15:29	1

Lab Sample ID: LCS 885-29872/2-A

Matrix: Solid

Analysis Batch: 29972

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	45.4		mg/Kg		91	51 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	82		62 - 134

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-29584/1-A

Matrix: Solid

Analysis Batch: 29591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29584

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		07/07/25 10:24	07/07/25 11:37	1

Lab Sample ID: LCS 885-29584/2-A

Matrix: Solid

Analysis Batch: 29591

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.6		mg/Kg		97	90 - 110

Lab Sample ID: MB 885-29600/1-A

Matrix: Solid

Analysis Batch: 29591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29600

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		07/07/25 12:00	07/07/25 16:32	1

Lab Sample ID: LCS 885-29600/2-A

Matrix: Solid

Analysis Batch: 29591

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.9		mg/Kg		99	90 - 110

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## GC VOA

## Prep Batch: 29539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-1	BH25-13 0'	Total/NA	Solid	5030C	
885-28078-2	BH25-13 1'	Total/NA	Solid	5030C	
885-28078-3	BH25-13 2'	Total/NA	Solid	5030C	
885-28078-4	BH25-13 3'	Total/NA	Solid	5030C	
885-28078-5	BH25-13 4'	Total/NA	Solid	5030C	
885-28078-6	BH25-14 0'	Total/NA	Solid	5030C	
885-28078-7	BH25-14 1'	Total/NA	Solid	5030C	
885-28078-8	BH25-14 2'	Total/NA	Solid	5030C	
885-28078-9	BH25-14 3'	Total/NA	Solid	5030C	
885-28078-10	BH25-14 4'	Total/NA	Solid	5030C	
885-28078-11	BH25-15 0'	Total/NA	Solid	5030C	
885-28078-12	BH25-15 1'	Total/NA	Solid	5030C	
885-28078-13	BH25-15 2'	Total/NA	Solid	5030C	
885-28078-14	BH25-15 3'	Total/NA	Solid	5030C	
885-28078-15	BH25-15 4'	Total/NA	Solid	5030C	
885-28078-16	BH25-15 5'	Total/NA	Solid	5030C	
885-28078-17	BH25-15 6'	Total/NA	Solid	5030C	
885-28078-18	BH25-15 7'	Total/NA	Solid	5030C	
885-28078-19	BH25-15 8'	Total/NA	Solid	5030C	
885-28078-20	BH25-16 0'	Total/NA	Solid	5030C	
MB 885-29539/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-29539/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-29539/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-28078-1 MS	BH25-13 0'	Total/NA	Solid	5030C	
885-28078-1 MSD	BH25-13 0'	Total/NA	Solid	5030C	
885-28078-2 MS	BH25-13 1'	Total/NA	Solid	5030C	
885-28078-2 MSD	BH25-13 1'	Total/NA	Solid	5030C	

## Prep Batch: 29551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-21	BH25-16 1'	Total/NA	Solid	5030C	
885-28078-22	BH25-16 2'	Total/NA	Solid	5030C	
885-28078-23	BH25-16 3'	Total/NA	Solid	5030C	
885-28078-24	BH25-16 4'	Total/NA	Solid	5030C	
885-28078-25	BH25-16 5'	Total/NA	Solid	5030C	
885-28078-26	BH25-16 6'	Total/NA	Solid	5030C	
885-28078-27	BH25-16 7'	Total/NA	Solid	5030C	
885-28078-28	BH25-16 8'	Total/NA	Solid	5030C	
MB 885-29551/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-29551/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-29551/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-28078-21 MS	BH25-16 1'	Total/NA	Solid	5030C	
885-28078-21 MSD	BH25-16 1'	Total/NA	Solid	5030C	
885-28078-22 MS	BH25-16 2'	Total/NA	Solid	5030C	
885-28078-22 MSD	BH25-16 2'	Total/NA	Solid	5030C	

## Analysis Batch: 29610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-21	BH25-16 1'	Total/NA	Solid	8021B	29551
885-28078-23	BH25-16 3'	Total/NA	Solid	8021B	29551
885-28078-24	BH25-16 4'	Total/NA	Solid	8021B	29551

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## GC VOA (Continued)

## Analysis Batch: 29610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-25	BH25-16 5'	Total/NA	Solid	8021B	29551
885-28078-26	BH25-16 6'	Total/NA	Solid	8021B	29551
885-28078-27	BH25-16 7'	Total/NA	Solid	8021B	29551
885-28078-28	BH25-16 8'	Total/NA	Solid	8021B	29551
MB 885-29551/1-A	Method Blank	Total/NA	Solid	8021B	29551
LCS 885-29551/3-A	Lab Control Sample	Total/NA	Solid	8021B	29551

## Analysis Batch: 29611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-21	BH25-16 1'	Total/NA	Solid	8015M/D	29551
885-28078-23	BH25-16 3'	Total/NA	Solid	8015M/D	29551
885-28078-24	BH25-16 4'	Total/NA	Solid	8015M/D	29551
885-28078-25	BH25-16 5'	Total/NA	Solid	8015M/D	29551
885-28078-26	BH25-16 6'	Total/NA	Solid	8015M/D	29551
885-28078-27	BH25-16 7'	Total/NA	Solid	8015M/D	29551
885-28078-28	BH25-16 8'	Total/NA	Solid	8015M/D	29551
MB 885-29551/1-A	Method Blank	Total/NA	Solid	8015M/D	29551
LCS 885-29551/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	29551
885-28078-21 MS	BH25-16 1'	Total/NA	Solid	8015M/D	29551
885-28078-21 MSD	BH25-16 1'	Total/NA	Solid	8015M/D	29551

## Analysis Batch: 29661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-1	BH25-13 0'	Total/NA	Solid	8015M/D	29539
885-28078-2	BH25-13 1'	Total/NA	Solid	8015M/D	29539
885-28078-3	BH25-13 2'	Total/NA	Solid	8015M/D	29539
885-28078-4	BH25-13 3'	Total/NA	Solid	8015M/D	29539
885-28078-5	BH25-13 4'	Total/NA	Solid	8015M/D	29539
885-28078-6	BH25-14 0'	Total/NA	Solid	8015M/D	29539
885-28078-7	BH25-14 1'	Total/NA	Solid	8015M/D	29539
885-28078-8	BH25-14 2'	Total/NA	Solid	8015M/D	29539
885-28078-9	BH25-14 3'	Total/NA	Solid	8015M/D	29539
885-28078-10	BH25-14 4'	Total/NA	Solid	8015M/D	29539
885-28078-11	BH25-15 0'	Total/NA	Solid	8015M/D	29539
885-28078-12	BH25-15 1'	Total/NA	Solid	8015M/D	29539
885-28078-13	BH25-15 2'	Total/NA	Solid	8015M/D	29539
885-28078-14	BH25-15 3'	Total/NA	Solid	8015M/D	29539
885-28078-15	BH25-15 4'	Total/NA	Solid	8015M/D	29539
885-28078-16	BH25-15 5'	Total/NA	Solid	8015M/D	29539
885-28078-17	BH25-15 6'	Total/NA	Solid	8015M/D	29539
885-28078-18	BH25-15 7'	Total/NA	Solid	8015M/D	29539
885-28078-19	BH25-15 8'	Total/NA	Solid	8015M/D	29539
885-28078-20	BH25-16 0'	Total/NA	Solid	8015M/D	29539
MB 885-29539/1-A	Method Blank	Total/NA	Solid	8015M/D	29539
LCS 885-29539/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	29539
885-28078-1 MS	BH25-13 0'	Total/NA	Solid	8015M/D	29539
885-28078-1 MSD	BH25-13 0'	Total/NA	Solid	8015M/D	29539

## Analysis Batch: 29662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-1	BH25-13 0'	Total/NA	Solid	8021B	29539

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## GC VOA (Continued)

## Analysis Batch: 29662 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-2	BH25-13 1'	Total/NA	Solid	8021B	29539
885-28078-3	BH25-13 2'	Total/NA	Solid	8021B	29539
885-28078-4	BH25-13 3'	Total/NA	Solid	8021B	29539
885-28078-5	BH25-13 4'	Total/NA	Solid	8021B	29539
885-28078-6	BH25-14 0'	Total/NA	Solid	8021B	29539
885-28078-7	BH25-14 1'	Total/NA	Solid	8021B	29539
885-28078-8	BH25-14 2'	Total/NA	Solid	8021B	29539
885-28078-9	BH25-14 3'	Total/NA	Solid	8021B	29539
885-28078-10	BH25-14 4'	Total/NA	Solid	8021B	29539
885-28078-11	BH25-15 0'	Total/NA	Solid	8021B	29539
885-28078-12	BH25-15 1'	Total/NA	Solid	8021B	29539
885-28078-13	BH25-15 2'	Total/NA	Solid	8021B	29539
885-28078-14	BH25-15 3'	Total/NA	Solid	8021B	29539
885-28078-15	BH25-15 4'	Total/NA	Solid	8021B	29539
885-28078-16	BH25-15 5'	Total/NA	Solid	8021B	29539
885-28078-17	BH25-15 6'	Total/NA	Solid	8021B	29539
885-28078-18	BH25-15 7'	Total/NA	Solid	8021B	29539
885-28078-19	BH25-15 8'	Total/NA	Solid	8021B	29539
885-28078-20	BH25-16 0'	Total/NA	Solid	8021B	29539
MB 885-29539/1-A	Method Blank	Total/NA	Solid	8021B	29539
LCS 885-29539/3-A	Lab Control Sample	Total/NA	Solid	8021B	29539
885-28078-2 MS	BH25-13 1'	Total/NA	Solid	8021B	29539
885-28078-2 MSD	BH25-13 1'	Total/NA	Solid	8021B	29539

## Analysis Batch: 29688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-22	BH25-16 2'	Total/NA	Solid	8015M/D	29551

## Analysis Batch: 29689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-22	BH25-16 2'	Total/NA	Solid	8021B	29551
885-28078-22 MS	BH25-16 2'	Total/NA	Solid	8021B	29551
885-28078-22 MSD	BH25-16 2'	Total/NA	Solid	8021B	29551

## GC Semi VOA

## Prep Batch: 29732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-1	BH25-13 0'	Total/NA	Solid	SHAKE	
885-28078-2	BH25-13 1'	Total/NA	Solid	SHAKE	
885-28078-3	BH25-13 2'	Total/NA	Solid	SHAKE	
885-28078-4	BH25-13 3'	Total/NA	Solid	SHAKE	
885-28078-5	BH25-13 4'	Total/NA	Solid	SHAKE	
885-28078-6	BH25-14 0'	Total/NA	Solid	SHAKE	
885-28078-7	BH25-14 1'	Total/NA	Solid	SHAKE	
885-28078-8	BH25-14 2'	Total/NA	Solid	SHAKE	
885-28078-9	BH25-14 3'	Total/NA	Solid	SHAKE	
885-28078-10	BH25-14 4'	Total/NA	Solid	SHAKE	
885-28078-11	BH25-15 0'	Total/NA	Solid	SHAKE	
885-28078-12	BH25-15 1'	Total/NA	Solid	SHAKE	
885-28078-13	BH25-15 2'	Total/NA	Solid	SHAKE	

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## GC Semi VOA (Continued)

## Prep Batch: 29732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-14	BH25-15 3'	Total/NA	Solid	SHAKE	
885-28078-15	BH25-15 4'	Total/NA	Solid	SHAKE	
885-28078-16	BH25-15 5'	Total/NA	Solid	SHAKE	
885-28078-17	BH25-15 6'	Total/NA	Solid	SHAKE	
885-28078-18	BH25-15 7'	Total/NA	Solid	SHAKE	
MB 885-29732/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-29732/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-28078-18 MS	BH25-15 7'	Total/NA	Solid	SHAKE	
885-28078-18 MSD	BH25-15 7'	Total/NA	Solid	SHAKE	

## Analysis Batch: 29757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-1	BH25-13 0'	Total/NA	Solid	8015M/D	29732
885-28078-2	BH25-13 1'	Total/NA	Solid	8015M/D	29732
885-28078-3	BH25-13 2'	Total/NA	Solid	8015M/D	29732
885-28078-4	BH25-13 3'	Total/NA	Solid	8015M/D	29732
885-28078-5	BH25-13 4'	Total/NA	Solid	8015M/D	29732
885-28078-6	BH25-14 0'	Total/NA	Solid	8015M/D	29732
885-28078-7	BH25-14 1'	Total/NA	Solid	8015M/D	29732
885-28078-8	BH25-14 2'	Total/NA	Solid	8015M/D	29732
885-28078-9	BH25-14 3'	Total/NA	Solid	8015M/D	29732
885-28078-10	BH25-14 4'	Total/NA	Solid	8015M/D	29732
885-28078-11	BH25-15 0'	Total/NA	Solid	8015M/D	29732
885-28078-12	BH25-15 1'	Total/NA	Solid	8015M/D	29732
885-28078-13	BH25-15 2'	Total/NA	Solid	8015M/D	29732
885-28078-14	BH25-15 3'	Total/NA	Solid	8015M/D	29732
885-28078-15	BH25-15 4'	Total/NA	Solid	8015M/D	29732
885-28078-16	BH25-15 5'	Total/NA	Solid	8015M/D	29732
885-28078-17	BH25-15 6'	Total/NA	Solid	8015M/D	29732
885-28078-18	BH25-15 7'	Total/NA	Solid	8015M/D	29732
MB 885-29732/1-A	Method Blank	Total/NA	Solid	8015M/D	29732
LCS 885-29732/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	29732
885-28078-18 MS	BH25-15 7'	Total/NA	Solid	8015M/D	29732
885-28078-18 MSD	BH25-15 7'	Total/NA	Solid	8015M/D	29732

## Prep Batch: 29780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-28	BH25-16 8'	Total/NA	Solid	SHAKE	
MB 885-29780/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-29780/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-28078-28 MS	BH25-16 8'	Total/NA	Solid	SHAKE	
885-28078-28 MSD	BH25-16 8'	Total/NA	Solid	SHAKE	

## Analysis Batch: 29794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-28	BH25-16 8'	Total/NA	Solid	8015M/D	29780
MB 885-29780/1-A	Method Blank	Total/NA	Solid	8015M/D	29780
LCS 885-29780/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	29780
885-28078-28 MS	BH25-16 8'	Total/NA	Solid	8015M/D	29780
885-28078-28 MSD	BH25-16 8'	Total/NA	Solid	8015M/D	29780

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## GC Semi VOA

## Prep Batch: 29872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-19	BH25-15 8'	Total/NA	Solid	SHAKE	
885-28078-20	BH25-16 0'	Total/NA	Solid	SHAKE	
885-28078-21	BH25-16 1'	Total/NA	Solid	SHAKE	
885-28078-22	BH25-16 2'	Total/NA	Solid	SHAKE	
885-28078-23	BH25-16 3'	Total/NA	Solid	SHAKE	
885-28078-24	BH25-16 4'	Total/NA	Solid	SHAKE	
885-28078-25	BH25-16 5'	Total/NA	Solid	SHAKE	
885-28078-26	BH25-16 6'	Total/NA	Solid	SHAKE	
885-28078-27	BH25-16 7'	Total/NA	Solid	SHAKE	
MB 885-29872/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-29872/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 29965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-21	BH25-16 1'	Total/NA	Solid	8015M/D	29872
885-28078-22	BH25-16 2'	Total/NA	Solid	8015M/D	29872
885-28078-27	BH25-16 7'	Total/NA	Solid	8015M/D	29872

## Analysis Batch: 29972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-19	BH25-15 8'	Total/NA	Solid	8015M/D	29872
885-28078-20	BH25-16 0'	Total/NA	Solid	8015M/D	29872
MB 885-29872/1-A	Method Blank	Total/NA	Solid	8015M/D	29872
LCS 885-29872/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	29872

## Analysis Batch: 30041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-23	BH25-16 3'	Total/NA	Solid	8015M/D	29872
885-28078-24	BH25-16 4'	Total/NA	Solid	8015M/D	29872
885-28078-25	BH25-16 5'	Total/NA	Solid	8015M/D	29872
885-28078-26	BH25-16 6'	Total/NA	Solid	8015M/D	29872

## HPLC/IC

## Prep Batch: 29584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-1	BH25-13 0'	Total/NA	Solid	300_Prep	
885-28078-2	BH25-13 1'	Total/NA	Solid	300_Prep	
885-28078-3	BH25-13 2'	Total/NA	Solid	300_Prep	
885-28078-4	BH25-13 3'	Total/NA	Solid	300_Prep	
885-28078-5	BH25-13 4'	Total/NA	Solid	300_Prep	
885-28078-6	BH25-14 0'	Total/NA	Solid	300_Prep	
885-28078-7	BH25-14 1'	Total/NA	Solid	300_Prep	
885-28078-8	BH25-14 2'	Total/NA	Solid	300_Prep	
885-28078-9	BH25-14 3'	Total/NA	Solid	300_Prep	
885-28078-10	BH25-14 4'	Total/NA	Solid	300_Prep	
885-28078-11	BH25-15 0'	Total/NA	Solid	300_Prep	
885-28078-12	BH25-15 1'	Total/NA	Solid	300_Prep	
885-28078-13	BH25-15 2'	Total/NA	Solid	300_Prep	
885-28078-14	BH25-15 3'	Total/NA	Solid	300_Prep	
MB 885-29584/1-A	Method Blank	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

## QC Association Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

## HPLC/IC (Continued)

## Prep Batch: 29584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-29584/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

## Analysis Batch: 29591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-1	BH25-13 0'	Total/NA	Solid	300.0	29584
885-28078-2	BH25-13 1'	Total/NA	Solid	300.0	29584
885-28078-3	BH25-13 2'	Total/NA	Solid	300.0	29584
885-28078-4	BH25-13 3'	Total/NA	Solid	300.0	29584
885-28078-5	BH25-13 4'	Total/NA	Solid	300.0	29584
885-28078-6	BH25-14 0'	Total/NA	Solid	300.0	29584
885-28078-7	BH25-14 1'	Total/NA	Solid	300.0	29584
885-28078-8	BH25-14 2'	Total/NA	Solid	300.0	29584
885-28078-9	BH25-14 3'	Total/NA	Solid	300.0	29584
885-28078-10	BH25-14 4'	Total/NA	Solid	300.0	29584
885-28078-11	BH25-15 0'	Total/NA	Solid	300.0	29584
885-28078-12	BH25-15 1'	Total/NA	Solid	300.0	29584
885-28078-13	BH25-15 2'	Total/NA	Solid	300.0	29584
885-28078-14	BH25-15 3'	Total/NA	Solid	300.0	29584
885-28078-15	BH25-15 4'	Total/NA	Solid	300.0	29600
885-28078-16	BH25-15 5'	Total/NA	Solid	300.0	29600
885-28078-17	BH25-15 6'	Total/NA	Solid	300.0	29600
885-28078-18	BH25-15 7'	Total/NA	Solid	300.0	29600
885-28078-19	BH25-15 8'	Total/NA	Solid	300.0	29600
885-28078-20	BH25-16 0'	Total/NA	Solid	300.0	29600
885-28078-21	BH25-16 1'	Total/NA	Solid	300.0	29600
885-28078-22	BH25-16 2'	Total/NA	Solid	300.0	29600
885-28078-23	BH25-16 3'	Total/NA	Solid	300.0	29600
885-28078-24	BH25-16 4'	Total/NA	Solid	300.0	29600
885-28078-25	BH25-16 5'	Total/NA	Solid	300.0	29600
885-28078-26	BH25-16 6'	Total/NA	Solid	300.0	29600
885-28078-27	BH25-16 7'	Total/NA	Solid	300.0	29600
885-28078-28	BH25-16 8'	Total/NA	Solid	300.0	29600
MB 885-29584/1-A	Method Blank	Total/NA	Solid	300.0	29584
MB 885-29600/1-A	Method Blank	Total/NA	Solid	300.0	29600
LCS 885-29584/2-A	Lab Control Sample	Total/NA	Solid	300.0	29584
LCS 885-29600/2-A	Lab Control Sample	Total/NA	Solid	300.0	29600

## Prep Batch: 29600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-15	BH25-15 4'	Total/NA	Solid	300_Prep	
885-28078-16	BH25-15 5'	Total/NA	Solid	300_Prep	
885-28078-17	BH25-15 6'	Total/NA	Solid	300_Prep	
885-28078-18	BH25-15 7'	Total/NA	Solid	300_Prep	
885-28078-19	BH25-15 8'	Total/NA	Solid	300_Prep	
885-28078-20	BH25-16 0'	Total/NA	Solid	300_Prep	
885-28078-21	BH25-16 1'	Total/NA	Solid	300_Prep	
885-28078-22	BH25-16 2'	Total/NA	Solid	300_Prep	
885-28078-23	BH25-16 3'	Total/NA	Solid	300_Prep	
885-28078-24	BH25-16 4'	Total/NA	Solid	300_Prep	
885-28078-25	BH25-16 5'	Total/NA	Solid	300_Prep	
885-28078-26	BH25-16 6'	Total/NA	Solid	300_Prep	

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QC Association Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

HPLC/IC (Continued)

Prep Batch: 29600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-28078-27	BH25-16 7'	Total/NA	Solid	300_Prep	
885-28078-28	BH25-16 8'	Total/NA	Solid	300_Prep	
MB 885-29600/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-29600/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-13 0'

Lab Sample ID: 885-28078-1

Date Collected: 07/01/25 07:10

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 18:54
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 18:54
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 19:51
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 13:35

Client Sample ID: BH25-13 1'

Lab Sample ID: 885-28078-2

Date Collected: 07/01/25 07:13

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 20:05
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 20:05
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 20:14
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 14:05

Client Sample ID: BH25-13 2'

Lab Sample ID: 885-28078-3

Date Collected: 07/01/25 07:15

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 21:16
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 21:16
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 20:38
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 14:15

Client Sample ID: BH25-13 3'

Lab Sample ID: 885-28078-4

Date Collected: 07/01/25 07:17

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 21:40

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## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

**Client Sample ID: BH25-13 3'****Lab Sample ID: 885-28078-4****Date Collected: 07/01/25 07:17****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 21:40
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 21:02
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 14:25

**Client Sample ID: BH25-13 4'****Lab Sample ID: 885-28078-5****Date Collected: 07/01/25 07:22****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 22:03
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 22:03
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 21:50
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 14:34

**Client Sample ID: BH25-14 0'****Lab Sample ID: 885-28078-6****Date Collected: 07/01/25 07:30****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 22:27
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 22:27
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 22:14
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 14:44

**Client Sample ID: BH25-14 1'****Lab Sample ID: 885-28078-7****Date Collected: 07/01/25 07:32****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 22:51
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 22:51

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

**Client Sample ID: BH25-14 1'****Lab Sample ID: 885-28078-7****Date Collected: 07/01/25 07:32****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 22:38
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 14:54

**Client Sample ID: BH25-14 2'****Lab Sample ID: 885-28078-8****Date Collected: 07/01/25 07:35****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 23:14
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 23:14
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 23:02
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 15:04

**Client Sample ID: BH25-14 3'****Lab Sample ID: 885-28078-9****Date Collected: 07/01/25 07:37****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/07/25 23:38
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/07/25 23:38
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 23:27
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 15:33

**Client Sample ID: BH25-14 4'****Lab Sample ID: 885-28078-10****Date Collected: 07/01/25 07:40****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 00:02
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 00:02
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/09/25 23:51

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

**Client Sample ID: BH25-14 4'****Lab Sample ID: 885-28078-10****Date Collected: 07/01/25 07:40****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 15:43

**Client Sample ID: BH25-15 0'****Lab Sample ID: 885-28078-11****Date Collected: 07/01/25 07:47****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 00:49
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 00:49
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 00:39
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 15:53

**Client Sample ID: BH25-15 1'****Lab Sample ID: 885-28078-12****Date Collected: 07/01/25 07:51****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 01:13
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 01:13
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 01:51
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 16:03

**Client Sample ID: BH25-15 2'****Lab Sample ID: 885-28078-13****Date Collected: 07/01/25 08:02****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 01:37
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 01:37
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 02:15
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 16:13

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-15 3'

Lab Sample ID: 885-28078-14

Date Collected: 07/01/25 08:05

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 02:01
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 02:01
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 02:39
Total/NA	Prep	300_Prep			29584	MA	EET ALB	07/07/25 10:24
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 16:23

Client Sample ID: BH25-15 4'

Lab Sample ID: 885-28078-15

Date Collected: 07/01/25 08:08

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 02:25
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 02:25
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 03:27
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 16:52

Client Sample ID: BH25-15 5'

Lab Sample ID: 885-28078-16

Date Collected: 07/01/25 08:12

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 02:49
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 02:49
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 03:51
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 17:41

Client Sample ID: BH25-15 6'

Lab Sample ID: 885-28078-17

Date Collected: 07/01/25 08:21

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 03:13

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

**Client Sample ID: BH25-15 6'****Date Collected: 07/01/25 08:21****Date Received: 07/03/25 07:45****Lab Sample ID: 885-28078-17****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 03:13
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 04:39
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 17:51

**Client Sample ID: BH25-15 7'****Date Collected: 07/01/25 08:25****Date Received: 07/03/25 07:45****Lab Sample ID: 885-28078-18****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 03:37
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 03:37
Total/NA	Prep	SHAKE			29732	DH	EET ALB	07/08/25 16:00
Total/NA	Analysis	8015M/D		1	29757	EM	EET ALB	07/10/25 05:03
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 18:01

**Client Sample ID: BH25-15 8'****Date Collected: 07/01/25 08:30****Date Received: 07/03/25 07:45****Lab Sample ID: 885-28078-19****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 04:01
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 04:01
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		1	29972	MB	EET ALB	07/11/25 15:51
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 18:11

**Client Sample ID: BH25-16 0'****Date Collected: 07/01/25 11:20****Date Received: 07/03/25 07:45****Lab Sample ID: 885-28078-20****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8015M/D		1	29661	JP	EET ALB	07/08/25 04:24
Total/NA	Prep	5030C			29539	AT	EET ALB	07/03/25 12:42
Total/NA	Analysis	8021B		1	29662	JP	EET ALB	07/08/25 04:24

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## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

**Client Sample ID: BH25-16 0'****Lab Sample ID: 885-28078-20****Date Collected: 07/01/25 11:20****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		10	29972	MB	EET ALB	07/11/25 16:03
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 18:21

**Client Sample ID: BH25-16 1'****Lab Sample ID: 885-28078-21****Date Collected: 07/01/25 11:25****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29611	AT	EET ALB	07/07/25 15:18
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29610	AT	EET ALB	07/07/25 15:18
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		10	29965	EM	EET ALB	07/11/25 15:31
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 18:31

**Client Sample ID: BH25-16 2'****Lab Sample ID: 885-28078-22****Date Collected: 07/01/25 11:30****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29688	AT	EET ALB	07/08/25 12:31
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29689	AT	EET ALB	07/08/25 12:31
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		10	29965	EM	EET ALB	07/11/25 15:55
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 18:40

**Client Sample ID: BH25-16 3'****Lab Sample ID: 885-28078-23****Date Collected: 07/01/25 11:35****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29611	AT	EET ALB	07/07/25 17:35
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29610	AT	EET ALB	07/07/25 17:35
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		1	30041	EM	EET ALB	07/14/25 13:54

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

**Client Sample ID: BH25-16 3'****Lab Sample ID: 885-28078-23****Date Collected: 07/01/25 11:35****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 18:50

**Client Sample ID: BH25-16 4'****Lab Sample ID: 885-28078-24****Date Collected: 07/01/25 11:45****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29611	AT	EET ALB	07/07/25 17:57
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29610	AT	EET ALB	07/07/25 17:57
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		1	30041	EM	EET ALB	07/14/25 14:06
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 19:20

**Client Sample ID: BH25-16 5'****Lab Sample ID: 885-28078-25****Date Collected: 07/01/25 11:50****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29611	AT	EET ALB	07/07/25 18:19
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29610	AT	EET ALB	07/07/25 18:19
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		1	30041	EM	EET ALB	07/14/25 14:18
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 19:30

**Client Sample ID: BH25-16 6'****Lab Sample ID: 885-28078-26****Date Collected: 07/01/25 11:53****Matrix: Solid****Date Received: 07/03/25 07:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29611	AT	EET ALB	07/07/25 18:40
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29610	AT	EET ALB	07/07/25 18:40
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		1	30041	EM	EET ALB	07/14/25 14:30
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 19:39

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

Client Sample ID: BH25-16 7'

Lab Sample ID: 885-28078-27

Date Collected: 07/01/25 12:00

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29611	AT	EET ALB	07/07/25 19:02
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29610	AT	EET ALB	07/07/25 19:02
Total/NA	Prep	SHAKE			29872	JM	EET ALB	07/10/25 09:51
Total/NA	Analysis	8015M/D		1	29965	EM	EET ALB	07/11/25 16:19
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 19:49

Client Sample ID: BH25-16 8'

Lab Sample ID: 885-28078-28

Date Collected: 07/01/25 12:03

Matrix: Solid

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8015M/D		1	29611	AT	EET ALB	07/07/25 19:24
Total/NA	Prep	5030C			29551	AT	EET ALB	07/03/25 15:59
Total/NA	Analysis	8021B		1	29610	AT	EET ALB	07/07/25 19:24
Total/NA	Prep	SHAKE			29780	DR	EET ALB	07/09/25 11:07
Total/NA	Analysis	8015M/D		1	29794	EM	EET ALB	07/09/25 19:40
Total/NA	Prep	300_Prep			29600	MA	EET ALB	07/07/25 12:00
Total/NA	Analysis	300.0		20	29591	MA	EET ALB	07/07/25 19:59

## Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex  
Project/Site: Todd 24 B Federal #002

Job ID: 885-28078-1  
SDG: 25A-01218

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, NM0901	02-27-26
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
300.0	300_Prep	Solid	Chloride
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
Oregon	NELAP	NM100001	02-26-26







## Chain-of-Custody Record

Client: **Vertex**

---

(direct bill to Devon, work order 8999999999)

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Mailing Address:

---

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Phone #:

---

email or Fax#:

---

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

---

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other \_\_\_\_\_

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☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:	
<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush-5 day
Project Name:	
Todd 24 B Federal #002	
Project #:	
25A-01218	
Project Manager:	
Kent Stallings	
<a href="mailto:kstallings@vertexresource.com">kstallings@vertexresource.com</a>	
Sampler:	L. Pullman
On Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
# of Coolers:	1
Cooler Temp (including CF):	7-3 + 2 = 2-5



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Date	Time	Matrix	Sample Name	Cooler Temp (including CF): 7-3 + 7 = -25			BTEX / MT	TPH:8015DD	8081 Pestic	EDB (Metho	PAHs by 83	RCRA 8 Me	Cl, F, Br, N	8260 (VOA)	8270 (Semi-	Total Colifor				
				Container Type and #	Preservative Type	HEAL No.														
07.01.25	11:50	Soil	BH25-16 5'	1, 4oz jar		-25	X	X					X							
07.01.25	11:53	Soil	BH25-16 6'	1, 4oz jar		-26	X	X					X							
07.01.25	12:00	Soil	BH25-16 7'	1, 4oz jar		-27	X	X					X							
07.01.25	12:03	Soil	BH25-16 8'	1, 4oz jar		-28	X	X					X							
Date:	Time:	Relinquished by:	Received by:			Via:	Date	Time	Remarks: ATTN Jim Raley Direct bill to Devon work order 8999999999 Jim Raley cc. permian@vertexresource.com, SCarttar@vertexresource.com, kstallings@vertexresource.com, SMcCarty@vertexresource.com, and LPullman@vertexresource.com for Final Report											
7-2-25	07:00	[Signature]	[Signature]				7/2/25	200												
Date:	Time:	Relinquished by:	Received by:			Via:	Date	Time												
7/2/25	19:00	[Signature]	[Signature]				7/3/25	7:45												

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: 885-28078-1

SDG Number: 25A-01218

**Login Number: 28078****List Number: 1****Creator: Proctor, Nancy****List Source: Eurofins Albuquerque**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Sally Carttar  
Vertex  
3101 Boyd Dr  
Carlsbad, New Mexico 88220

Generated 8/26/2025 1:10:23 PM

## JOB DESCRIPTION

Todd 24B Fed 2

## JOB NUMBER

885-31126-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109



# 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  
8/26/2025 1:10:23 PM

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



Client: Vertex  
Project/Site: Todd 24B Fed 2

Laboratory Job ID: 885-31126-1

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## Definitions/Glossary

Client: Vertex

Job ID: 885-31126-1

Project/Site: Todd 24B Fed 2

## 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 24B Fed 2

Job ID: 885-31126-1

**Job ID: 885-31126-1**

**Eurofins Albuquerque**

### Job Narrative 885-31126-1

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 8/15/2025 7:40 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 0.5°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.

#### HPLC/IC

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

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BH25-16 at 9ft

Lab Sample ID: 885-31126-1

Date Collected: 08/12/25 08:00

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 03:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			08/15/25 13:06	08/21/25 03:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/15/25 13:06	08/21/25 03:35	1
Ethylbenzene	ND		0.050	mg/Kg		08/15/25 13:06	08/21/25 03:35	1
Toluene	ND		0.050	mg/Kg		08/15/25 13:06	08/21/25 03:35	1
Xylenes, Total	ND		0.099	mg/Kg		08/15/25 13:06	08/21/25 03:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			08/15/25 13:06	08/21/25 03:35	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		9.7	mg/Kg		08/21/25 10:00	08/21/25 17:22	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/21/25 10:00	08/21/25 17:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			08/21/25 10:00	08/21/25 17:22	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/18/25 12:39	08/18/25 17:40	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BH25-16 at 10ft

Lab Sample ID: 885-31126-2

Date Collected: 08/12/25 08:30

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 04:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			08/15/25 13:06	08/21/25 04:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/15/25 13:06	08/21/25 04:46	1
Ethylbenzene	ND		0.050	mg/Kg		08/15/25 13:06	08/21/25 04:46	1
Toluene	ND		0.050	mg/Kg		08/15/25 13:06	08/21/25 04:46	1
Xylenes, Total	ND		0.10	mg/Kg		08/15/25 13:06	08/21/25 04:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			08/15/25 13:06	08/21/25 04:46	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		08/21/25 10:00	08/21/25 17:35	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/21/25 10:00	08/21/25 17:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			08/21/25 10:00	08/21/25 17:35	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		59	mg/Kg		08/18/25 12:39	08/18/25 18:10	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BS25-02 at 1ft

Lab Sample ID: 885-31126-3

Date Collected: 08/12/25 09:00

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 05:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			08/15/25 13:06	08/21/25 05:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/15/25 13:06	08/21/25 05:57	1
Ethylbenzene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 05:57	1
Toluene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 05:57	1
Xylenes, Total	ND		0.096	mg/Kg		08/15/25 13:06	08/21/25 05:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			08/15/25 13:06	08/21/25 05:57	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		08/21/25 10:00	08/21/25 17:47	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/21/25 10:00	08/21/25 17:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			08/21/25 10:00	08/21/25 17:47	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		08/18/25 12:39	08/18/25 18:39	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: WS25-02 at 0-1ft

Lab Sample ID: 885-31126-4

Date Collected: 08/12/25 09:20

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 06:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			08/15/25 13:06	08/21/25 06:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/15/25 13:06	08/21/25 06:20	1
Ethylbenzene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 06:20	1
Toluene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 06:20	1
Xylenes, Total	ND		0.097	mg/Kg		08/15/25 13:06	08/21/25 06:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			08/15/25 13:06	08/21/25 06:20	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		9.5	mg/Kg		08/21/25 10:00	08/21/25 18:00	1
Motor Oil Range Organics [C28-C40]	77		47	mg/Kg		08/21/25 10:00	08/21/25 18:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			08/21/25 10:00	08/21/25 18:00	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95		60	mg/Kg		08/18/25 12:39	08/18/25 18:49	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BS25-01 at 3ft

Lab Sample ID: 885-31126-5

Date Collected: 08/12/25 12:00

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 06:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			08/15/25 13:06	08/21/25 06:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/15/25 13:06	08/21/25 06:44	1
Ethylbenzene	ND		0.047	mg/Kg		08/15/25 13:06	08/21/25 06:44	1
Toluene	ND		0.047	mg/Kg		08/15/25 13:06	08/21/25 06:44	1
Xylenes, Total	ND		0.095	mg/Kg		08/15/25 13:06	08/21/25 06:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			08/15/25 13:06	08/21/25 06:44	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		08/21/25 10:00	08/21/25 17:10	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/21/25 10:00	08/21/25 17:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			08/21/25 10:00	08/21/25 17:10	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		60	mg/Kg		08/18/25 12:39	08/18/25 18:59	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: WS25-01 at 0-3ft

Lab Sample ID: 885-31126-6

Date Collected: 08/12/25 12:30

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 07:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			08/15/25 13:06	08/21/25 07:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/15/25 13:06	08/21/25 07:07	1
Ethylbenzene	ND		0.049	mg/Kg		08/15/25 13:06	08/21/25 07:07	1
Toluene	ND		0.049	mg/Kg		08/15/25 13:06	08/21/25 07:07	1
Xylenes, Total	ND		0.098	mg/Kg		08/15/25 13:06	08/21/25 07:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			08/15/25 13:06	08/21/25 07:07	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		9.9	mg/Kg		08/22/25 10:00	08/22/25 14:30	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/22/25 10:00	08/22/25 14:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			08/22/25 10:00	08/22/25 14:30	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		60	mg/Kg		08/18/25 12:39	08/18/25 19:09	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BS25-03 at 2ft

Lab Sample ID: 885-31126-7

Date Collected: 08/12/25 13:00

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 07:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			08/15/25 13:06	08/21/25 07:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/15/25 13:06	08/21/25 07:31	1
Ethylbenzene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 07:31	1
Toluene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 07:31	1
Xylenes, Total	ND		0.096	mg/Kg		08/15/25 13:06	08/21/25 07:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			08/15/25 13:06	08/21/25 07:31	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		08/22/25 10:00	08/22/25 14:42	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/22/25 10:00	08/22/25 14:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	85		62 - 134			08/22/25 10:00	08/22/25 14:42	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		08/18/25 12:39	08/18/25 19:19	20

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## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BS25-04 at 0ft

Lab Sample ID: 885-31126-8

Date Collected: 08/12/25 13:10

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 07:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			08/15/25 13:06	08/21/25 07:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/15/25 13:06	08/21/25 07:54	1
Ethylbenzene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 07:54	1
Toluene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 07:54	1
Xylenes, Total	ND		0.096	mg/Kg		08/15/25 13:06	08/21/25 07:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			08/15/25 13:06	08/21/25 07:54	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		08/22/25 10:00	08/22/25 14:54	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/22/25 10:00	08/22/25 14:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			08/22/25 10:00	08/22/25 14:54	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		60	mg/Kg		08/18/25 12:39	08/18/25 19:28	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: WS25-03 at 0-2ft

Lab Sample ID: 885-31126-9

Date Collected: 08/12/25 14:00

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 08:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			08/15/25 13:06	08/21/25 08:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/15/25 13:06	08/21/25 08:18	1
Ethylbenzene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 08:18	1
Toluene	ND		0.048	mg/Kg		08/15/25 13:06	08/21/25 08:18	1
Xylenes, Total	ND		0.096	mg/Kg		08/15/25 13:06	08/21/25 08:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			08/15/25 13:06	08/21/25 08:18	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		08/22/25 10:00	08/22/25 14:22	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/22/25 10:00	08/22/25 14:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			08/22/25 10:00	08/22/25 14:22	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/18/25 12:39	08/18/25 19:38	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BS25-05 at 0ft

Lab Sample ID: 885-31126-10

Date Collected: 08/12/25 15:00

Matrix: Solid

Date Received: 08/15/25 07:40

## 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		08/15/25 13:06	08/21/25 08:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			08/15/25 13:06	08/21/25 08:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/15/25 13:06	08/21/25 08:41	1
Ethylbenzene	ND		0.049	mg/Kg		08/15/25 13:06	08/21/25 08:41	1
Toluene	ND		0.049	mg/Kg		08/15/25 13:06	08/21/25 08:41	1
Xylenes, Total	ND		0.097	mg/Kg		08/15/25 13:06	08/21/25 08:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			08/15/25 13:06	08/21/25 08:41	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		10	mg/Kg		08/22/25 10:00	08/22/25 14:33	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/22/25 10:00	08/22/25 14:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			08/22/25 10:00	08/22/25 14:33	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		60	mg/Kg		08/18/25 12:39	08/18/25 19:48	20

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

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

Lab Sample ID: MB 885-32449/1-A

Matrix: Solid

Analysis Batch: 32908

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32449

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/15/25 13:06	08/21/25 03:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			08/15/25 13:06	08/21/25 03:11	1

Lab Sample ID: LCS 885-32449/2-A

Matrix: Solid

Analysis Batch: 32908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32449

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	22.4		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	189		15 - 150				

Lab Sample ID: 885-31126-1 MS

Matrix: Solid

Analysis Batch: 32908

Client Sample ID: BH25-16 at 9ft

Prep Type: Total/NA

Prep Batch: 32449

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.8	21.9		mg/Kg		88	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	186		15 - 150						

Lab Sample ID: 885-31126-1 MSD

Matrix: Solid

Analysis Batch: 32908

Client Sample ID: BH25-16 at 9ft

Prep Type: Total/NA

Prep Batch: 32449

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		24.8	20.8		mg/Kg		84	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	187		15 - 150								

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

Lab Sample ID: MB 885-32449/1-A

Matrix: Solid

Analysis Batch: 32909

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32449

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/15/25 13:06	08/21/25 03:11	1
Ethylbenzene	ND		0.050	mg/Kg		08/15/25 13:06	08/21/25 03:11	1
Toluene	ND		0.050	mg/Kg		08/15/25 13:06	08/21/25 03:11	1

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-32449/1-A

Matrix: Solid

Analysis Batch: 32909

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32449

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		08/15/25 13:06	08/21/25 03:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			08/15/25 13:06	08/21/25 03:11	1

Lab Sample ID: LCS 885-32449/3-A

Matrix: Solid

Analysis Batch: 32909

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32449

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.955		mg/Kg		96	70 - 130
Ethylbenzene	1.00	0.928		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	2.00	1.93		mg/Kg		97	70 - 130
o-Xylene	1.00	0.926		mg/Kg		93	70 - 130
Toluene	1.00	0.942		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	92		15 - 150				

Lab Sample ID: 885-31126-2 MS

Matrix: Solid

Analysis Batch: 32909

Client Sample ID: BH25-16 at 10ft

Prep Type: Total/NA

Prep Batch: 32449

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.990	0.901		mg/Kg		91	70 - 130
Ethylbenzene	ND		0.990	0.870		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	ND		1.98	1.79		mg/Kg		90	70 - 130
o-Xylene	ND		0.990	0.864		mg/Kg		87	70 - 130
Toluene	ND		0.990	0.869		mg/Kg		88	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	90		15 - 150						

Lab Sample ID: 885-31126-2 MSD

Matrix: Solid

Analysis Batch: 32909

Client Sample ID: BH25-16 at 10ft

Prep Type: Total/NA

Prep Batch: 32449

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.998	0.919		mg/Kg		92	70 - 130	2	20
Ethylbenzene	ND		0.998	0.899		mg/Kg		90	70 - 130	3	20
m-Xylene & p-Xylene	ND		2.00	1.88		mg/Kg		94	70 - 130	5	20
o-Xylene	ND		0.998	0.879		mg/Kg		88	70 - 130	2	20
Toluene	ND		0.998	0.895		mg/Kg		90	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	90		15 - 150								

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

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

Lab Sample ID: MB 885-32910/1-A

Matrix: Solid

Analysis Batch: 32904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32910

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/21/25 09:59	08/21/25 13:00	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/21/25 09:59	08/21/25 13:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			08/21/25 09:59	08/21/25 13:00	1

Lab Sample ID: LCS 885-32910/2-A

Matrix: Solid

Analysis Batch: 32904

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	49.9		mg/Kg		100	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	100		62 - 134				

Lab Sample ID: MB 885-32997/1-A

Matrix: Solid

Analysis Batch: 32983

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32997

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/22/25 10:00	08/22/25 13:12	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/22/25 10:00	08/22/25 13:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			08/22/25 10:00	08/22/25 13:12	1

Lab Sample ID: LCS 885-32997/2-A

Matrix: Solid

Analysis Batch: 32983

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32997

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	50.8		mg/Kg		102	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	106		62 - 134				

Lab Sample ID: 885-31126-10 MS

Matrix: Solid

Analysis Batch: 32994

Client Sample ID: BS25-05 at 0ft

Prep Type: Total/NA

Prep Batch: 32997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		48.3	47.8		mg/Kg		99	44 - 136

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## QC Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

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

Lab Sample ID: 885-31126-10 MS

Matrix: Solid

Analysis Batch: 32994

Client Sample ID: BS25-05 at 0ft

Prep Type: Total/NA

Prep Batch: 32997

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	101		62 - 134

Lab Sample ID: 885-31126-10 MSD

Matrix: Solid

Analysis Batch: 32994

Client Sample ID: BS25-05 at 0ft

Prep Type: Total/NA

Prep Batch: 32997

	Sample	Sample	Spike	MSD	MSD				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
Diesel Range Organics [C10-C28]	ND		49.7	53.5		mg/Kg		108	44 - 136	11
										Limit
	MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits							
Di-n-octyl phthalate (Surr)	113		62 - 134							

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-32595/1-A

Matrix: Solid

Analysis Batch: 32575

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32595

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	ND		1.5	mg/Kg		08/18/25 12:39	08/18/25 15:42	1		

Lab Sample ID: LCS 885-32595/2-A

Matrix: Solid

Analysis Batch: 32575

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32595

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			15.0	14.7		mg/Kg		98	90 - 110	

Lab Sample ID: 885-31126-1 MS

Matrix: Solid

Analysis Batch: 32575

Client Sample ID: BH25-16 at 9ft

Prep Type: Total/NA

Prep Batch: 32595

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	ND		29.9	ND		mg/Kg		NC	50 - 150	

Lab Sample ID: 885-31126-1 MSD

Matrix: Solid

Analysis Batch: 32575

Client Sample ID: BH25-16 at 9ft

Prep Type: Total/NA

Prep Batch: 32595

	Sample	Sample	Spike	MSD	MSD				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
Chloride	ND		29.8	60.2		mg/Kg		NC	50 - 150	NC
										Limit

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

## GC VOA

## Prep Batch: 32449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-1	BH25-16 at 9ft	Total/NA	Solid	5030C	
885-31126-2	BH25-16 at 10ft	Total/NA	Solid	5030C	
885-31126-3	BS25-02 at 1ft	Total/NA	Solid	5030C	
885-31126-4	WS25-02 at 0-1ft	Total/NA	Solid	5030C	
885-31126-5	BS25-01 at 3ft	Total/NA	Solid	5030C	
885-31126-6	WS25-01 at 0-3ft	Total/NA	Solid	5030C	
885-31126-7	BS25-03 at 2ft	Total/NA	Solid	5030C	
885-31126-8	BS25-04 at 0ft	Total/NA	Solid	5030C	
885-31126-9	WS25-03 at 0-2ft	Total/NA	Solid	5030C	
885-31126-10	BS25-05 at 0ft	Total/NA	Solid	5030C	
MB 885-32449/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-32449/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-32449/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-31126-1 MS	BH25-16 at 9ft	Total/NA	Solid	5030C	
885-31126-1 MSD	BH25-16 at 9ft	Total/NA	Solid	5030C	
885-31126-2 MS	BH25-16 at 10ft	Total/NA	Solid	5030C	
885-31126-2 MSD	BH25-16 at 10ft	Total/NA	Solid	5030C	

## Analysis Batch: 32908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-1	BH25-16 at 9ft	Total/NA	Solid	8015M/D	32449
885-31126-2	BH25-16 at 10ft	Total/NA	Solid	8015M/D	32449
885-31126-3	BS25-02 at 1ft	Total/NA	Solid	8015M/D	32449
885-31126-4	WS25-02 at 0-1ft	Total/NA	Solid	8015M/D	32449
885-31126-5	BS25-01 at 3ft	Total/NA	Solid	8015M/D	32449
885-31126-6	WS25-01 at 0-3ft	Total/NA	Solid	8015M/D	32449
885-31126-7	BS25-03 at 2ft	Total/NA	Solid	8015M/D	32449
885-31126-8	BS25-04 at 0ft	Total/NA	Solid	8015M/D	32449
885-31126-9	WS25-03 at 0-2ft	Total/NA	Solid	8015M/D	32449
885-31126-10	BS25-05 at 0ft	Total/NA	Solid	8015M/D	32449
MB 885-32449/1-A	Method Blank	Total/NA	Solid	8015M/D	32449
LCS 885-32449/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32449
885-31126-1 MS	BH25-16 at 9ft	Total/NA	Solid	8015M/D	32449
885-31126-1 MSD	BH25-16 at 9ft	Total/NA	Solid	8015M/D	32449

## Analysis Batch: 32909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-1	BH25-16 at 9ft	Total/NA	Solid	8021B	32449
885-31126-2	BH25-16 at 10ft	Total/NA	Solid	8021B	32449
885-31126-3	BS25-02 at 1ft	Total/NA	Solid	8021B	32449
885-31126-4	WS25-02 at 0-1ft	Total/NA	Solid	8021B	32449
885-31126-5	BS25-01 at 3ft	Total/NA	Solid	8021B	32449
885-31126-6	WS25-01 at 0-3ft	Total/NA	Solid	8021B	32449
885-31126-7	BS25-03 at 2ft	Total/NA	Solid	8021B	32449
885-31126-8	BS25-04 at 0ft	Total/NA	Solid	8021B	32449
885-31126-9	WS25-03 at 0-2ft	Total/NA	Solid	8021B	32449
885-31126-10	BS25-05 at 0ft	Total/NA	Solid	8021B	32449
MB 885-32449/1-A	Method Blank	Total/NA	Solid	8021B	32449
LCS 885-32449/3-A	Lab Control Sample	Total/NA	Solid	8021B	32449
885-31126-2 MS	BH25-16 at 10ft	Total/NA	Solid	8021B	32449
885-31126-2 MSD	BH25-16 at 10ft	Total/NA	Solid	8021B	32449

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

## GC Semi VOA

## Analysis Batch: 32904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-1	BH25-16 at 9ft	Total/NA	Solid	8015M/D	32910
885-31126-2	BH25-16 at 10ft	Total/NA	Solid	8015M/D	32910
885-31126-3	BS25-02 at 1ft	Total/NA	Solid	8015M/D	32910
885-31126-4	WS25-02 at 0-1ft	Total/NA	Solid	8015M/D	32910
885-31126-5	BS25-01 at 3ft	Total/NA	Solid	8015M/D	32910
MB 885-32910/1-A	Method Blank	Total/NA	Solid	8015M/D	32910
LCS 885-32910/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32910

## Prep Batch: 32910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-1	BH25-16 at 9ft	Total/NA	Solid	SHAKE	
885-31126-2	BH25-16 at 10ft	Total/NA	Solid	SHAKE	
885-31126-3	BS25-02 at 1ft	Total/NA	Solid	SHAKE	
885-31126-4	WS25-02 at 0-1ft	Total/NA	Solid	SHAKE	
885-31126-5	BS25-01 at 3ft	Total/NA	Solid	SHAKE	
MB 885-32910/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-32910/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 32983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-6	WS25-01 at 0-3ft	Total/NA	Solid	8015M/D	32997
885-31126-7	BS25-03 at 2ft	Total/NA	Solid	8015M/D	32997
885-31126-8	BS25-04 at 0ft	Total/NA	Solid	8015M/D	32997
MB 885-32997/1-A	Method Blank	Total/NA	Solid	8015M/D	32997
LCS 885-32997/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32997

## Analysis Batch: 32994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-9	WS25-03 at 0-2ft	Total/NA	Solid	8015M/D	32997
885-31126-10	BS25-05 at 0ft	Total/NA	Solid	8015M/D	32997
885-31126-10 MS	BS25-05 at 0ft	Total/NA	Solid	8015M/D	32997
885-31126-10 MSD	BS25-05 at 0ft	Total/NA	Solid	8015M/D	32997

## Prep Batch: 32997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-6	WS25-01 at 0-3ft	Total/NA	Solid	SHAKE	
885-31126-7	BS25-03 at 2ft	Total/NA	Solid	SHAKE	
885-31126-8	BS25-04 at 0ft	Total/NA	Solid	SHAKE	
885-31126-9	WS25-03 at 0-2ft	Total/NA	Solid	SHAKE	
885-31126-10	BS25-05 at 0ft	Total/NA	Solid	SHAKE	
MB 885-32997/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-32997/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-31126-10 MS	BS25-05 at 0ft	Total/NA	Solid	SHAKE	
885-31126-10 MSD	BS25-05 at 0ft	Total/NA	Solid	SHAKE	

## HPLC/IC

## Analysis Batch: 32575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-1	BH25-16 at 9ft	Total/NA	Solid	300.0	32595
885-31126-2	BH25-16 at 10ft	Total/NA	Solid	300.0	32595

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## QC Association Summary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

## HPLC/IC (Continued)

## Analysis Batch: 32575 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-3	BS25-02 at 1ft	Total/NA	Solid	300.0	32595
885-31126-4	WS25-02 at 0-1ft	Total/NA	Solid	300.0	32595
885-31126-5	BS25-01 at 3ft	Total/NA	Solid	300.0	32595
885-31126-6	WS25-01 at 0-3ft	Total/NA	Solid	300.0	32595
885-31126-7	BS25-03 at 2ft	Total/NA	Solid	300.0	32595
885-31126-8	BS25-04 at 0ft	Total/NA	Solid	300.0	32595
885-31126-9	WS25-03 at 0-2ft	Total/NA	Solid	300.0	32595
885-31126-10	BS25-05 at 0ft	Total/NA	Solid	300.0	32595
MB 885-32595/1-A	Method Blank	Total/NA	Solid	300.0	32595
LCS 885-32595/2-A	Lab Control Sample	Total/NA	Solid	300.0	32595
885-31126-1 MS	BH25-16 at 9ft	Total/NA	Solid	300.0	32595
885-31126-1 MSD	BH25-16 at 9ft	Total/NA	Solid	300.0	32595

## Prep Batch: 32595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31126-1	BH25-16 at 9ft	Total/NA	Solid	300_Prep	
885-31126-2	BH25-16 at 10ft	Total/NA	Solid	300_Prep	
885-31126-3	BS25-02 at 1ft	Total/NA	Solid	300_Prep	
885-31126-4	WS25-02 at 0-1ft	Total/NA	Solid	300_Prep	
885-31126-5	BS25-01 at 3ft	Total/NA	Solid	300_Prep	
885-31126-6	WS25-01 at 0-3ft	Total/NA	Solid	300_Prep	
885-31126-7	BS25-03 at 2ft	Total/NA	Solid	300_Prep	
885-31126-8	BS25-04 at 0ft	Total/NA	Solid	300_Prep	
885-31126-9	WS25-03 at 0-2ft	Total/NA	Solid	300_Prep	
885-31126-10	BS25-05 at 0ft	Total/NA	Solid	300_Prep	
MB 885-32595/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-32595/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-31126-1 MS	BH25-16 at 9ft	Total/NA	Solid	300_Prep	
885-31126-1 MSD	BH25-16 at 9ft	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BH25-16 at 9ft

Lab Sample ID: 885-31126-1

Date Collected: 08/12/25 08:00

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 03:35
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 03:35
Total/NA	Prep	SHAKE			32910	BZR	EET ALB	08/21/25 10:00
Total/NA	Analysis	8015M/D		1	32904	EM	EET ALB	08/21/25 17:22
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 17:40

Client Sample ID: BH25-16 at 10ft

Lab Sample ID: 885-31126-2

Date Collected: 08/12/25 08:30

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 04:46
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 04:46
Total/NA	Prep	SHAKE			32910	BZR	EET ALB	08/21/25 10:00
Total/NA	Analysis	8015M/D		1	32904	EM	EET ALB	08/21/25 17:35
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 18:10

Client Sample ID: BS25-02 at 1ft

Lab Sample ID: 885-31126-3

Date Collected: 08/12/25 09:00

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 05:57
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 05:57
Total/NA	Prep	SHAKE			32910	BZR	EET ALB	08/21/25 10:00
Total/NA	Analysis	8015M/D		1	32904	EM	EET ALB	08/21/25 17:47
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 18:39

Client Sample ID: WS25-02 at 0-1ft

Lab Sample ID: 885-31126-4

Date Collected: 08/12/25 09:20

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 06:20

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## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: WS25-02 at 0-1ft

Lab Sample ID: 885-31126-4

Date Collected: 08/12/25 09:20

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 06:20
Total/NA	Prep	SHAKE			32910	BZR	EET ALB	08/21/25 10:00
Total/NA	Analysis	8015M/D		1	32904	EM	EET ALB	08/21/25 18:00
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 18:49

Client Sample ID: BS25-01 at 3ft

Lab Sample ID: 885-31126-5

Date Collected: 08/12/25 12:00

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 06:44
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 06:44
Total/NA	Prep	SHAKE			32910	BZR	EET ALB	08/21/25 10:00
Total/NA	Analysis	8015M/D		1	32904	EM	EET ALB	08/21/25 17:10
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 18:59

Client Sample ID: WS25-01 at 0-3ft

Lab Sample ID: 885-31126-6

Date Collected: 08/12/25 12:30

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 07:07
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 07:07
Total/NA	Prep	SHAKE			32997	EM	EET ALB	08/22/25 10:00
Total/NA	Analysis	8015M/D		1	32983	EM	EET ALB	08/22/25 14:30
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 19:09

Client Sample ID: BS25-03 at 2ft

Lab Sample ID: 885-31126-7

Date Collected: 08/12/25 13:00

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 07:31
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 07:31

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BS25-03 at 2ft

Lab Sample ID: 885-31126-7

Date Collected: 08/12/25 13:00

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			32997	EM	EET ALB	08/22/25 10:00
Total/NA	Analysis	8015M/D		1	32983	EM	EET ALB	08/22/25 14:42
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 19:19

Client Sample ID: BS25-04 at 0ft

Lab Sample ID: 885-31126-8

Date Collected: 08/12/25 13:10

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 07:54
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 07:54
Total/NA	Prep	SHAKE			32997	EM	EET ALB	08/22/25 10:00
Total/NA	Analysis	8015M/D		1	32983	EM	EET ALB	08/22/25 14:54
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 19:28

Client Sample ID: WS25-03 at 0-2ft

Lab Sample ID: 885-31126-9

Date Collected: 08/12/25 14:00

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 08:18
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 08:18
Total/NA	Prep	SHAKE			32997	EM	EET ALB	08/22/25 10:00
Total/NA	Analysis	8015M/D		1	32994	EM	EET ALB	08/22/25 14:22
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 19:38

Client Sample ID: BS25-05 at 0ft

Lab Sample ID: 885-31126-10

Date Collected: 08/12/25 15:00

Matrix: Solid

Date Received: 08/15/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8015M/D		1	32908	JP	EET ALB	08/21/25 08:41
Total/NA	Prep	5030C			32449	KLS	EET ALB	08/15/25 13:06
Total/NA	Analysis	8021B		1	32909	JP	EET ALB	08/21/25 08:41
Total/NA	Prep	SHAKE			32997	EM	EET ALB	08/22/25 10:00
Total/NA	Analysis	8015M/D		1	32994	EM	EET ALB	08/22/25 14:33

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

Client Sample ID: BS25-05 at 0ft  
Date Collected: 08/12/25 15:00  
Date Received: 08/15/25 07:40

Lab Sample ID: 885-31126-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			32595	MA	EET ALB	08/18/25 12:39
Total/NA	Analysis	300.0		20	32575	MA	EET ALB	08/18/25 19:48

Laboratory References:  
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-31126-1

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, NM0901	02-27-26
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
300.0	300_Prep	Solid	Chloride
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
Oregon	NELAP	NM100001	02-26-26

[illegible]

## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-31126-1

Login Number: 31126

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Sally Carttar  
Vertex  
3101 Boyd Dr  
Carlsbad, New Mexico 88220

Generated 10/15/2025 2:19:01 PM

## JOB DESCRIPTION

Todd 24B Fed 2

## JOB NUMBER

885-35134-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# 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



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

Generated  
10/15/2025 2:19:01 PM

Client: Vertex  
Project/Site: Todd 24B Fed 2

Laboratory Job ID: 885-35134-1

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## Definitions/Glossary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

## 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 24B Fed 2

Job ID: 885-35134-1

**Job ID: 885-35134-1**

**Eurofins Albuquerque**

### Job Narrative 885-35134-1

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 10/9/2025 7:25 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 1.8°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.

#### HPLC/IC

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

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

Client Sample ID: BS25-03 at 3ft

Lab Sample ID: 885-35134-1

Date Collected: 10/06/25 14:05

Matrix: Solid

Date Received: 10/09/25 07:25

## 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		10/09/25 11:27	10/12/25 08:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 150			10/09/25 11:27	10/12/25 08:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/09/25 11:27	10/12/25 08:14	1
Ethylbenzene	ND		0.050	mg/Kg		10/09/25 11:27	10/12/25 08:14	1
Toluene	ND		0.050	mg/Kg		10/09/25 11:27	10/12/25 08:14	1
Xylenes, Total	ND		0.099	mg/Kg		10/09/25 11:27	10/12/25 08:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 150			10/09/25 11:27	10/12/25 08:14	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		9.7	mg/Kg		10/09/25 13:55	10/09/25 22:20	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/09/25 13:55	10/09/25 22:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			10/09/25 13:55	10/09/25 22:20	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		51	mg/Kg		10/13/25 09:10	10/13/25 15:12	10

Eurofins Albuquerque



## Client Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

Client Sample ID: WS25-03 at 3ft

Lab Sample ID: 885-35134-2

Date Collected: 10/06/25 14:10

Matrix: Solid

Date Received: 10/09/25 07:25

## 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		10/09/25 11:27	10/12/25 09:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 150			10/09/25 11:27	10/12/25 09:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/09/25 11:27	10/12/25 09:25	1
Ethylbenzene	ND		0.047	mg/Kg		10/09/25 11:27	10/12/25 09:25	1
Toluene	ND		0.047	mg/Kg		10/09/25 11:27	10/12/25 09:25	1
Xylenes, Total	ND		0.094	mg/Kg		10/09/25 11:27	10/12/25 09:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 150			10/09/25 11:27	10/12/25 09:25	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		9.7	mg/Kg		10/09/25 13:55	10/09/25 22:32	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/09/25 13:55	10/09/25 22:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			10/09/25 13:55	10/09/25 22:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		49	mg/Kg		10/13/25 09:10	10/13/25 15:26	10

Eurofins Albuquerque

## QC Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

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

Lab Sample ID: MB 885-36408/1-A

Matrix: Solid

Analysis Batch: 36530

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36408

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		10/09/25 11:27	10/12/25 07:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			10/09/25 11:27	10/12/25 07:50	1

Lab Sample ID: LCS 885-36408/2-A

Matrix: Solid

Analysis Batch: 36530

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36408

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	25.9		mg/Kg		104	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	214		15 - 150				

Lab Sample ID: 885-35134-1 MS

Matrix: Solid

Analysis Batch: 36530

Client Sample ID: BS25-03 at 3ft

Prep Type: Total/NA

Prep Batch: 36408

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.7	26.9		mg/Kg		109	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	213		15 - 150						

Lab Sample ID: 885-35134-1 MSD

Matrix: Solid

Analysis Batch: 36530

Client Sample ID: BS25-03 at 3ft

Prep Type: Total/NA

Prep Batch: 36408

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		25.0	26.7		mg/Kg		107	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	215		15 - 150								

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

Lab Sample ID: MB 885-36408/1-A

Matrix: Solid

Analysis Batch: 36531

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36408

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/09/25 11:27	10/12/25 07:50	1
Ethylbenzene	ND		0.050	mg/Kg		10/09/25 11:27	10/12/25 07:50	1
Toluene	ND		0.050	mg/Kg		10/09/25 11:27	10/12/25 07:50	1

Eurofins Albuquerque

## QC Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-36408/1-A

Matrix: Solid

Analysis Batch: 36531

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36408

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		10/09/25 11:27	10/12/25 07:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			10/09/25 11:27	10/12/25 07:50	1

Lab Sample ID: LCS 885-36408/3-A

Matrix: Solid

Analysis Batch: 36531

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36408

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.04		mg/Kg		104	70 - 130
Ethylbenzene	1.00	1.04		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	2.00	2.11		mg/Kg		105	70 - 130
o-Xylene	1.00	1.03		mg/Kg		103	70 - 130
Toluene	1.00	1.04		mg/Kg		104	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	108		15 - 150				

Lab Sample ID: 885-35134-2 MS

Matrix: Solid

Analysis Batch: 36531

Client Sample ID: WS25-03 at 3ft

Prep Type: Total/NA

Prep Batch: 36408

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.944	0.969		mg/Kg		103	70 - 130
Ethylbenzene	ND		0.944	0.992		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	ND		1.89	1.97		mg/Kg		104	70 - 130
o-Xylene	ND		0.944	0.966		mg/Kg		102	70 - 130
Toluene	ND		0.944	0.978		mg/Kg		104	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		15 - 150						

Lab Sample ID: 885-35134-2 MSD

Matrix: Solid

Analysis Batch: 36531

Client Sample ID: WS25-03 at 3ft

Prep Type: Total/NA

Prep Batch: 36408

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.948	0.999		mg/Kg		105	70 - 130	3	20
Ethylbenzene	ND		0.948	1.07		mg/Kg		113	70 - 130	7	20
m-Xylene & p-Xylene	ND		1.90	2.12		mg/Kg		112	70 - 130	8	20
o-Xylene	ND		0.948	1.05		mg/Kg		111	70 - 130	9	20
Toluene	ND		0.948	1.02		mg/Kg		108	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	109		15 - 150								

Eurofins Albuquerque

## QC Sample Results

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

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

Lab Sample ID: MB 885-36418/1-A

Matrix: Solid

Analysis Batch: 36385

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36418

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		10/09/25 13:54	10/09/25 18:42	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/09/25 13:54	10/09/25 18:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			10/09/25 13:54	10/09/25 18:42	1

Lab Sample ID: LCS 885-36418/2-A

Matrix: Solid

Analysis Batch: 36385

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	44.4		mg/Kg		89	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	85		62 - 134				

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-36545/1-A

Matrix: Solid

Analysis Batch: 36554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36545

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		10/13/25 09:10	10/13/25 11:20	1
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Chloride	49.8		47.1	mg/Kg		95	90 - 110	

Eurofins Albuquerque

## QC Association Summary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

## GC VOA

## Prep Batch: 36408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-35134-1	BS25-03 at 3ft	Total/NA	Solid	5030C	
885-35134-2	WS25-03 at 3ft	Total/NA	Solid	5030C	
MB 885-36408/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-36408/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-36408/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-35134-1 MS	BS25-03 at 3ft	Total/NA	Solid	5030C	
885-35134-1 MSD	BS25-03 at 3ft	Total/NA	Solid	5030C	
885-35134-2 MS	WS25-03 at 3ft	Total/NA	Solid	5030C	
885-35134-2 MSD	WS25-03 at 3ft	Total/NA	Solid	5030C	

## Analysis Batch: 36530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-35134-1	BS25-03 at 3ft	Total/NA	Solid	8015M/D	36408
885-35134-2	WS25-03 at 3ft	Total/NA	Solid	8015M/D	36408
MB 885-36408/1-A	Method Blank	Total/NA	Solid	8015M/D	36408
LCS 885-36408/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	36408
885-35134-1 MS	BS25-03 at 3ft	Total/NA	Solid	8015M/D	36408
885-35134-1 MSD	BS25-03 at 3ft	Total/NA	Solid	8015M/D	36408

## Analysis Batch: 36531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-35134-1	BS25-03 at 3ft	Total/NA	Solid	8021B	36408
885-35134-2	WS25-03 at 3ft	Total/NA	Solid	8021B	36408
MB 885-36408/1-A	Method Blank	Total/NA	Solid	8021B	36408
LCS 885-36408/3-A	Lab Control Sample	Total/NA	Solid	8021B	36408
885-35134-2 MS	WS25-03 at 3ft	Total/NA	Solid	8021B	36408
885-35134-2 MSD	WS25-03 at 3ft	Total/NA	Solid	8021B	36408

## GC Semi VOA

## Analysis Batch: 36385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-35134-1	BS25-03 at 3ft	Total/NA	Solid	8015M/D	36418
885-35134-2	WS25-03 at 3ft	Total/NA	Solid	8015M/D	36418
MB 885-36418/1-A	Method Blank	Total/NA	Solid	8015M/D	36418
LCS 885-36418/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	36418

## Prep Batch: 36418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-35134-1	BS25-03 at 3ft	Total/NA	Solid	SHAKE	
885-35134-2	WS25-03 at 3ft	Total/NA	Solid	SHAKE	
MB 885-36418/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-36418/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## HPLC/IC

## Prep Batch: 36545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-35134-1	BS25-03 at 3ft	Total/NA	Solid	300_Prep	
885-35134-2	WS25-03 at 3ft	Total/NA	Solid	300_Prep	
MB 885-36545/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-36545/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

HPLC/IC

Analysis Batch: 36554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-35134-1	BS25-03 at 3ft	Total/NA	Solid	300.0	36545
885-35134-2	WS25-03 at 3ft	Total/NA	Solid	300.0	36545
MB 885-36545/1-A	Method Blank	Total/NA	Solid	300.0	36545
LCS 885-36545/2-A	Lab Control Sample	Total/NA	Solid	300.0	36545



Lab Chronicle

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

**Client Sample ID: BS25-03 at 3ft**  
**Date Collected: 10/06/25 14:05**  
**Date Received: 10/09/25 07:25**

**Lab Sample ID: 885-35134-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			36408	KLS	EET ALB	10/09/25 11:27
Total/NA	Analysis	8015M/D		1	36530	RA	EET ALB	10/12/25 08:14
Total/NA	Prep	5030C			36408	KLS	EET ALB	10/09/25 11:27
Total/NA	Analysis	8021B		1	36531	RA	EET ALB	10/12/25 08:14
Total/NA	Prep	SHAKE			36418	BZR	EET ALB	10/09/25 13:55
Total/NA	Analysis	8015M/D		1	36385	EM	EET ALB	10/09/25 22:20
Total/NA	Prep	300_Prep			36545	MA	EET ALB	10/13/25 09:10
Total/NA	Analysis	300.0		10	36554	MA	EET ALB	10/13/25 15:12

**Client Sample ID: WS25-03 at 3ft**  
**Date Collected: 10/06/25 14:10**  
**Date Received: 10/09/25 07:25**

**Lab Sample ID: 885-35134-2**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			36408	KLS	EET ALB	10/09/25 11:27
Total/NA	Analysis	8015M/D		1	36530	RA	EET ALB	10/12/25 09:25
Total/NA	Prep	5030C			36408	KLS	EET ALB	10/09/25 11:27
Total/NA	Analysis	8021B		1	36531	RA	EET ALB	10/12/25 09:25
Total/NA	Prep	SHAKE			36418	BZR	EET ALB	10/09/25 13:55
Total/NA	Analysis	8015M/D		1	36385	EM	EET ALB	10/09/25 22:32
Total/NA	Prep	300_Prep			36545	MA	EET ALB	10/13/25 09:10
Total/NA	Analysis	300.0		10	36554	MA	EET ALB	10/13/25 15:26

**Laboratory References:**  
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex  
Project/Site: Todd 24B Fed 2

Job ID: 885-35134-1

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, NM0901	02-27-26
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
300.0	300_Prep	Solid	Chloride
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
Oregon	NELAP	NM100001	02-26-26



## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-35134-1

Login Number: 35134

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (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 521241

**QUESTIONS**

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 521241
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAB1516753239
Incident Name	NAB1516753239 TODD 24 B FEDERAL #002 @ 30-015-27691
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-27691] TODD 24 B FEDERAL #002

**Location of Release Source**

Please answer all the questions in this group.

Site Name	TODD 24 B FEDERAL #002
Date Release Discovered	02/23/2015
Surface Owner	Federal

**Incident Details**

Please answer all the questions in this group.

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

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Pump   Produced Water   Released: 80 BBL   Recovered: 75 BBL   Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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**Oil Conservation Division**  
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QUESTIONS, Page 2

Action 521241

**QUESTIONS (continued)**

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 521241
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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: 10/29/2025
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QUESTIONS, Page 3

Action 521241

**QUESTIONS (continued)**

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 521241
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Site Characterization</b>	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (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
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
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 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (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	No

<b>Remediation Plan</b>	
<i>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.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>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.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	60
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	307
GRO+DRO (EPA SW-846 Method 8015M)	19
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>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>	
On what estimated date will the remediation commence	05/09/2025
On what date will (or did) the final sampling or liner inspection occur	07/14/2025
On what date will (or was) the remediation complete(d)	07/14/2025
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	87
What is the estimated volume (in cubic yards) that will be remediated	20
<i>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.</i>	
<i>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.</i>	

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QUESTIONS, Page 4

Action 521241

**QUESTIONS (continued)**

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 521241
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>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.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	fJEG1635837366 OWL LANDFILL JAL
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	No
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>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>	
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: 10/29/2025
<i>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.</i>	

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QUESTIONS, Page 5

Action 521241

QUESTIONS (continued)

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 521241
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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

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QUESTIONS, Page 6

Action 521241

**QUESTIONS (continued)**

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID: 10155
	Action Number: 521241
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	511708
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/06/2025
What was the (estimated) number of samples that were to be gathered	2
What was the sampling surface area in square feet	200

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
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	189
What was the total volume (cubic yards) remediated	19
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	189
What was the total volume (in cubic yards) reclaimed	19
Summarize any additional remediation activities not included by answers (above)	As detailed in attached report
<i>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>	
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: 10/29/2025

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Action 521241

QUESTIONS (continued)

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	Action Number: 521241
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 521241

CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
scwells	None	11/13/2025