



Incident Number: nAPP2233339274

## Environmental Site Remediation Work Plan

East Pecos Pipeline Spill

Section 27, Township 26 South, Range 29 East

Facility: fAPP2122957910

County: Eddy

Vertex File Number: 22E-03982

**Prepared for:**

Devon Energy Production Company, LP

**Prepared by:**

Vertex Resource Services Inc.

**Date:**

December 2024

Devon Energy Production Company, LP  
East Pecos Pipeline Spill

Environmental Site Remediation Work Plan  
December 2024

Environmental Site Remediation Work Plan  
East Pecos Pipeline Spill  
Section 27, Township 26 South, Range 29 East  
Facility: fAPP2122957910  
County: Eddy

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*December 3, 2024*

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## 1.0 Introduction and Summary

Devon Energy Production Company, LP (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Work Plan for a produced water and crude oil release that occurred on November 17, 2022, in a pasture since designated East Pecos Pipeline Spill (hereafter referred to as the "site"). Devon submitted an initial C-141 Release Notification (Appendix A) to New Mexico Oil Conservation Division (NMOCD) on November 17, 2022. Incident ID number napp2233339274 was assigned to this incident.

The objectives of the environmental remediation work plan are to identify exceedances of total petroleum hydrocarbons (TPH) and chloride found during the site assessment/characterization activity and to propose appropriate remediation techniques to address these areas. The following list is a summary of the proposed actions and requests.

- Remediate the soil portion of the release under 19.15.29 *New Mexico Administrative Code* (NMAC) as presented in Section 6.1 of this report
- Dig-haul-dispose impacted soils to the extent practicable, presented in Section 6.1 of this report
- Request Variance for chloride values to be constrained by safe, practicable depth of approximately 20 feet below ground surface (bgs), as presented in Section 6.1 of this report
- Request Variance for the project to remain under the medium karst closure criteria for chloride values as presented in Section 6.1 of this report
- Respectfully request variance regarding confirmation sampling from 200 square ft to 500 square ft due to the hazardous nature of the project, depth of excavation, and safety concerns
- Request alternative closure option to install a geosynthetic clay liner (GCL) or GCL encapsulation at 6 feet bgs to restrict atmospheric water from rain events forcing downward migration of in-situ impacted soil and to inhibit upward weeping of chlorides into the root vegetative zone as presented in Section 6.1 of this report
- Perform an Electromagnetic (EM)31 Survey to direct excavation and groundwater monitoring well placement, requested in Section 6.2
- Further delineation of groundwater impacts with additional monitoring wells simultaneous with soil remediation
- Groundwater impacts above New Mexico Water Quality Control Commission (NMWQCC) Standards (20.6.2 NMAC) will require a Stage I Abatement Plan under 19.15.30 NMAC. The Abatement Plan will follow once groundwater impacts are fully delineated

## 2.0 Incident Description

The release occurred on November 17, 2022, due to a failed poly weld on an aboveground 10-inch produced water transfer line. The incident was reported on November 17, 2022, and involved the release of an estimated 4,425 barrels (bbl) of produced water and 100 bbl of crude oil into the pasture. No free fluid was recovered or removed during the initial clean-up. Additional details relevant to the release are presented in the C-141 Report (Appendix A).

## 3.0 Site Characteristics

The site is located approximately 15 miles south-southeast of Malaga, New Mexico. The legal location for the site is Section 27, Township 26 South and Range 29 East in Eddy County, New Mexico. The release area is located on private

property. An aerial photograph and site schematic are presented on Figure 1.

The location is in pasture along and adjacent to a pipeline right of way. The following sections specifically describe the release area resulting from the East Pecos Pipeline Spill on or in proximity to the right-of-way (Figure 1).

*The Geological Map of New Mexico* (New Mexico Bureau of Geology and Mineral Resources, 2024) indicates the site's surface geology primarily comprises Pqm - Quartermaster Formation (Upper Permian), red sandstone and siltstone (New Mexico Bureau of Geology and Mineral Resources, 2024). The karst geology potential for the site is medium (United States Department of the Interior, Bureau of Land Management, 2018). The surrounding landscape is associated with ridges and fans 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 gravelly loams and gravelly fine sandy loams with cementation below ground surface and high runoff potential (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grasses interspersed with shrubs (United States Department of Agriculture, Natural Resources Conservation Service, 2024).

#### 4.0 Closure Criteria Determination

The nearest active well to the site is located 0.26 miles to the northwest with consumptive use identified by the New Mexico Office of the State Engineer (NMOSE) as providing water for the secondary recovery of oil. 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 0.21 miles southeast of the site (United States Fish and Wildlife Service, 2024). 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.

The nearest depth to groundwater reference to the site currently documented with the NMOSE is an exploratory borehole advanced 0.30 miles to the northeast on July 25, 2022. The static water surface at the borehole was measured as 67 feet bgs (New Mexico Office of the State Engineer, 2024). In September 2024, seven monitoring wells were drilled in immediate proximity to the site, each with measured depth to groundwater greater than 51 feet bgs. The bore logs for the monitoring wells are presented in Appendix B. Information pertaining to the depth to groundwater determination is included in Appendix B and closure criteria documentation is included in Appendix E.

**Devon Energy Production Company, LP**  
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<b>Table 1. Closure Criteria Determination</b>			
<b>Site Name: East Pecos Pipeline Spill</b>			
<b>Spill Coordinates: 32.016373,-103.966326</b>		<b>X: 597621</b>	<b>Y: 3542717</b>
<b>Site Specific Conditions</b>		<b>Value</b>	<b>Unit</b>
1	Depth to Groundwater (nearest reference)	67	feet
	Distance between release and nearest DTGW reference	1,581	feet
		0.30	miles
	Date of nearest DTGW reference measurement	July 25, 2022	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	1,116	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	7,524	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	17,855	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	2,536	feet
	ii) Within 1000 feet of any fresh water well or spring	1,358	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	4,291	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	67,780	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest High Karst	7,971	feet
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	3,947	feet
11	Soil Type	Gravelly loam, cemented	
12	Ecological Classification	Shallow	
13	Geology	Red sandstone and siltstone	
	<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.

Table 2. Closure Criteria for Soils Impacted by a Release		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
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 Site Characterization

5.1 Soil Characterization

On November 19, 2022, Vertex personnel met with Kelley Oilfield Services at East Pecos to map the release and determine boundaries for the initial remediation. Kelley Oilfield Services scraped the surface of the release area to at least 6 inches bgs to remove the residual crude oil and produced water for disposal off-site. The contaminated material was stockpiled on a plastic liner within the release area until hauled for disposal. Initial cleanup response was completed and all scraped material removed from site on January 4, 2023. Areas of environmental concern identified included the pasture in the vicinity of the release point, and the pasture east and south of the release point.

Vertex personnel began horizontal delineation of the release on December 21, 2022, and continued through February 22, 2023. Vertical delineation was attempted with a Geoprobe GH42 on December 28 and 29, 2022, but the equipment was not able to advance to depths sufficient to collect clean soil. On January 23, 2023, HCI Drilling used an air-rotary drill to advance boreholes BH22-108, BH22-109, BH22-110, BH22-111, and BH22-112 to 40 feet bgs. Field screening and laboratory results for the 40-foot samples exceeded NMOCD strictest criteria for chloride.

Talon/LPE advanced boreholes BH22-138, BH22-139, BH22-140, and BH22-141 with a sonic drill rig between March 15 and 17, 2023. BH22-138 was advanced to 50 feet bgs and the samples collected between 20 and 45 feet bgs were dry. The sample collected at 50 feet bgs was wet and field screening and laboratory results exceeded NMOCD strictest criteria for chloride. Boreholes BH22-139 and BH22-140 were advanced to 45 feet bgs through dry soil, and the samples collected at 45 feet exceeded NMOCD strictest criteria for chloride. Vertical delineation was achieved in BH22-141, which was advanced to 79 feet bgs through dry soil, and samples collected between 40 and 79 feet bgs were below NMOCD strictest criteria for TPH and chloride. The release area and all borehole locations to date are presented in Figure 1. The vertical delineation borehole locations are presented in Figure 2. Characterization field screening and laboratory results are presented in Table 3. Daily field reports and laboratory data reports are presented in Appendix C and Appendix F, respectively.

## 5.2 Groundwater Characterization

Seven exploratory boreholes were drilled by Vertex and Atkins Engineering using a hollow stem auger rig between August 5 and August 14, 2024, to characterize the groundwater at the site (Appendix D). Boreholes MW24-A, MW24-B, MW24-D, MW24-E, and MW24-G were drilled outside of the release for horizontal delineation, while MW24-C and MW24-F were drilled inside the release area. Six of the boreholes were successfully advanced to approximately 10 feet below the water surface and developed into monitoring wells MW24-A, MW24-B, MW24-D, MW24-E, MW24-F, and MW24-G. Borehole MW24-C was drilled to approximately 97 feet bgs and yielded approximately 1 foot of water above terminal depth after 17 days to reach equilibrium. Borehole MW24-C was plugged and abandoned according to the WR-08 permit, Well Plugging Plan of Operations, filed with NMOSE. Drilling locations are presented on Figure 3. Field screening and laboratory results for depth samples collected throughout drilling are shown in Table 4. Bore logs with water depths are included in Appendix B.

On August 31 and September 1, 2024, water samples were collected per EPA LSASDPROC-301-R6 from monitoring wells MW24-A, MW24-B, MW24-D, MW24-E, MW24-F, and MW24-G. Water samples were tested for BTEX, TPH, and chloride. Laboratory results for water samples from MW24-D, MW24-F, and MW24-G exceeded 10,000 mg/L chloride with the highest concentration of 59,000 mg/L from well MW24-F. Laboratory results for the water samples are shown in Table 5.

## 6.0 Remedial Activities

### 6.1 Soil Remediation

The release area has been fully delineated horizontally and the soil profile has been characterized vertically from ground surface to water surface. Accessible areas identified with contaminant concentrations above closure criteria will be remediated through excavation. Laboratory results from the site assessment/characterization have been referenced to estimate both the vertical and horizontal limits of the impacts and the volume of soil to be removed. Soil will be excavated to the extents of the known contamination or in 2 feet increments, whichever is less.

Upper 4-feet is to be excavated to Closure Criteria per 19.15.29:

- Chloride < 600 mg/kg
- TPH (GRO + DRO + MRO) < 100 mg/kg
- BTEX < 50 mg/kg
- Benzene < 10 mg/kg

Below 4-feet is to be excavated to Closure Criteria per 19.15.29:

- Chloride < 10,000 mg/kg
- TPH (GRO + DRO + MRO) < 2,500 mg/kg
- TPH (GRO + DRO) < 1,000 mg/kg
- BTEX < 50 mg/kg
- Benzene < 10 mg/kg

Field screening will be employed to confirm removal of contaminated soil below the applicable closure criteria. Field screening will consist of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dextil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and titration of silver nitrate and/or an electroconductivity meter (chloride). Contaminated soil will be stored on a 30mil liner prior to disposal at an approved facility. Once excavation is complete, confirmation samples will be collected and laboratory analysis completed to confirm closure criteria guidelines are met. Excavations will be backfilled with clean soil, sampled and sourced locally.

The surface pipeline may need to be moved north or supported throughout excavation. A hydrovac truck will be utilized to remove contaminated soil near underground pipelines running east-west across the north portion of the excavation. Shoring and active removal and replacement of soil by section may be required to support the pipeline while the excavation is underway. Heavy equipment will be used to complete excavation and field screening will be utilized to find the horizontal and vertical extents of the release area. The proposed excavation schematic is shown in Figure 4.

Vertex requests a variance for the closure criteria of the site to adhere to depth to groundwater standard of 51 to 100 feet bgs despite the recent policy change for incidents occurring within medium karst regions to be the most stringent closure criteria. Exploratory boreholes and monitoring wells advanced within and around the release area did not indicate the presence of karst during drilling activities.

Vertex and Devon respectfully request the above chloride closure criteria up to 20 feet bgs or until a technically feasible depth is reached. Excavation to approximately 20 feet bgs is technically feasible based on locally sourced and available equipment while maintaining safety standards.

Excavation to depths exceeding 20 feet bgs decreases the margin of safety for workers on-site as engineering controls such as shoring and benching constitute an unnecessary health and safety risk. Additionally, after more than two 4 ft soil benches, the limiting factor becomes the available equipment. The maximum dig depth of a commonly available, standard excavator is approximately 18-feet. We seek to continue to excavate bases until Closure Criteria between 51 and 100 feet is met, or to a maximum depth that is technically feasible, whichever comes first.

To control the source, which in this case is impacted soil migrating vertically and laterally to underlying groundwater, Vertex proposes the installation of a GCL over the base of the excavation to 6 feet bgs. The GCL will minimize migration of the remaining constituent salts by reducing the vertical movement of water from immediately above the remediation area.

Soil encapsulation via GCL is proposed to be installed per American Petroleum Institute (API), *Publication 4758: Strategies for Addressing Salt Impacts of Produced Water Releases to Plants, Soil, and Groundwater*. Procedurally, after excavation confirmation samples will be collected and laboratory-confirmed regarding TPH, BTEX and Chloride. Upon approval, clean backfilled material will be built to 6 ft bgs and mounded to drain away surface water from the original impacted area and away from the liner. A GCL will cap the backfilled excavation below. Layers of material above 6 ft bgs will be constructed to create a preferential flow path, following the mound away from the liner encapsulating the material below. A layer of clean backfill will top the system at 4 ft bgs to surface allowing for revegetation and natural reclamation to occur.



A variance is requested to install a GCL at excavation bases where chloride is > 600 mg/kg and at an excavation depth within the upper 6-feet. Prior to liner installation, NMOCD will be consulted to evaluate constituents of concern concentrations at excavation base depths. Furthermore, the GCL will be placed under existing flowlines to maintain liner integrity during pipeline maintenance.

The initial proposed excavation base area will be approximately 217,978 square feet (5 acres). Additionally, Vertex and Devon respectfully request a variance for confirmation sampling due to the large area of the excavation base. This variance request will consist of five-point composite samples for every 500 square feet of excavation base. Excavation wall samples will utilize five-point composite samples representative of no more than 500 square feet. Additional discrete grab samples will be collected from areas with discoloration and analyzed for chloride (EPA 300.0), benzene, toluene, ethylbenzene, and xylenes (EPA 8021B), and total petroleum hydrocarbons (EPA 8015D) depending on field screening results. Excavations will be backfilled with clean soil sourced locally.

Confirmatory samples will be collected from the excavation as per NMOCD guidance and pending variance permissions and submitted for laboratory analysis of all applicable parameters. The estimated volume to be excavated is approximately 93,600 cubic yards.

## 6.2 Groundwater Remediation and Abatement

The first six monitoring wells accomplished initial characterization of groundwater at the site. The results identified the need for further groundwater investigation. For more complete characterization, potential locations for additional monitoring wells will follow a planned EM31 geophysical study to best locate the monitoring wells to capture the most information. Once characterization of groundwater at the site is complete, results will be compared to NMWQCC standards (NMAC 20.6.2) and will then be used to determine whether conditions require a Stage 1 Abatement plan per NMAC 19.15.30. The proposed additions to the subsurface groundwater investigation are outlined below. Procedures will follow the initial six wells and are described below.

It is expected at least two additional groundwater monitoring wells will complete the groundwater site characterization. These will assess groundwater quality conditions within the upper water table up-gradient and down-gradient of the release area. The proposed monitoring well locations and/or proposed borings will be installed using a hollow stem auger (HSA) rig. The boreholes shall be a minimum of 4" greater than the 2.375" outside diameter of the well materials. Each borehole will be advanced to a depth of approximately 10 ft below the water table and Vertex will maintain a detailed description of the lithology encountered while drilling. Based on the previous boreholes advanced at the site, and available well logs within the area, the anticipated depth to the water table is between 60 and 70 ft bgs where the exact depth will be determined in the field by a geo-professional.

Each groundwater monitoring well will be completed with a 2-inch diameter polyvinyl chloride (PVC) standpipe threaded to a 2-inch diameter machine slotted (0.010 in slot or coarser) PVC well screen. Given the uncertainty of seasonal variation in groundwater levels at the site, or potential drawdown effects from other activities in the area, a minimum screen length of 15 ft is suggested for each monitoring well. The annulus around and approximately 2 ft above the screens will be backfilled with a filter pack. A primary seal consisting of bentonite pellets will be placed approximately 2 ft above the filter pack followed by bentonite grout slurry to near surface. A steel vault measuring

4 in x 4 in x 5 ft and equipped with a lockable lid will be installed to protect the aboveground portion of PVC standpipe (stick-up). On the surface, a 5,000-psi Quickrete pad will surround the monitoring well. The pad will slope away from the vault, and the vault will be filled with clean silica to stabilize the riser. A weep hole will be drilled into the base of the vault above the concrete and the standpipe will be capped. Four bollards will be placed around the monitoring well to protect it from operations on-site.

Each monitoring well will be surveyed for geographical position and elevation relative to sea level. A registered New Mexico Land surveyor will survey the top of casing elevations referenced to US Geological Survey (USGS) datum, and state plane coordinates of the monitoring wells. Vertical measurement will be to the 0.01 foot and horizontal measurements to the 0.1 foot. Coordinates will be reported in Latitude and Longitude NAD 83 Decimal Degrees

Prior to collection of groundwater samples, each groundwater monitoring well will be developed to remove built-up sediment and drilling debris from within the screened interval and filter pack. Well development allows for collection of representative formation groundwater samples and establishes natural hydraulic flow to the well. The monitoring wells will be developed by bailing water and/or surging until field parameters (temperature, pH, and specific conductance) stabilize.

#### **6.2.1 Groundwater Monitoring and Sampling**

The groundwater monitoring wells will be allowed to recover to static levels prior to sample collection for 7 to 10 days. The static water level from each groundwater monitoring well will be measured with the use of a water level meter, oil-water Solinst Interface probe, or equivalent static water level monitor. Dedicated bailers or pumps will be used to purge each groundwater monitoring well prior to sample collection. Three well volumes will be purged from each monitoring well or monitoring wells may be purged dry in instances of slow recharge. Groundwater samples will be collected from each monitoring well when sufficient water has recovered. Field parameters, including temperature, pH, and specific conductance will be measured and recorded at the time of sample collection. The groundwater samples will be submitted to an accredited laboratory for analysis of salinity parameters and petroleum hydrocarbons. Monitoring well sampling guidelines set forth in U.S. Environmental Protection Agency, Region 4, Laboratory Services & Applied Science Division, Athens, Georgia, LSASDPROC-301-R6, *Groundwater Sampling*, will be followed.

#### **6.2.2 Hydraulic Conductivity Testing**

Hydraulic conductivity testing will be performed on each monitoring well to determine the hydraulic properties of the upper water table at the site. Based on the lithology encountered within the upper water table zone, Vertex will conduct either a rising head (fine sediment/slow recovery) or falling head test (coarse sediment/fast recovery). The rising head test is conducted by purging water from static level to create sufficient displacement and monitor groundwater recovery at a set interval. A falling head test is conducted by inserting a slug (solid/weighted pipe) to create sufficient upward displacement from static level and monitor groundwater recovery at a set interval. The field collected data (recovery vs. time) will be analyzed with the use of commercial software to estimate the hydraulic conductivity value.

Vertex will prepare a technical report summarizing the hydrogeological characterization of the site. The technical report will include the following:



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- Description of the site and previous environment assessments
- A description of potential receptors within the area
- Summary of the field investigation and methodologies employed
- Depth to groundwater levels
- Inferred groundwater flow characteristics and lateral hydraulic gradient
- Estimated groundwater flow velocity
- Field-measured physical parameter results and laboratory analytical results
- A detailed assessment and evaluation of groundwater quality conditions
- Conclusion and recommendations

Should you have any questions or concerns, please do not hesitate to contact P.M Kent Stallings at 346.814.1413 or [kstallings@vertexresource.com](mailto:kstallings@vertexresource.com).

## 7.0 References

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## 8.0 Limitations

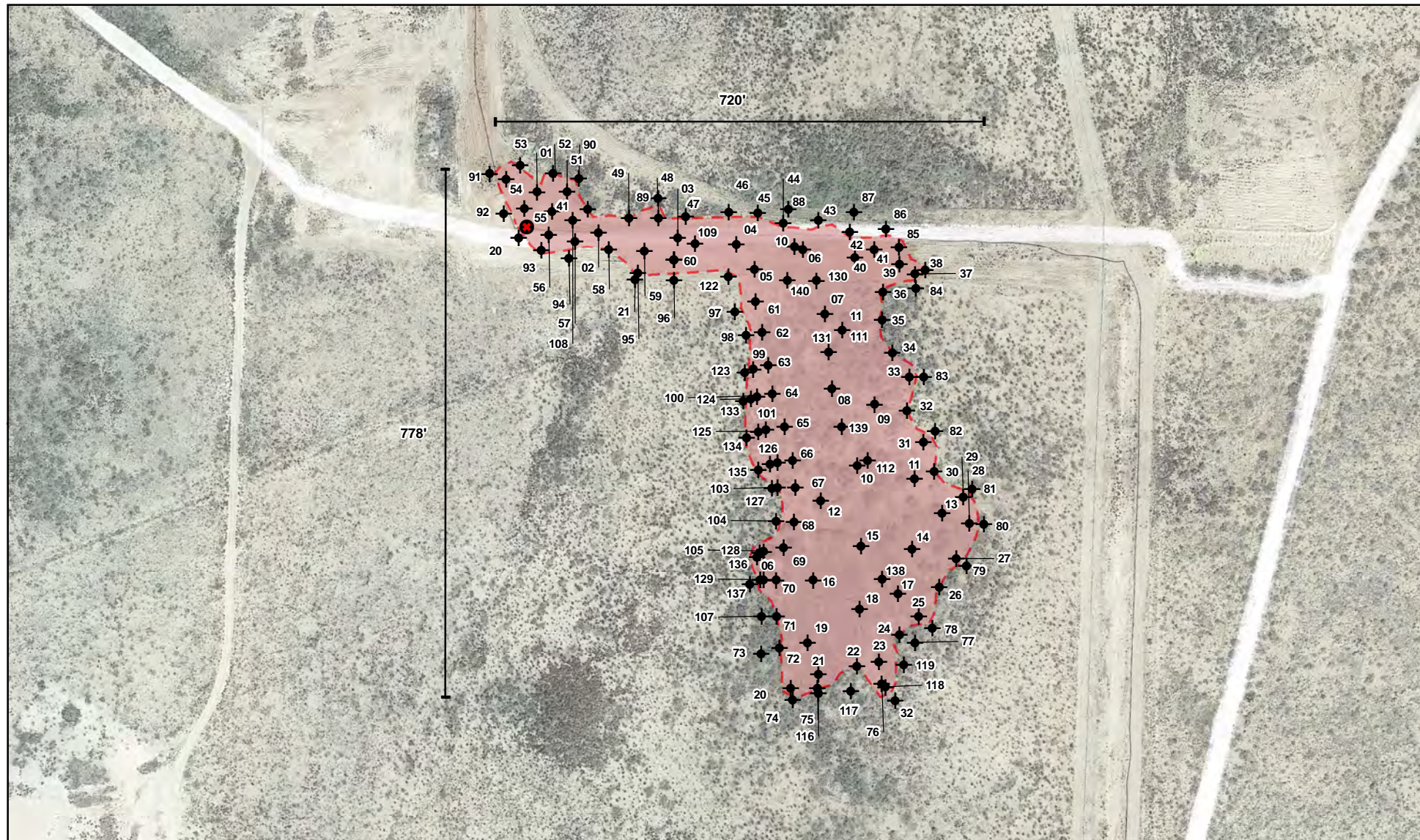
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The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions 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**

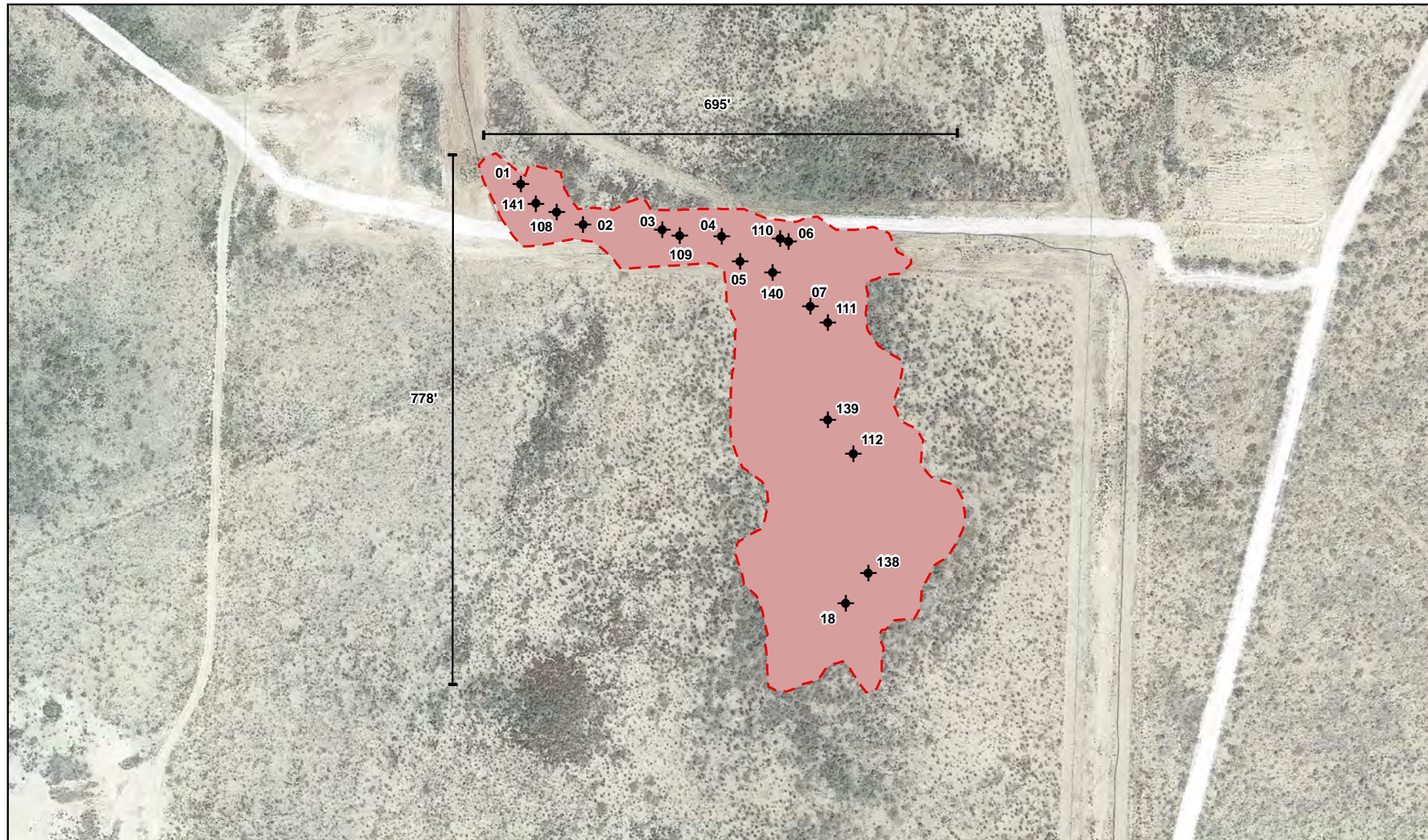


Document Path: G:\Projects\US PROJECTS\Devon Energy Corporation\2022\22E-03982 - East Pecos Pipeline Spill\Figure 1 Characterization Sample Locations (22E-03982).mxd





Document Path: \\vws-4s01.corp.internal\shared\ps04 - Geomatics\1-Projects\US PROJECTS\Devon Energy Corporation\2022\22E-03982 - East Pecos Pipeline Spill\Figure 2 Geoprobe Delineation (22E-03982).mxd



- ◆ Borehole (Prefixed by "BH22-")
- Release Area (~194,604 sq. ft.)



0 25 50 100 150 Feet  
Map Center:  
Lat/Long: 32.016260, -103.966824

NAD 1983 UTM Zone 13N  
Date: Mar 26/23



### Vertical Delineation Sample Locations East Pecos Pipeline Spill

FIGURE:

2

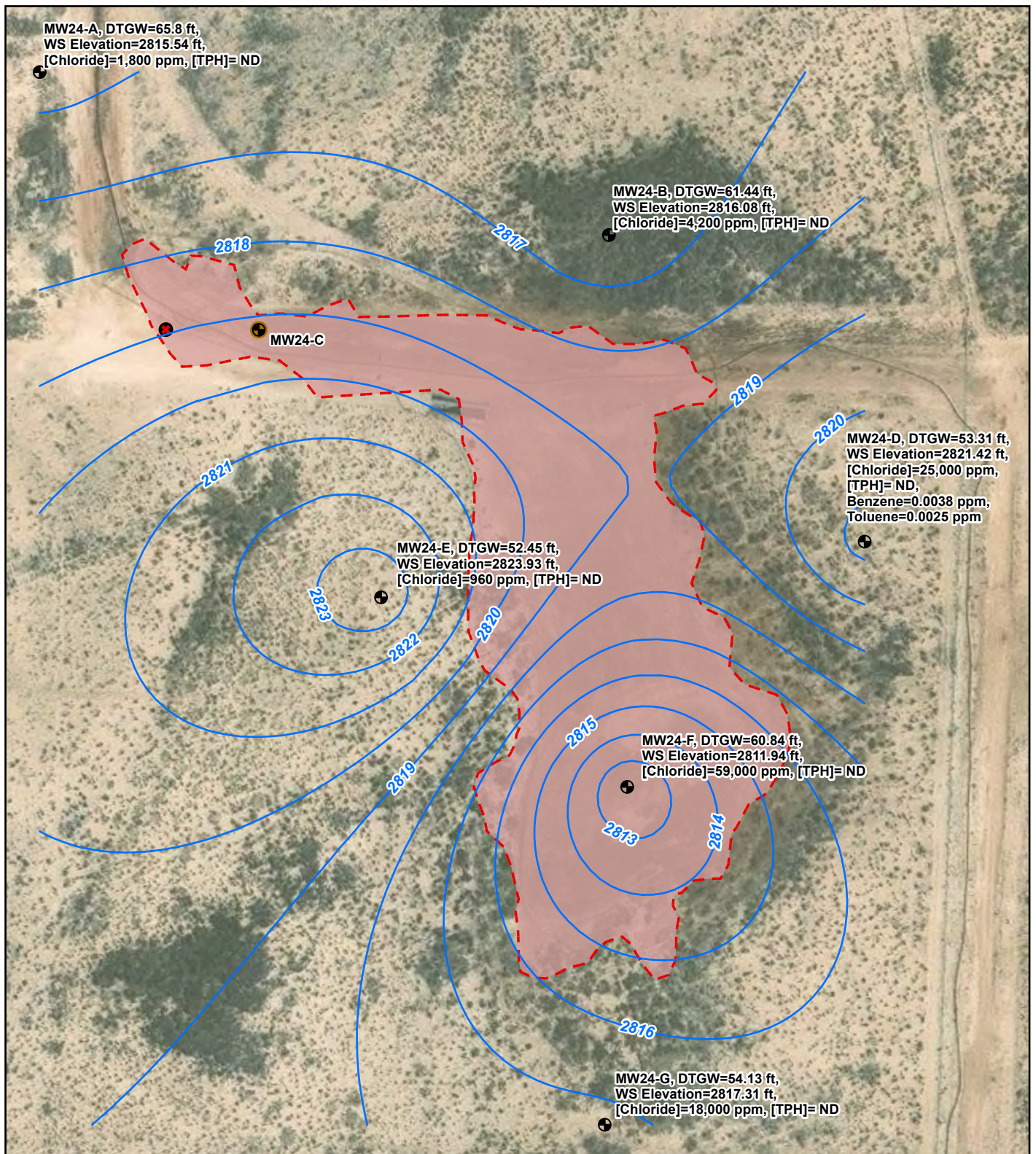


Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Background imagery from Google Earth, 2022. Features from GPS, Vertex Professional Services Ltd., 2022.

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- Monitoring Well    
 Plugged Monitoring Well    
 Water Surface Elevation Contour (1 ft. Interval)
- Point of Release    
 Release Area



0 30 60 120 ft Map Center:  
 Lat: 32.016342°N, Long: 103.966612°W  
 NAD 1983 UTM Zone 13N  
 Date: Nov 20/24



### Current Monitoring Wells East Pecos Pipeline Spill

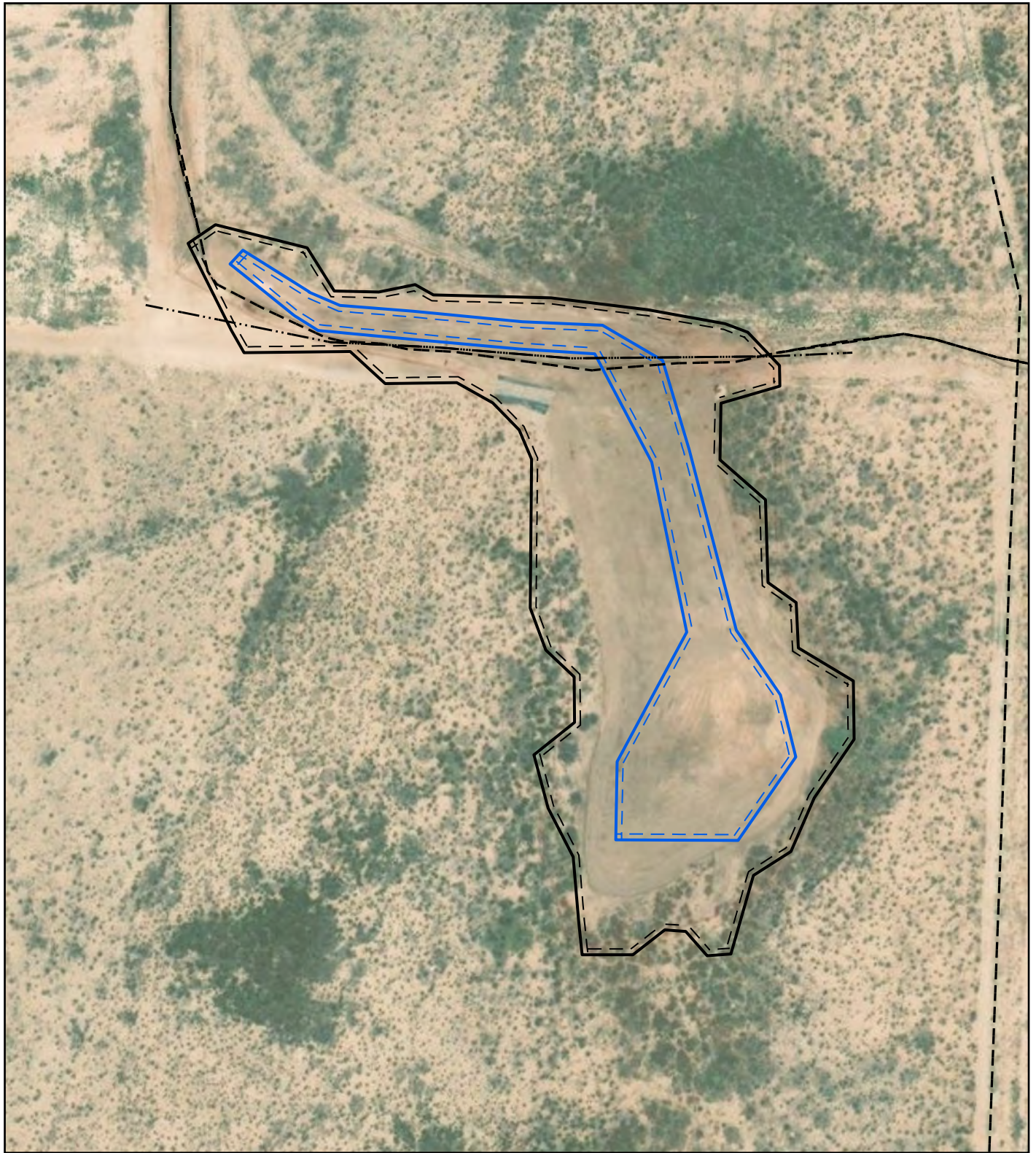
FIGURE:  
3

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, 2023. Features from GPS, Vertex Professional Services Ltd., 2024.

VERSATILITY. EXPERTISE.





- - Pipeline (Aboveground)
- · - Pipeline (Underground)
-  Proposed Excavation to 4' bgs (~217,978 sq.ft.)
-  Proposed Excavation to 20' bgs (~62,802 sq.ft.)



0 30 60 120 ft  
NAD 1983 UTM Zone 13N  
Date: Nov 18/24

Map Center:  
Lat: 32.016292°N,  
Long: 103.966838°W



### Proposed Excavation Schematic East Pecos Pipeline Spill

FIGURE:  
4



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.

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VERSATILITY. EXPERTISE.



## **TABLES**

Client Name: Devon Energy Production Company, LP

Site Name: East Pecos Pipeline Spill

NMOCD Tracking #: nAPP2233339274

Project #: 22E-03982

Lab Reports: 2212E44, 2301065, 2301068, 2301135, 2301226, 2301272, 2301981, 2302198, 2302264, 2302A68, 2303967, and 2303A37

Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater 51-100 feet bgs

Sample Description			Field Screening		Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (petroflag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH22-01	0	December 28, 2022	-	28,871	ND	ND	ND	5100	3700	5100	8800	63,000
	2	December 28, 2022	-	9,144	-	-	-	-	-	-	-	-
	4	December 28, 2022	-	7,802	ND	ND	ND	ND	ND	ND	ND	69,000
	6	December 28, 2022	-	15,752	-	-	-	-	-	-	-	-
	8	December 28, 2022	-	19,203	ND	ND	ND	ND	ND	ND	ND	17,000
	10	December 28, 2022	-	17,572	-	-	-	-	-	-	-	-
	12	December 28, 2022	-	15,408	-	-	-	-	-	-	-	-
BH22-02	0	December 28, 2022	-	19,187	ND	ND	ND	ND	ND	ND	ND	17,000
	4	December 28, 2022	-	28,858	ND	ND	ND	1300	880	1300	2180	71,000
	8	December 28, 2022	-	13,956	ND	ND	ND	ND	ND	ND	ND	13,000
	12	December 28, 2022	-	15,509	ND	ND	ND	ND	ND	ND	ND	17,000
	16	December 28, 2022	-	16,592	-	-	-	-	-	-	-	-
BH22-03	0	December 28, 2022	-	12,162	ND	ND	ND	ND	ND	ND	ND	13,000
	4	December 28, 2022	-	28,871	ND	ND	ND	3100	1700	3100	4800	48,000
	8	December 28, 2022	-	15,333	ND	ND	ND	86	54	86	140	15,000
	12	December 28, 2022	-	13,146	ND	ND	ND	ND	ND	ND	ND	9,500
	16	December 28, 2022	-	7,728	-	-	-	-	-	-	-	-
BH22-04	0	December 28, 2022	-	7,531	ND	ND	ND	ND	ND	ND	ND	9,800
	4	December 29, 2022	-	17,796	ND	ND	ND	31000	17000	31000	48000	48,000
	8	December 29, 2022	-	5,614	ND	ND	ND	ND	ND	ND	ND	13,000
	12	December 29, 2022	-	13,813	ND	ND	ND	ND	ND	ND	ND	15,000
	16	December 29, 2022	-	14,805	-	-	-	-	-	-	-	-
BH22-05	0	December 29, 2022	-	14,284	ND	ND	1100	5900	1600	7000	8600	9,000
	4	December 29, 2022	-	19,190	ND	ND	ND	490	380	490	870	17,000
	8	December 29, 2022	-	1,623	ND	ND	ND	ND	ND	ND	ND	950
	12	December 29, 2022	-	15,944	ND	ND	ND	ND	ND	ND	ND	17,000
	14	December 29, 2022	-	15,348	-	-	-	-	-	-	-	-
BH22-06	0	December 29, 2022	-	4,527	-	-	-	-	-	-	-	-
	4	December 29, 2022	-	29,148	0.22	0.73	ND	16000	10000	16000	26000	56,000
	8	December 29, 2022	-	14,004	ND	ND	ND	25	ND	25	25	19,000
	12	December 29, 2022	-	7,736	ND	ND	ND	ND	ND	ND	ND	9,400
	16	December 29, 2022	-	4,383	-	-	-	-	-	-	-	-
BH22-07	0	December 29, 2022	-	7,353	ND	ND	ND	ND	ND	ND	ND	6,800
	0	December 29, 2022	-	7,795	-	-	-	-	-	-	-	-
	0	February 3, 2023	-	-	ND	ND	ND	2700	1200	2700	6600	13,000
	2	February 3, 2023	-	-	ND	ND	ND	ND	100	ND	100	9,700
	4	December 29, 2022	-	10,361	-	-	-	-	-	-	-	-
BH22-08	4	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	10,000
	8	December 29, 2022	-	11,338	-	-	-	-	-	-	-	-
	0	January 1, 2023	-	13,021	ND	ND	ND	1800	840	1800	2640	13,000
	2	January 1, 2023	-	15,402	ND	ND	ND	ND	ND	ND	ND	12,000
	4	January 1, 2023	64	12,714	ND	ND	ND	ND	ND	ND	ND	9,700
BH22-09	0	January 1, 2023	-	13,222	ND	ND	ND	7300	4100	7300	11400	13,000
	2	January 1, 2023	-	11,635	ND	ND	ND	ND	ND	ND	ND	10,000
	4	January 1, 2023	206	10,932	ND	ND	ND	ND	130	130	130	9,000
BH22-10	0	January 1, 2023	-	6,108	ND	0.534	37	17000	8600	17037	25637	6,400
	2	January 1, 2023	-	16,706	ND	ND	ND	ND	ND	ND	ND	13,000
	4	January 1, 2023	67	13,656	ND	ND	ND	ND	ND	ND	ND	11,000
BH22-11	0	January 1, 2023	-	12,611	ND	ND	ND	5400	3300	5400	8700	10,000
	2	January 1, 2023	-	11,019	ND	ND	ND	ND	ND	ND	ND	9,400
	4	January 1, 2023	69	11,332	ND	ND	ND	ND	ND	ND	ND	9,700
BH22-12	0	December 22, 2022	-	10,016	ND	ND	ND	190	130	190	320	13,000
	2	December 22, 2022	-	13,105	ND	ND	ND	ND	ND	ND	ND	9,300
	4	December 22, 2022	29	11,263	ND	ND	ND	ND	ND	ND	ND	11,000
BH22-13	0	January 1, 2023	-	11,299	ND	ND	ND	18000	9700	18000	27700	9,700
	2	January 1, 2023	-	15,662	ND	ND	ND	130	81	130	211	13,000
	4	January 1, 2023	100	15,594	ND	ND	ND	19	ND	19	19	12,000

Client Name: Devon Energy Production Company, LP

Site Name: East Pecos Pipeline Spill

NMOCD Tracking #: nAPP223339274

Project #: 22E-03982

Lab Reports: 2212E44, 2301065, 2301068, 2301135, 2301226, 2301272, 2301981, 2302198, 2302264, 2302A68, 2303967, and 2303A37

Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater 51-100 feet bgs

Sample Description			Field Screening		Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)								
BH22-14	0	January 1, 2023	-	8,564	ND	4.9	99	23000	11000	23099	34099	11,000
	2	January 1, 2023	-	16,494	ND	2.85	71	5600	2300	5671	7971	16,000
	4	January 1, 2023	1,236	16,825	ND	3.67	67	5300	2400	5367	7767	19,000
BH22-15	0	January 1, 2023	-	6,647	ND	ND	ND	810	650	810	1460	5,900
	2	January 1, 2023	-	19,689	ND	ND	ND	ND	ND	ND	ND	18,000
	4	January 1, 2023	54	19,275	ND	ND	ND	ND	ND	ND	ND	17,000
BH22-16	0	December 22, 2022	-	15,397	ND	ND	ND	ND	ND	ND	ND	15,000
	2	December 22, 2022	-	16,638	ND	ND	ND	ND	ND	ND	ND	16,000
	4	December 22, 2022	31	13,467	ND	ND	ND	ND	ND	ND	ND	17,000
BH22-17	0	January 1, 2023	-	4,435	ND	ND	ND	730	660	730	1390	3,300
	2	January 1, 2023	-	1,046	ND	ND	ND	ND	ND	ND	ND	670
	4	January 1, 2023	49	1,628	ND	ND	ND	ND	ND	ND	ND	1,100
BH22-18	0	December 22, 2022	-	14,844	ND	ND	ND	ND	ND	ND	ND	17,000
	2	December 22, 2022	-	16,172	ND	ND	ND	ND	ND	ND	ND	14,000
	4	December 22, 2022	25	17,982	ND	ND	ND	ND	ND	ND	ND	20,000
	8	December 30, 2022	-	9,564	-	-	-	-	-	-	-	-
	12	December 30, 2022	-	11,520	-	-	-	-	-	-	-	-
BH22-19	0	December 22, 2022	-	7,642	-	-	-	-	-	-	-	-
	0	December 22, 2022	-	4,938	ND	ND	ND	ND	ND	ND	ND	3,800
	2	December 22, 2022	-	17,667	ND	ND	ND	ND	ND	ND	ND	20,000
	4	December 22, 2022	0	17,183	ND	ND	ND	ND	ND	ND	ND	14,000
	0	December 22, 2022	-	2,009	ND	ND	ND	ND	ND	ND	ND	1,200
BH22-20	2	December 22, 2022	-	12,563	ND	ND	ND	ND	ND	ND	ND	13,000
	4	December 22, 2022	189	13,282	ND	ND	ND	ND	ND	ND	ND	12,000
	0	December 22, 2022	-	1,319	ND	ND	ND	ND	ND	ND	ND	690
BH22-21	2	December 22, 2022	-	17,224	ND	ND	ND	ND	ND	ND	ND	17,000
	4	December 22, 2022	62	12,311	ND	ND	ND	ND	ND	ND	ND	14,000
	0	December 22, 2022	-	626	ND	ND	ND	ND	ND	ND	ND	240
BH22-22	2	December 22, 2022	-	350	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 22, 2022	15	331	ND	ND	ND	ND	ND	ND	ND	ND
	0	December 22, 2022	-	8,093	ND	ND	ND	ND	ND	ND	ND	6,900
BH22-23	2	December 22, 2022	-	13,346	ND	ND	ND	ND	ND	ND	ND	11,000
	4	December 22, 2022	20	9,131	ND	ND	ND	ND	ND	ND	ND	8,700
	0	December 22, 2022	-	850	ND	ND	ND	ND	ND	ND	ND	280
BH22-24	2	December 22, 2022	-	1,023	ND	ND	ND	ND	ND	ND	ND	310
	4	December 22, 2022	8	180	ND	ND	ND	ND	ND	ND	ND	ND
	0	December 22, 2022	-	8,994	ND	ND	ND	ND	ND	ND	ND	8,100
BH22-25	2	December 22, 2022	-	13,750	ND	ND	ND	ND	ND	ND	ND	12,000
	4	December 22, 2022	40	10,065	ND	ND	ND	ND	ND	ND	ND	10,000
	0	December 22, 2022	-	314	ND	ND	ND	ND	ND	ND	ND	ND
BH22-26	2	December 22, 2022	-	295	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 22, 2022	12	177	ND	ND	ND	ND	ND	ND	ND	ND
	0	December 22, 2022	-	2,297	ND	ND	ND	ND	ND	ND	ND	1,500
BH22-27	2	December 22, 2022	-	9,769	ND	ND	ND	ND	ND	ND	ND	14,000
	4	December 22, 2022	25	12,532	ND	ND	ND	ND	ND	ND	ND	12,000
	0	December 22, 2022	-	1,342	ND	ND	ND	ND	ND	ND	ND	960
BH22-28	2	December 22, 2022	-	10,486	ND	ND	ND	ND	ND	ND	ND	10,000
	4	December 22, 2022	16	12,537	ND	ND	ND	ND	ND	ND	ND	11,000
	0	December 22, 2022	-	730	ND	ND	ND	ND	ND	ND	ND	250
BH22-29	2	December 22, 2022	-	10,648	ND	ND	ND	ND	ND	ND	ND	11,000
	4	December 22, 2022	22	11,296	ND	ND	ND	ND	ND	ND	ND	10,000
	0	December 22, 2022	-	317	ND	ND	ND	ND	ND	ND	ND	ND
BH22-30	2	December 22, 2022	-	171	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 22, 2022	10	469	ND	ND	ND	ND	ND	ND	ND	120
	0	December 22, 2022	-	1,212	ND	ND	ND	ND	ND	ND	ND	680
BH22-31	2	December 22, 2022	-	8,753	ND	ND	ND	ND	ND	ND	ND	9,300
	4	December 22, 2022	22	11,015	ND	ND	ND	ND	ND	ND	ND	10,000

Client Name: Devon Energy Production Company, LP

Site Name: East Pecos Pipeline Spill

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Sample Description			Field Screening		Petroleum Hydrocarbons							Inorganic
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					Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BH22-32	0	December 22, 2022	-	193	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 22, 2022	-	184	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 22, 2022	13	277	ND	ND	ND	ND	ND	ND	ND	ND
BH22-33	0	December 22, 2022	-	320	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 22, 2022	-	9,482	ND	ND	ND	ND	ND	ND	ND	9,900
	4	December 22, 2022	18	9,457	ND	ND	ND	ND	ND	ND	ND	9,400
BH22-34	0	December 22, 2022	-	245	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 22, 2022	-	168	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 22, 2022	12	278	ND	ND	ND	ND	ND	ND	ND	ND
BH22-35	0	December 22, 2022	-	213	ND	ND	ND	ND	ND	ND	ND	67
	2	December 22, 2022	-	216	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 22, 2022	6	577	ND	ND	ND	ND	ND	ND	ND	130
BH22-36	0	December 22, 2022	-	274	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 22, 2022	-	163	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 22, 2022	5	163	ND	ND	ND	ND	ND	ND	ND	ND
BH22-37	0	December 22, 2022	-	353	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 22, 2022	-	1,838	ND	ND	ND	ND	ND	ND	ND	1,800
	4	December 22, 2022	14	681	ND	ND	ND	ND	ND	ND	ND	180
BH22-38	0	December 31, 2022	-	96	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 31, 2022	-	119	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 31, 2022	12	119	ND	ND	ND	ND	ND	ND	ND	ND
BH22-39	0	December 31, 2022	-	64	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 31, 2022	-	375	ND	ND	ND	ND	ND	ND	ND	99
	4	December 31, 2022	43	6,591	ND	ND	ND	ND	ND	ND	ND	4,800
BH22-40	0	December 30, 2022	-	28,932	ND	ND	ND	2100	1500	2100	3600	39,000
	2	December 30, 2022	-	13,727	0.076	0.886	ND	ND	ND	ND	ND	19,000
	4	December 30, 2022	-	17,579	ND	ND	ND	ND	ND	ND	ND	17,000
BH22-41	0	December 31, 2022	-	50	ND	ND	ND	ND	ND	ND	ND	110
	2	December 31, 2022	-	1,412	ND	ND	ND	ND	ND	ND	ND	890
	4	December 31, 2022	40	2,235	ND	ND	ND	ND	ND	ND	ND	1,600
BH22-42	0	December 31, 2022	-	5,177	ND	ND	ND	ND	ND	ND	ND	2,700
	2	December 31, 2022	-	13,530	ND	ND	ND	ND	ND	ND	ND	9,800
	4	December 31, 2022	49	1,489	ND	ND	ND	ND	ND	ND	ND	1,100
BH22-43	0	January 2, 2023	-	386	ND	ND	ND	ND	ND	ND	ND	120
	2	January 2, 2023	-	521	ND	ND	ND	ND	ND	ND	ND	97
	4	January 2, 2023	13	564	ND	ND	ND	ND	ND	ND	ND	99
BH22-44	0	January 2, 2023	-	180	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 2, 2023	-	681	ND	ND	ND	ND	ND	ND	ND	280
	4	January 2, 2023	26	695	ND	ND	ND	ND	ND	ND	ND	340
BH22-45	0	January 2, 2023	-	101	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 2, 2023	-	150	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 2, 2023	9	98	ND	ND	ND	ND	ND	ND	ND	ND
BH22-46	0	December 29, 2022	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 29, 2022	-	47	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 29, 2022	19	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH22-47	0	December 29, 2022	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 29, 2022	-	137	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 29, 2022	31	105	ND	ND	ND	ND	ND	ND	ND	ND
BH22-48	0	December 29, 2022	-	1,955	ND	ND	ND	ND	ND	ND	ND	1,800
	2	December 29, 2022	-	5,877	ND	ND	ND	ND	ND	ND	ND	6,200
	4	December 29, 2022	38	8,638	ND	ND	ND	ND	ND	ND	ND	9,300
BH22-49	0	December 29, 2022	-	10	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 29, 2022	-	66	ND	ND	ND	ND	ND	ND	ND	65
	4	December 29, 2022	17	176	ND	ND	ND	ND	ND	ND	ND	62
BH22-50	0	December 29, 2022	-	236	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 29, 2022	-	285	ND	ND	ND	ND	ND	ND	ND	210
	4	December 29, 2022	16	116	ND	ND	ND	ND	ND	ND	ND	ND

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					Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BH22-51	0	December 29, 2022	-	2,186	ND	ND	ND	ND	ND	ND	ND	3,600
	2	December 29, 2022	-	4,925	ND	ND	ND	ND	ND	ND	ND	5,100
	4	December 29, 2022	50	6,063	ND	ND	ND	ND	ND	ND	ND	5,500
BH22-52	0	December 29, 2022	-	246	ND	ND	ND	ND	ND	ND	ND	98
	2	December 29, 2022	-	249	ND	ND	ND	ND	ND	ND	ND	91
	4	December 29, 2022	32	552	ND	ND	ND	ND	ND	ND	ND	470
BH22-53	0	December 29, 2022	-	160	ND	ND	ND	ND	ND	ND	ND	ND
	2	December 29, 2022	-	331	ND	ND	ND	ND	ND	ND	ND	120
	4	December 29, 2022	38	399	ND	ND	ND	ND	ND	ND	ND	210
BH22-54	0	December 29, 2022	-	3,501	ND	ND	ND	ND	ND	ND	ND	3,100
	2	December 29, 2022	-	2,287	ND	ND	ND	ND	ND	ND	ND	3,800
	4	December 29, 2022	-	1,069	ND	ND	ND	ND	ND	ND	ND	970
BH22-55	0	December 29, 2022	-	457	ND	ND	ND	ND	ND	ND	ND	190
	2	December 29, 2022	-	850	ND	ND	ND	ND	ND	ND	ND	840
	4	December 29, 2022	27	-	ND	ND	ND	ND	ND	ND	ND	200
BH22-56	0	December 29, 2022	-	2,727	ND	ND	ND	ND	ND	ND	ND	3,400
	2	December 29, 2022	-	10,943	ND	ND	ND	ND	ND	ND	ND	14,000
	4	December 29, 2022	42	15,167	ND	ND	ND	ND	ND	ND	ND	17,000
BH22-57	0	December 31, 2022	-	593	ND	ND	ND	ND	ND	ND	ND	270
	2	December 31, 2022	-	665	ND	ND	ND	ND	ND	ND	ND	250
	4	December 31, 2022	33	2,219	ND	ND	ND	ND	ND	ND	ND	980
BH22-58	0	December 31, 2022	-	432	ND	ND	ND	ND	ND	ND	ND	68
	2	December 31, 2022	-	174	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 31, 2022	18	314	ND	ND	ND	ND	ND	ND	ND	82
BH22-59	0	December 31, 2022	-	679	ND	ND	ND	18	ND	18	18	200
	2	December 31, 2022	-	2,186	ND	ND	ND	ND	ND	ND	ND	910
	4	December 31, 2022	27	1,262	ND	ND	ND	ND	ND	ND	ND	460
BH22-60	0	December 31, 2022	-	3,168	ND	ND	ND	17	ND	17	17	2,300
	2	December 31, 2022	-	135	ND	ND	ND	ND	ND	ND	ND	ND
	4	December 31, 2022	12	155	ND	ND	ND	ND	ND	ND	ND	64
BH22-61	0	December 21, 2022	-	956	ND	ND	ND	ND	ND	ND	ND	560
	2	December 21, 2022	-	10,133	ND	ND	ND	ND	ND	ND	ND	9,500
	4	December 21, 2022	22	7,099	ND	ND	ND	ND	ND	ND	ND	7,000
BH22-62	0	December 21, 2022	-	535	ND	ND	ND	ND	ND	ND	ND	160
	2	December 21, 2022	-	1,856	ND	ND	ND	ND	ND	ND	ND	1,400
	4	December 21, 2022	12	324	ND	ND	ND	ND	ND	ND	ND	96
BH22-63	0	December 21, 2022	-	1,003	ND	ND	ND	ND	ND	ND	ND	530
	2	December 21, 2022	-	368	ND	ND	ND	ND	ND	ND	ND	370
	4	December 21, 2022	9	694	ND	ND	ND	ND	ND	ND	ND	ND
BH22-64	0	December 21, 2022	-	727	ND	ND	ND	ND	ND	ND	ND	410
	2	December 21, 2022	-	705	ND	ND	ND	ND	ND	ND	ND	4,200
	4	December 21, 2022	21	9,530	ND	ND	ND	ND	ND	ND	ND	9,700
BH22-65	0	December 21, 2022	-	1,197	ND	ND	ND	ND	ND	ND	ND	790
	2	December 21, 2022	-	3,537	ND	ND	ND	ND	ND	ND	ND	9,600
	4	December 21, 2022	18	4,283	ND	ND	ND	ND	ND	ND	ND	3,000
BH22-66	0	December 21, 2022	-	381	ND	ND	ND	ND	ND	ND	ND	220
	2	December 21, 2022	-	1,746	ND	ND	ND	ND	ND	ND	ND	960
	4	December 21, 2022	17	2,453	ND	ND	ND	ND	ND	ND	ND	2,200
BH22-67	0	December 21, 2022	-	3,772	ND	ND	ND	ND	ND	ND	ND	3,000
	2	December 21, 2022	-	10,833	ND	ND	ND	ND	ND	ND	ND	11,000
	4	December 21, 2022	15	10,243	ND	ND	ND	ND	ND	ND	ND	11,000
BH22-68	0	December 21, 2022	-	4,869	ND	ND	ND	ND	ND	ND	ND	4,900
	2	December 21, 2022	-	329	ND	ND	ND	ND	ND	ND	ND	67
	4	December 21, 2022	6	411	ND	ND	ND	ND	ND	ND	ND	70
BH22-69	0	December 21, 2022	-	1,212	ND	ND	ND	ND	ND	ND	ND	560
	2	December 21, 2022	-	10,702	ND	ND	ND	ND	ND	ND	ND	9,900
	4	December 21, 2022	22	9,957	ND	ND	ND	ND	ND	ND	ND	8,300

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Sample Description			Field Screening		Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BH22-70	0	December 21, 2022	-	955	ND	ND	ND	ND	57	ND	57	350
	2	December 21, 2022	-	11,809	ND	ND	ND	ND	ND	ND	ND	9,900
	4	December 21, 2022	18	13,780	ND	ND	ND	ND	ND	ND	ND	11,000
BH22-71	0	December 21, 2022	-	1,029	ND	ND	ND	ND	84	ND	84	460
	2	December 21, 2022	-	1,063	ND	ND	ND	ND	ND	ND	ND	440
	4	December 21, 2022	13	903	ND	ND	ND	ND	ND	ND	ND	540
BH22-72	0	December 21, 2022	-	2,000	ND	ND	ND	ND	ND	ND	ND	370
	2	December 21, 2022	-	671	ND	ND	ND	ND	ND	ND	ND	260
	4	December 21, 2022	20	691	ND	ND	ND	ND	ND	ND	ND	98
BH22-73	0	January 3, 2023	-	567	ND	ND	ND	ND	ND	ND	ND	70
	2	January 3, 2023	-	655	ND	ND	ND	ND	ND	ND	ND	190
	4	January 3, 2023	1	1,008	ND	ND	ND	ND	ND	ND	ND	560
BH22-74	0	January 3, 2023	-	404	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 3, 2023	-	414	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 3, 2023	0	320	ND	ND	ND	ND	ND	ND	ND	ND
BH22-75	0	January 3, 2023	-	994	ND	ND	ND	ND	ND	ND	ND	680
	2	January 3, 2023	-	597	ND	ND	ND	ND	ND	ND	ND	300
	4	January 3, 2023	4	327	ND	ND	ND	ND	ND	ND	ND	85
BH22-76	0	January 3, 2023	-	4,329	ND	ND	ND	ND	ND	ND	ND	2,600
	2	January 3, 2023	-	1,847	ND	ND	ND	ND	ND	ND	ND	1,200
	4	January 3, 2023	0	913	ND	ND	ND	ND	ND	ND	ND	340
BH22-77	0	January 3, 2023	-	298	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 3, 2023	-	219	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 3, 2023	0	230	ND	ND	ND	ND	ND	ND	ND	ND
BH22-78	0	January 3, 2023	-	243	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 3, 2023	-	226	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 3, 2023	1	246	ND	ND	ND	ND	ND	ND	ND	ND
BH22-79	0	January 3, 2023	-	215	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 3, 2023	-	253	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 3, 2023	0	245	ND	ND	ND	ND	ND	ND	ND	ND
BH22-80	0	January 4, 2023	-	70	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 4, 2023	-	54	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 4, 2023	12	108	ND	ND	ND	ND	ND	ND	ND	ND
BH22-81	0	January 4, 2023	-	116	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 4, 2023	-	92	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 4, 2023	5	134	ND	ND	ND	ND	ND	ND	ND	ND
BH22-82	0	January 4, 2023	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 4, 2023	-	5	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 4, 2023	7	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH22-83	0	January 4, 2023	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 4, 2023	-	5	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 4, 2023	9	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH22-84	0	January 4, 2023	-	144	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 4, 2023	-	206	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 4, 2023	9	262	ND	ND	ND	ND	ND	ND	ND	ND
BH22-85	0	January 4, 2023	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 4, 2023	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 4, 2023	18	1,218	ND	ND	ND	ND	ND	ND	ND	1,600
BH22-86	0	January 5, 2023	-	1,459	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 5, 2023	-	427	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 5, 2023	10	470	ND	ND	ND	ND	ND	ND	ND	ND
BH22-87	0	January 5, 2023	-	157	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 5, 2023	-	241	ND	ND	ND	ND	ND	ND	ND	110
	4	January 5, 2023	11	155	ND	ND	ND	ND	ND	ND	ND	ND
BH22-88	0	January 5, 2023	-	34	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 5, 2023	-	27	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 5, 2023	0	30	ND	ND	ND	ND	ND	ND	ND	ND

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Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH22-89	0	January 5, 2023	-	43	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 5, 2023	-	18	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 5, 2023	81	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-90	0	January 5, 2023	-	251	ND	ND	ND	ND	ND	ND	ND	150
	2	January 5, 2023	-	157	ND	ND	ND	ND	ND	ND	ND	100
	4	January 5, 2023	13	99	ND	ND	ND	ND	ND	ND	ND	110
BH22-91	0	January 5, 2023	-	219	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 5, 2023	-	248	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 5, 2023	19	161	ND	ND	ND	ND	ND	ND	ND	ND
BH22-92	0	January 5, 2023	-	80	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 5, 2023	-	271	ND	ND	ND	ND	ND	ND	ND	290
	4	January 5, 2023	6	272	ND	ND	ND	ND	ND	ND	ND	270
BH22-93	0	January 5, 2023	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 5, 2023	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 5, 2023	14	1,109	ND	ND	ND	ND	ND	ND	ND	1,700
BH22-94	0	January 3, 2023	-	294	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 3, 2023	-	564	ND	ND	ND	ND	ND	ND	ND	210
	4	January 3, 2023	23	1,093	ND	ND	ND	ND	ND	ND	ND	380
BH22-95	0	January 3, 2023	-	1,733	ND	ND	ND	ND	ND	ND	ND	1,100
	2	January 3, 2023	-	544	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 3, 2023	14	596	ND	ND	ND	ND	ND	ND	ND	120
BH22-96	0	January 3, 2023	-	467	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 3, 2023	-	458	ND	ND	ND	ND	ND	ND	ND	100
	4	January 3, 2023	12	749	ND	ND	ND	ND	ND	ND	ND	230
BH22-97	0	January 3, 2023	-	825	ND	ND	ND	ND	ND	ND	ND	320
	2	January 3, 2023	-	469	ND	ND	ND	ND	ND	ND	ND	ND
	4	January 3, 2023	0	357	ND	ND	ND	ND	ND	ND	ND	ND
BH22-98	0	January 3, 2023	-	460	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 3, 2023	-	393	ND	ND	ND	ND	ND	ND	ND	68
	4	January 3, 2023	0	294	ND	ND	ND	ND	ND	ND	ND	ND
BH22-99	0	January 3, 2023	-	509	ND	ND	ND	ND	ND	ND	ND	150
	2	January 3, 2023	-	1,108	ND	ND	ND	ND	ND	ND	ND	780
	4	January 3, 2023	5	385	ND	ND	ND	ND	ND	ND	ND	59
BH22-100	0	January 3, 2023	-	984	ND	ND	ND	ND	ND	ND	ND	460
	2	January 3, 2023	-	1,290	ND	ND	ND	ND	ND	ND	ND	960
	4	January 3, 2023	4	828	ND	ND	ND	ND	ND	ND	ND	470
BH22-101	0	January 3, 2023	-	673	ND	ND	ND	ND	ND	ND	ND	440
	2	January 3, 2023	-	1,202	ND	ND	ND	ND	ND	ND	ND	990
	4	January 3, 2023	2	1,239	ND	ND	ND	ND	ND	ND	ND	1,100
BH22-102	0	January 3, 2023	-	640	ND	ND	ND	ND	ND	ND	ND	320
	2	January 3, 2023	-	1,013	ND	ND	ND	ND	ND	ND	ND	760
	4	January 3, 2023	4	196	ND	ND	ND	ND	ND	ND	ND	74
BH22-103	0	January 3, 2023	-	395	ND	ND	ND	ND	ND	ND	ND	86
	2	January 3, 2023	-	835	ND	ND	ND	ND	ND	ND	ND	780
	4	January 3, 2023	3	135	ND	ND	ND	ND	ND	ND	ND	ND
BH22-104	0	January 4, 2023	-	596	ND	ND	ND	ND	ND	ND	ND	380
	2	January 4, 2023	-	355	ND	ND	ND	ND	ND	ND	ND	250
	4	January 4, 2023	6	314	ND	ND	ND	ND	ND	ND	ND	ND
BH22-105	0	January 4, 2023	-	1,031	ND	ND	ND	ND	ND	ND	ND	1,100
	2	January 4, 2023	-	310	ND	ND	ND	ND	ND	ND	ND	100
	4	January 4, 2023	6	191	ND	ND	ND	ND	ND	ND	ND	200
BH22-106	0	January 4, 2023	-	1,438	ND	ND	ND	ND	ND	ND	ND	1,600
	2	January 4, 2023	-	252	ND	ND	ND	ND	ND	ND	ND	230
	4	January 4, 2023	10	233	ND	ND	ND	ND	ND	ND	ND	84
BH22-107	0	January 4, 2023	-	242	ND	ND	ND	ND	ND	ND	ND	ND
	2	January 4, 2023	-	965	ND	ND	ND	ND	ND	ND	ND	560
	4	January 4, 2023	6	311	ND	ND	ND	ND	ND	ND	ND	180

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Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)								
BH22-108	10	January 23, 2023	-	20,751	ND	ND	ND	ND	ND	ND	ND	17,000
	15	January 23, 2023	-	19,044	-	-	-	-	-	-	-	-
	20	January 23, 2023	49	9,229	ND	ND	ND	ND	ND	ND	ND	7,300
	25	January 23, 2023	45	18,103	-	-	-	-	-	-	-	-
	30	January 23, 2023	44	16,228	ND	ND	ND	ND	ND	ND	ND	13,000
	35	January 23, 2023	0	17,754	-	-	-	-	-	-	-	-
	40	January 23, 2023	47	18,168	ND	ND	ND	ND	ND	ND	ND	13,000
BH22-109	10	January 23, 2023	39	3,901	ND	ND	ND	ND	ND	ND	ND	2,400
	15	January 23, 2023	-	3,919	-	-	-	-	-	-	-	-
	20	January 23, 2023	0	4,810	ND	ND	ND	ND	ND	ND	ND	2,800
	25	January 23, 2023	0	1,856	-	-	-	-	-	-	-	-
	30	January 23, 2023	0	3,377	ND	ND	ND	ND	ND	ND	ND	1,800
	35	January 23, 2023	38	3,534	-	-	-	-	-	-	-	-
	40	January 23, 2023	0	1,962	ND	ND	ND	ND	ND	ND	ND	1,200
BH22-110	10	January 23, 2023	-	12,068	ND	ND	ND	ND	ND	ND	ND	9,200
	15	January 23, 2023	-	16,996	-	-	-	-	-	-	-	-
	20	January 23, 2023	-	22,235	ND	ND	ND	ND	ND	ND	ND	14,000
	25	January 23, 2023	0	7,246	-	-	-	-	-	-	-	-
	30	January 23, 2023	0	4,019	ND	ND	ND	ND	ND	ND	ND	3,100
	35	January 23, 2023	0	4,269	-	-	-	-	-	-	-	-
	40	January 23, 2023	80	4,404	ND	ND	ND	ND	ND	ND	ND	2,900
BH22-111	10	January 23, 2023	0	10,404	ND	ND	ND	ND	ND	ND	ND	7,600
	15	January 23, 2023	0	12,807	-	-	-	-	-	-	-	-
	20	January 23, 2023	0	16,391	ND	ND	ND	ND	ND	ND	ND	11,000
	25	January 23, 2023	0	10,248	-	-	-	-	-	-	-	-
	30	January 23, 2023	73	6,953	ND	ND	ND	ND	ND	ND	ND	3,800
	35	January 23, 2023	31	9,250	-	-	-	-	-	-	-	-
	40	January 23, 2023	29	10,069	ND	ND	ND	ND	ND	ND	ND	8,900
BH22-112	10	January 23, 2023	95	13,982	ND	ND	ND	ND	ND	ND	ND	10,000
	15	January 23, 2023	107	11,328	-	-	-	-	-	-	-	-
	20	January 23, 2023	168	15,697	ND	ND	ND	ND	ND	ND	ND	11,000
	25	January 23, 2023	61	8,352	-	-	-	-	-	-	-	-
	30	January 23, 2023	58	6,512	ND	ND	ND	ND	ND	ND	ND	4,000
	35	January 23, 2023	71	6,832	-	-	-	-	-	-	-	-
	40	January 23, 2023	48	7,372	ND	ND	ND	ND	ND	ND	ND	4,700
BH22-116	0	February 3, 2023	59	447	ND	ND	ND	ND	ND	ND	ND	260
	2	February 3, 2023	18	479	ND	ND	ND	ND	ND	ND	ND	190
BH22-117	0	February 3, 2023	48	460	ND	ND	ND	ND	ND	ND	ND	400
	2	February 3, 2023	32	357	ND	ND	ND	ND	ND	ND	ND	ND
BH22-118	0	February 3, 2023	101	4,946	ND	ND	ND	ND	ND	ND	ND	3,200
	2	February 3, 2023	46	1,372	ND	ND	ND	21	ND	21	21	1,100
BH22-119	0	February 3, 2023	48	150	ND	ND	ND	ND	ND	ND	ND	73
	2	February 3, 2023	15	207	ND	ND	ND	ND	ND	ND	ND	ND
BH22-120	0	February 3, 2023	37	30	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 3, 2023	33	284	ND	ND	ND	ND	ND	ND	ND	100
	4	February 3, 2023	55	323	ND	ND	ND	ND	ND	ND	ND	180
BH22-121	0	February 3, 2023	85	93	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 3, 2023	29	180	ND	ND	ND	ND	ND	ND	ND	ND
BH23-122	0	February 3, 2023	54	93	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 3, 2023	67	359	ND	ND	ND	ND	ND	ND	ND	88
	4	February 3, 2023	19	157	ND	ND	ND	ND	ND	ND	ND	ND
BH22-123	0	February 3, 2023	36	326	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 3, 2023	36	326	ND	ND	ND	ND	ND	ND	ND	62
BH23-124	0	February 3, 2023	0	382	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	940
BH22-125	0	February 3, 2023	92	350	ND	ND	ND	ND	ND	ND	ND	100
	2	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	1,200
	4	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	140



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Sample Description			Field Screening		Petroleum Hydrocarbons							Inorganic	
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable						
					Benzene	BTX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)		
			(ppm)	(ppm)									(mg/kg)
BH22-126	0	February 3, 2023	0	342	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	ND	1,000
BH22-127	0	February 3, 2023	72	269	ND	ND	ND	ND	ND	ND	ND	ND	64
	2	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	ND	110
BH22-128	0	February 3, 2023	91	401	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	ND	620
BH22-129	0	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	ND	120
	2	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	ND	880
BH22-130	0	February 3, 2023	-	-	ND	0.59	38	15000	8000	15,038	23,038	12,000	
	2	February 3, 2023	-	-	ND	ND	ND	120	66	129	186	5,000	
	4	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	ND	4,500
BH22-131	0	February 3, 2023	-	-	ND	ND	ND	74	48	74	122	4,900	
	2	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	9,400	
	4	February 3, 2023	-	-	ND	ND	ND	ND	ND	ND	ND	9,300	
BH22-132	0	February 22, 2023	15	69	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 22, 2023	0	49	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH22-133	0	February 22, 2023	0	241	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 22, 2023	7	486	ND	ND	ND	ND	ND	ND	ND	ND	400
BH22-134	0	February 22, 2023	0	441	ND	ND	ND	ND	ND	ND	ND	ND	360
	2	February 22, 2023	5	1,047	ND	ND	ND	ND	ND	ND	ND	ND	850
BH22-135	0	February 22, 2023	2	177	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 22, 2023	34	764	ND	ND	ND	ND	ND	ND	ND	ND	720
BH22-136	0	February 22, 2023	3	317	ND	ND	ND	ND	ND	ND	ND	ND	120
	2	February 22, 2023	13	1,164	ND	ND	ND	ND	ND	ND	ND	ND	850
BH22-137	0	February 22, 2023	18	154	22	ND	ND	ND	ND	ND	ND	ND	ND
	2	February 22, 2023	14	861	ND	ND	ND	ND	ND	ND	ND	ND	490
BH22-138	20	March 15, 2023	-	11,452	ND	ND	ND	ND	ND	ND	ND	ND	11,000
	30	March 15, 2023	-	3,342	ND	ND	ND	ND	ND	ND	ND	ND	3,100
	40	March 15, 2023	114	2,657	ND	ND	ND	ND	ND	ND	ND	ND	2,400
	45	March 15, 2023	48	3,002	ND	ND	ND	ND	ND	ND	ND	ND	2,200
	50	March 15, 2023	65	8,808	ND	ND	ND	ND	ND	ND	ND	ND	9,800
BH22-139	20	March 16, 2023	-	7,648	ND	ND	ND	ND	ND	ND	ND	ND	7,600
	30	March 16, 2023	-	8,492	ND	ND	ND	ND	ND	ND	ND	ND	8,100
	40	March 16, 2023	58	6,069	ND	ND	ND	ND	ND	ND	ND	ND	4,700
	45	March 16, 2023	90	5,604	ND	ND	ND	ND	ND	ND	ND	ND	3,800
BH22-140	25	March 16, 2023	-	7,811	ND	ND	ND	ND	ND	ND	ND	ND	5,300
	30	March 16, 2023	-	5,828	ND	ND	ND	ND	ND	ND	ND	ND	4,400
	35	March 16, 2023	-	6,444	ND	ND	ND	ND	ND	ND	ND	ND	6,000
	40	March 16, 2023	76	5,389	ND	ND	ND	ND	ND	ND	ND	ND	4,500
	45	March 16, 2023	64	7,256	ND	ND	ND	ND	ND	ND	ND	ND	5,500
BH22-141	20	March 16, 2023	-	4,553	ND	ND	ND	ND	ND	ND	ND	ND	3,800
	26	March 16, 2023	-	4,641	ND	ND	ND	ND	ND	ND	ND	ND	4,700
	30	March 17, 2023	-	2,388	ND	ND	ND	ND	ND	ND	ND	ND	2,200
	40	March 17, 2023	53	951	ND	ND	ND	ND	ND	ND	ND	ND	400
	45	March 17, 2023	52	936	ND	ND	ND	ND	ND	ND	ND	ND	450
	50	March 17, 2023	43	889	ND	ND	ND	ND	ND	ND	ND	ND	290
	54	March 17, 2023	34	712	ND	ND	ND	ND	ND	ND	ND	ND	300
	56	March 17, 2023	47	712	ND	ND	ND	ND	ND	ND	ND	ND	290
	59	March 17, 2023	43	783	ND	ND	ND	ND	ND	ND	ND	ND	270
	64	March 17, 2023	45	419	ND	ND	ND	ND	ND	ND	ND	ND	270
	69	March 17, 2023	42	437	ND	ND	ND	ND	ND	ND	ND	ND	220
	74	March 17, 2023	25	353	ND	ND	ND	ND	ND	ND	ND	ND	210
79	March 17, 2023	22	395	ND	ND	ND	ND	ND	ND	ND	ND	180	

"ND" Not Detected at the Reporting Limit

"-." indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria (&gt;/=4 feet bgs)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (0-4 feet bgs)

Client Name: Devon Energy Production Company, LP  
 Site Name: East Pecos Pipeline Spill  
 NMOCD Tracking #: nAPP2233339274  
 Project #: 22E-03982  
 Lab Reports: 885-9563-1, 885-9708-1, and 885-10040-1

Table 4. Exploratory Borehole Drilling Sample Field Screen and 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)	
MW24-A	3.5	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	510
	9	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	1,700
	20	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	440
	30	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	290
	40	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	230
	50	August 13, 2024	ND	ND	ND	ND	ND	ND	ND	250
	60	August 13, 2024	ND	ND	ND	64	ND	64	64	61
	69	August 13, 2024	ND	ND	ND	ND	ND	ND	ND	120
75	August 13, 2024	ND	ND	ND	ND	ND	ND	ND	230	
MW24-B	0	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	110
	4	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	10	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	19	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	29	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	39	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	49	August 8, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	59	August 8, 2024	ND	ND	ND	ND	ND	ND	ND	84
64	August 8, 2024	ND	ND	ND	ND	ND	ND	ND	140	
MW24-C	0	August 13, 2024	ND	ND	ND	ND	ND	ND	ND	13,000
	10	August 13, 2024	ND	ND	ND	ND	ND	ND	ND	13,000
	19	August 13, 2024	ND	ND	ND	13	ND	13	13	9,700
	30	August 13, 2024	ND	ND	ND	10	ND	10	10	4,600
	40	August 13, 2024	ND	ND	ND	18	ND	18	18	10,000
	50	August 13, 2024	ND	ND	ND	ND	ND	ND	ND	8,900
	60	August 13, 2024	ND	ND	ND	84	ND	84	84	7,700
70	August 13, 2024	ND	ND	ND	ND	ND	ND	ND	2,600	
MW24-D	0	August 5, 2024	ND	ND	ND	ND	ND	ND	ND	180
	4	August 5, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	10	August 5, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	15	August 5, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	30	August 5, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	40	August 5, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	45	August 5, 2024	ND	ND	ND	ND	ND	ND	ND	72

Client Name: Devon Energy Production Company, LP  
 Site Name: East Pecos Pipeline Spill  
 NMOCD Tracking #: nAPP2233339274  
 Project #: 22E-03982  
 Lab Reports: 885-9563-1, 885-9708-1, and 885-10040-1

Table 4. Exploratory Borehole Drilling Sample Field Screen and 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)	
										(mg/kg)
MW24-E	0	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	4	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	160
	10	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	260
	20	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	200
	29	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	130
	39	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	110
	50	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	110
	59	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	120
	64	August 7, 2024	ND	ND	ND	ND	ND	ND	ND	110
MW24-F	0	August 12, 2024	ND	ND	ND	96	82	ND	178	67,000
	3.5	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	15,000
	9-11	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	18,000
	19	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	16,000
	30	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	16,000
	40	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	11,000
	50	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	6,300
	60	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	7,300
	65	August 12, 2024	ND	ND	ND	ND	ND	ND	ND	5,700
MW24-G	0	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	190
	4	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	10	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	14	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	19	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	25	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	29	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	200
	34	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	320
	39	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	400
	45	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	2,100
	50	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	2,500
59	August 6, 2024	ND	ND	ND	ND	ND	ND	ND	1,800	

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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

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

Client Name: Devon Energy Production Company, LP

Site Name: East Pecos Pipeline Spill

NM OCD Tracking #: nAPP2233339274

Project #: 22E-03982

Lab Report: 885-11123-1

Table 5. Water Sample Laboratory Results													
Sample Description		Petroleum Hydrocarbons										Inorganic	
Sample ID	Sample Date	Volatile					Extractable						
		Benzene	Toluene	Ethylbenzene	Xylenes (Total)	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride	Total Dissolved Solids (TDS)
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW24-A	August 31, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,800	-
MW24-B	August 31, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,200	-
MW24-D	September 1, 2024	0.0038	0.0025	ND	ND	0.0063	ND	ND	ND	ND	ND	25,000	-
MW24-E	August 31, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	960	-
MW24-F	September 1, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59,000	-
MW24-G	September 1, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18,000	-

"ND" Not Detected at the Reporting Limit

"- " indicates not analyzed/assessed

**Bold and grey shaded indicates exceedance outside of NMAC 20.6.2.3101 Standard for Groundwater Of 10,000 mg/L Or Less**

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

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

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	nAPP2233339274
District RP	
Facility ID	
Application ID	

Responsible Party

Responsible Party WPX Energy Permain, LLC	OGRID 246289
Contact Name Jim Raley	Contact Telephone 575-689-7597
Contact email Jim.Raley@dmn.com	Incident # (assigned by OCD) nAPP2233339274
Contact mailing address 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.017103 Longitude -103.967874  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: East Pecos Pipeline Spill	Site Type Oil Well
Date Release Discovered: 11/17/2022	API# (if applicable) N/A

Unit Letter	Section	Township	Range	County
A	27	26S	29E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: )

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 100	Volume Recovered (bbls) 0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 4425	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)


Cause of Release: Poly weld failed on above ground 10" produced water transfer line. Allowing release of fluids to ROW and surface.  
  
Volume estimate attached.

Incident ID	nAPP2233339274
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Volume exceeded 25 bbls, significant property damage.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Rosa Romero, Mike Bratcher via email on 11/17/2022.	

## Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Jim Raley</u>	Title: <u>Environmental Professional</u>
Signature: <u></u>	Date: <u>11/29/2022</u>
email: <u>jim.raley@dvn.com</u>	Telephone: <u>575-689-7597</u>
<b><u>OCD Only</u></b>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>11/29/2022</u>

## **APPENDIX B – Borehole Logs**





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

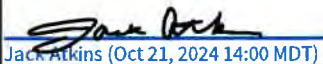
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-1 (MW-A)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4850			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5315 Buena Vista Dr.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 1	SECONDS 4.29	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	58	5.72	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE NW NE Sec. 27 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/12/2024	DRILLING ENDED 08/14/2024	DEPTH OF COMPLETED WELL (FT) 76	BORE HOLE DEPTH (FT) ±76	DEPTH WATER FIRST ENCOUNTERED (FT) ±65			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 65.99	DATE STATIC MEASURED 08/19/2024		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					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						
	+3	60	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	61	76	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.10"
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	+3	1	±8.5	Quik Crete 5000 PSI	±1.3	from surface		
	1	56	±8.5	Type I/II Neat Cement	±19.3	auger		
	56	59	±8.5	Bentonite Pellets	±1.4	auger		
	59	76	±8.5	Silica Sand	±4.2	auger		

FOR OSE INTERNAL USE

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

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	9	9	Fine sand and silt; whitish buff; < 4 cm pebbles; very dry	Y    ✓ N	
	9	30	21	small round gravels 15-20% , <1 cm; some larger (1-2 cm) all < 3 cm; light tan buff	Y    ✓ N	
	30	40	10	34' Gravels 30%; white, dark grey, light grey; brown tan, brown	Y    ✓ N	
	40	69	29	40' 70% gravels; white, dark grey, light grey, white; tan, light buff, silt, very fine	✓ Y    N	
	69	76	7	clay sand silt mix, 30% moisture, gritty, <1 cm	✓ Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):	
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Monitoring well. Above ground surface completion, till no longer needed. Logs adapted from on-site Vertex personnel. No pump test					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt						
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:   Jackie D. Atkins 10/21/2024 Jack Atkins (Oct 21, 2024 14:00 MDT)					
SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE	

FOR OSE INTERNAL USE

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

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)


1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-2 (MW-B)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4850			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5315 Buena Vista Dr.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 1	SECONDS 2.50 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	57	58.65 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Sec. 27 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/07/2024	DRILLING ENDED 08/07/2024	DEPTH OF COMPLETED WELL (FT) 70	BORE HOLE DEPTH (FT) ±70	DEPTH WATER FIRST ENCOUNTERED (FT) ±64			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 64.7		DATE STATIC MEASURED 08/19/2024	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	+3 55		±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	55 70		±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.10"
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	0 1		±8.5	Quik Crete 5000 PSI	±1.3	from surface		
	1 49		±8.5	Type I/II Neat Cement	±15.4	auger		
	49 52		±8.5	Bentonite Pellets	±1.4	auger		
	52 70		±8.5	Silica Sand	±4.2	auger		

FOR OSE INTERNAL USE

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

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4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	5	5	Silty Sand, light brown/tan	Y    ✓ N	
	5	11	6	Silty Sand, fine-grained, some clay, light brown/tan	Y    ✓ N	
	11	24	13	Silt, with sand increasing light brown/tan	Y    ✓ N	
	24	29	5	Silt and sand, gravel 15%, Tan pinkish	Y    ✓ N	
	29	34	5	Sand, Coarse, with silt and gravel 60% angular/ rounded , white , grey	Y    ✓ N	
	34	39	5	Sand and silt, gravel larger,angular/subangular, brownish	Y    ✓ N	
	39	44	5	Sand with silt, small gravel, angular/subangular, moist , dark brown	Y    ✓ N	
	44	49	5	Sand and silt, with gravel 70% angular/subrounded, brown	Y    ✓ N	
	49	54	5	Sand, with gravel 90% angular/subrounded, brown	Y    ✓ N	
	54	70	16	Sandy Clay, 85% clay, medium/high plastic, moist, brown	✓ Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:						
5. TEST, RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Monitoring well. Above ground surface completion, till no longer needed. Logs adapted from on-site Vertex personnel. No pump test					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  <div style="display: flex; justify-content: space-between;"> <div>             Jackie D. Atkins            Jack Atkins (Oct 21, 2024 14:00 MDT)         </div> <div>10/21/2024</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div> <div>DATE</div> </div>					

FOR USE INTERNAL USE

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

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LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


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1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-3 (MW- C)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4850			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5315 Buena Vista Dr.				CITY STATE ZIP Carlsbad NM 88220			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 01	SECONDS 1.5 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	58	3.0 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Sec. 27 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/13/2024		DRILLING ENDED 08/19/2024		DEPTH OF COMPLETED WELL (FT) Soil Boring		BORE HOLE DEPTH (FT) ±98	
					DEPTH WATER FIRST ENCOUNTERED (FT) ±unknown			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 09/18/2024		
						DATE STATIC MEASURED 95		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER – SPECIFY: Hollow Stem Auger					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						
	0	98	--	8.5" Soil boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

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FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
	0	10	10	Dark brown, loosely consolidated silts ; 3 cm - 5cm; brown clumps; friable	Y    ✓ N		
	10	25	15	70-80% gravels, mixed sizes <1 cm to 7 cm; mixed colors mostly grey; Brown tan	Y    ✓ N		
	25	35	10	90% gravel; mixed size 1-7 cm; color white, grey; Brown tan very fine sand and	Y    ✓ N		
	35	45	10	Reddish brown; clay silt and very fine sand 5%; <5% white gravel; high plasticity	Y    ✓ N		
	45	50	5	Med brown silt clay sand, <5% gravel, low to med plastic, clump forming, more	Y    ✓ N		
	50	60	10	Reddish med brown clay silt sand, <3% gravels, moist	Y    ✓ N		
	60	70	10	darker brown clay, some silt, more sand than above, very little gravel, med plastic	Y    ✓ N		
	70	98	28	Brown tight clay, small amt of sand, med plasticity, moist	✓ Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:				TOTAL ESTIMATED WELL YIELD (gpm):		
	5. TEST, RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
		MISCELLANEOUS INFORMATION: Logs adapted from on-site Vertex personnel. No pump test. Soil boring, plugged with Type I/II neat Cement, see attached Plugging Record					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	 Jackie D. Atkins (Oct 21, 2024 14:00 MDT)		Jackie D. Atkins		10/21/2024		
SIGNATURE OF DRILLER / PRINT SIGNEE NAME				DATE			

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
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LOCATION	WELL TAG ID NO	PAGE 2 OF 2	





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

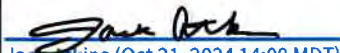
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-4(MW- D)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4850			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5315 Buena Vista Dr.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 00	SECONDS 59.23 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	57	55.51 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Sec. 27 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/05/2024	DRILLING ENDED 08/05/2024	DEPTH OF COMPLETED WELL (FT) 63	BORE HOLE DEPTH (FT) ±64	DEPTH WATER FIRST ENCOUNTERED (FT) ±55			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 55.7		DATE STATIC MEASURED 08/19/2024	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					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						
	+3	49	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	49	63	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.10"
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	1	±8.5	Quik Crete 5000 PSI	±1.3	from surface		
	1	44	±8.5	Type I/II Neat Cement	±12.9	auger		
	44	46	±8.5	Bentonite Pellets	±1.4	auger		
	46	63	±8.5	Silica Sand	±4.2	auger		

FOR OSE INTERNAL USE

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FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	16	16	Silt and sand, very fine, reddish grey, pink	Y    ✓ N	
	16	35	19	Silty sand, super fine, increasing gravels, subangular grey/whitish	Y    ✓ N	
	35	45	10	Silty sand, fine, increasing gravels, angular/rounded, pink/tan	Y    ✓ N	
	45	56	11	Sand and gravel, rounded, with clay ,dark brown	✓ Y    N	
	56	64	8	Sand, silt and clay, trace pebbles, grey/tan, wet	✓ Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Monitoring well. Above ground surface completion, till no longer needed. Logs adapted from on-site Vertex personnel. No pump test					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:					
	 Jackie D. Atkins (Oct 21, 2024 14:00 MDT)		Jackie D. Atkins		10/21/2024	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME				DATE	

FOR USE INTERNAL USE

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POD NO.

TRN NO.

LOCATION

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# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


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1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-5 (MW-E)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4850			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5315 Buena Vista Dr.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 00	SECONDS 58.68 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	58	1.53 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Sec. 27 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/06/2024	DRILLING ENDED 08/06/2024	DEPTH OF COMPLETED WELL (FT) 64		BORE HOLE DEPTH (FT) ±64	DEPTH WATER FIRST ENCOUNTERED (FT) ±57		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 57.2	DATE STATIC MEASURED 08/19/2024		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					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						
	+3	49	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	49	64	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.10"
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						
	0	1	±8.5	Quik Crete 5000 PSI	±1.8	from surface		
	1	44	±8.5	Type I/II Neat Cement	±18.0	auger		
	44	47	±8.5	Bentonite Pellets	±1.4	auger		
	47	64	±8.5	Silica Sand	±4.7	auger		

FOR OSE INTERNAL USE

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FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	11	11	Silt and sand, very fine, tan	Y    ✓ N	
	11	20	9	Silt and sand fine-grained, with gravel 15% sorted angularity, tan	Y    ✓ N	
	20	24	4	Sand, fine-grained, with gravel 25% angular rounded, light tan	Y    ✓ N	
	24	29	5	Sand, fine-grained, with gravel 25% angular rounded, red brown	Y    ✓ N	
	29	34	5	Clay, low plasticity, with fine-grained sand, red, brown	Y    ✓ N	
	34	39	5	Clay, medium/high plasticity, with fine-grained sand, red, brown	Y    ✓ N	
	39	44	5	Clay, low plasticity, with fine-grained sand, red, brown	Y    ✓ N	
	44	54	5	Clay, low plasticity, with fine-grained sand, red, little gravel, red brown	Y    ✓ N	
	54	64	10	Clay, low- medium plasticity, with fine-grained sand, red, little gravel, red brown	✓ Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Monitoring well. Above ground surface completion, till no longer needed. Logs adapted from on-site Vertex personnel. No pump test					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  <div style="display: flex; justify-content: space-between;"> <div>             Jackie D. Atkins (Oct 21, 2024 14:00 MDT)         </div> <div>Jackie D. Atkins</div> <div>10/21/2024</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div> <div>DATE</div> </div>					

FOR USE INTERNAL USE

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LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



# WELL RECORD & LOG

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OSE STATE OF NEW MEXICO  
12/17/24 12:59


1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-6 (MW- F)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4850			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5315 Buena Vista Dr.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 00	SECONDS 56.65 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	57	58.49 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Sec. 27 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/12/2024		DRILLING ENDED 08/12/2024		DEPTH OF COMPLETED WELL (FT) 72	BORE HOLE DEPTH (FT) ±76	DEPTH WATER FIRST ENCOUNTERED (FT) ±64	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 64.4	DATE STATIC MEASURED 08/19/2024	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger						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						
	+3	57	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	57	72	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.10"
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	1	±8.5	Quik Crete 5000 PSI	±1.8	from surface		
	1	52	±8.5	Type I/II Neat Cement	±18	auger		
	52	55	±8.5	Bentonite Pellets	±1.4	auger		
	55	72	±8.5	Silica Sand	±4.2	auger		

FOR OSE INTERNAL USE

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4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	9	9	Brown (red) silt sand, clay mix; homogenous; 5% small gravel (increasing)	Y ✓ N	
	9	14	5	Medium-dark brown silt/sand/clay mix; more sand 5% small gravel	Y ✓ N	
	14	19	5	14' cuttings Brown, whit nodules; sand/silt 95%, some clay (<5%); Friable	Y ✓ N	
	19	24	5	Medium, light brown; brown silt/sand mix matric; <5% ; sub 3 cm white pebble	Y ✓ N	
	24	30	6	Medium-brown; silt/clay/sand, no gravel, more clay; medium plasticity at this m	Y ✓ N	
	30	44	14	Matrix Brown, some grey; more clay, silt sand than above; <1% small white grav	Y ✓ N	
	44	54	10	Light brown more tan, 10% gravel white, med/hard dry strength, more clay	Y N	
	54	60	6	Gravel color change, grey white 25%, subangular to subrounded, 10% brown silt	Y ✓ N	
	60	76	16	more clay and sand, gritty feel, 20% gravel <3cm, more clay with depth high pla	✓ Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Monitoring well. Above ground surface completion, till no longer needed. Logs adapted from on-site Vertex personnel. No pump test					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:					
	 Jackie D. Atkins (Oct 21, 2024 14:00 MDT)		Jackie D. Atkins		10/21/2024	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME				DATE	

FOR OSE INTERNAL USE

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

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

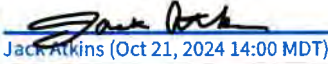
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-7 (MW- G)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4850			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5315 Buena Vista Dr.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 00	SECONDS 53.07 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
		LONGITUDE 103	57	58.81 W				
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Sec. 27 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/06/2024	DRILLING ENDED 08/06/2024	DEPTH OF COMPLETED WELL (FT) 64	BORE HOLE DEPTH (FT) ±64	DEPTH WATER FIRST ENCOUNTERED (FT) ±57			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 57.1		DATE STATIC MEASURED 08/19/2024	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					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						
	+3	49	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	49	64	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.10"
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	1	±8.5	Quik Crete 5000 PSI	±1.8	from surface		
	1	44	±8.5	Type I/II Neat Cement	±12.9	auger		
	44	47	±8.5	Bentonite Pellets	±1.4	auger		
	47	64	±8.5	Silica Sand	±4.2	auger		

FOR OSE INTERNAL USE

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

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	14	14	Silt and sand, very fine, more cohesive at depth, tan	Y    ✓ N	
	14	15	1	Gravels,(4-7cm) little sand, grey	Y    ✓ N	
	15	20	5	Silty sand, with gravel, sub angular, tan	Y    ✓ N	
	20	39	19	Gravel, 60% , with silty sand, sub angular, tan/ brown	Y    ✓ N	
	39	46	7	Sand, fine-grained, little clay, low plasticity, brownish red	Y    ✓ N	
	46	59	13	Clay, medium plasticity, increase sands, red	✓ Y    N	
	59	64	5	Clay, high plasticity, with silt, some gravel, red, brown, very hydrated	✓ Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:						
5. TEST, RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Monitoring well. Above ground surface completion, till no longer needed. Logs adapted from on-site Vertex personnel. No pump test					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  <div style="display: flex; justify-content: space-between;"> <div>               Jackie D. Atkins              Jack Atkins (Oct 21, 2024 14:00 MDT)           </div> <div>             10/21/2024           </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div> <div>DATE</div> </div>					

FOR OSE INTERNAL USE

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

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

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



## Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	3/17/2023
Site Location Name:	East Pecos Pipeline Spill	Report Run Date:	3/18/2023 12:03 AM
Client Contact Name:	Wes Matthews	API #:	
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

### Summary of Times

Arrived at Site	3/17/2023 7:22 AM
Departed Site	3/17/2023 1:53 PM

### Field Notes

- 7:37** Completed JSA on arrival. On site with Talon and Kelly Services to complete BH23-141.
- 8:29** Conducted safety meeting with Jim Raley, Talon, and Kelly Services.
- 8:32** Proceeded to extract last boring on BH22-141 from day before.
- 13:23** Advanced BH22-141 to 79 feet bgs. Majority of soil was silty red clay except for a sand layer between 48 and 55 feet bgs.
- 13:25** Field screening results for samples at 64, 69, 74, and 79 feet bgs were below NMOCD strictest criterion for chloride.

### Next Steps & Recommendations

1



## Daily Site Visit Report



## Site Photos

Viewing Direction: West



On north side of release area facing west.  
Beginning of day.

Viewing Direction: Southeast



On northwest edge of release area facing  
southeast. Beginning of day.

Viewing Direction: Southwest



Northwest edge of release area facing south.  
Continued advancing BH22-141.

Viewing Direction: North



Core for BH22-141.



## Daily Site Visit Report

Viewing Direction: North



Core for BH22-141.

Viewing Direction: North



Core for BH22-141.

Viewing Direction: South



West end of release area facing east.  
Completed BH22-141.

## 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 thin horizontal line.

Signature



## Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	8/5/2024
Site Location Name:	East Pecos Pipeline Spill	Report Run Date:	8/6/2024 9:42 AM
Client Contact Name:	Jim Raley	API #:	
Client Contact Phone #:	575-748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

### Summary of Times

Arrived at Site	8/5/2024 9:00 AM
Departed Site	7/5/2024 5:58 PM

### Field Notes

- 9:46** Met Jim Raley at gate on arrival. Unlocked gate prior to accessing site. Checked access roads and determined that west pipeline “bridge” was reinforced with wooden timbers but east “bridge” was not. Blocked east bridge with local debris to deter usage.
- 12:05** Drillers arrived at 10:43. Completed JSA and conducted safety meeting with Atkins drilling crew, PM, and Jim Raley. On site to drill 7 monitoring wells for groundwater monitoring.
- 17:32** Drilling at monitoring well D started at approximately 11:20. Collected logging samples at 0, 4, and 10 feet bgs and attempted intervals of 5 feet except where spoon was rejected by hard material. Samples were collected from rig spoons whenever possible. Cuttings were collected when spoons could not collect material.
- 17:42** Samples collected from monitoring well D at 0, 4, 10, 15 25-29, 30, 35, 40, 45, 55, and 59 feet bgs. Sample materials and depths were logged. Potential water surface was encountered at 53 feet bgs. The well was drilled further and casing installed. The 15-feet of screened casing is from 48 to 63 feet bgs.
- 17:44** Water surface was measured at 51.2 feet bgs after casing installation. Water surface will be checked again tomorrow to confirm the well depth and screened casing is adequate.
- 17:46** Monitoring well D is in place and cased but not grouted yet. Drilling crew will grout multiple wells at a time to improve efficiency. Drill rig was moved into place and monitoring well G to prepare for drilling the following day.
- 17:56** Locked gate prior to departure site.

## Daily Site Visit Report



### Next Steps & Recommendations

- 1 Continue drilling monitoring wells.



# Daily Site Visit Report



## Site Photos

**Viewing Direction: West**



Descriptive Photo - 1  
Viewing Direction: West  
Desc: East of monitoring well location D facing west.  
Created: 6/5/2024 12:01:53 PM  
Lat:32.018458, Long:-103.985307

East of monitoring well location D facing west.

**Viewing Direction: Southwest**



Descriptive Photo - 2  
Viewing Direction: Southwest  
Desc: Northeast of monitoring well location D facing southwest.  
Created: 6/5/2024 1:37:28 PM  
Lat:32.018558, Long:-103.985414

Northeast of monitoring well location D facing southwest.

**Viewing Direction: Southwest**



Descriptive Photo - 3  
Viewing Direction: Southwest  
Desc: Northeast of monitoring well location D facing southwest.  
Created: 6/5/2024 3:00:28 PM  
Lat:32.018571, Long:-103.985311

Northeast of monitoring well location D facing southwest.

**Viewing Direction: North**



Descriptive Photo - 4  
Viewing Direction: North  
Desc: South of monitoring well D facing north. Casing installed.  
Created: 6/5/2024 3:01:24 PM  
Lat:32.018571, Long:-103.985311

South of monitoring well D facing north. Casing installed.



## Daily Site Visit Report

Viewing Direction: North



South of location for monitoring well G facing north. Rig in place for drilling following day.

Viewing Direction: East



West of gate facing east. Locked gate at departure.

## 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.

Signature





## Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	8/7/2024
Site Location Name:	East Pecos Pipeline Spill	Report Run Date:	8/8/2024 2:53 AM
Client Contact Name:	Jim Raley	API #:	
Client Contact Phone #:	575-748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

### Summary of Times

Arrived at Site	8/7/2024 7:25 AM
Departed Site	8/7/2024 6:13 PM

### Field Notes

- 7:50** Completed JSA on arrival. On site to continue drilling monitoring wells. Swept remaining drill locations within magnetic locator prior to ground disturbance.
- 11:27** Conducted safety meeting when drillers arrived. Drillers resumed advancement of monitoring well E.
- 14:53** Collected and logged samples throughout drilling of monitoring well E. Samples collected at 20, 24, 29, 34, 39, 44, 49, 50, 54, 59, and 64 feet bgs. Water surface not encountered. Well was left to equilibrate while drilling moved back to monitoring well G.
- 15:03** Water surface at monitoring well G too low for casing depth while total depth was 59 feet bgs. Drilling crew removed casing and increased depth to 64 feet bgs. A sample from 64 feet bgs was collected and logged. Casing was replaced and sand was placed at bottom around screened area from 47 to 64 feet bgs. Screened interval was 15 feet.
- 18:00** Drilling crew installed casing in monitoring well E. At total depth 64 feet, the water depth was only 59 feet. The casing may need to be removed and depth increased. Water depth will be measured again the following day.
- 18:03** Monitoring well B was advanced to 39 feet bgs before shutting down for the day. Samples were collected and logged throughout drilling. Samples were collected at 0, 4, 10, 19, 29, and 39 feet bgs. Drilling will continue the following day.
- 18:13** Locked gate prior to departure.

## Daily Site Visit Report



### Next Steps & Recommendations

- 1 Continue drilling monitoring well B.
- 2 Check water depth at monitoring well E and increase borehole depth if needed.
- 3 Drill remaining monitoring wells.

## Daily Site Visit Report



## Site Photos

Viewing Direction: East



West of gate facing east. Gate locked at arrival.

Viewing Direction: East



West of monitoring well E facing east.

Viewing Direction: Southeast



Northwest of monitoring well E facing southeast.

Viewing Direction: Southeast



Northwest of monitoring well G facing southeast. Drilling crew reset casing.



## Daily Site Visit Report

Viewing Direction: North



South of monitoring well G facing north. Casing reinstalled.

Viewing Direction: South



North of monitoring well E facing south. Installed casing, possibly temporary.

Viewing Direction: Northwest



Southeast of monitoring well B facing northwest.

Viewing Direction: East



West of gate facing east at departure.

## 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.

Signature





## Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	8/31/2024
Site Location Name:	East Pecos Pipeline Spill	Report Run Date:	9/1/2024 10:52 AM
Client Contact Name:	Jim Raley	API #:	
Client Contact Phone #:	575-748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

### Summary of Times

Arrived at Site	8/31/2024 8:21 AM
Departed Site	8/31/2024 7:09 PM

### Field Notes

**8:55** Completed JSA on arrival. On site to purge monitoring wells and collect water samples.

**9:02** Monitoring wells to be purged (three volumes) with bailer. Samples to be collected with bailer after purges and subsequent recovery. Purging and sampling procedures per EPA LSASDPROC-301-R6.

**12:55** Used interface probe to measure distance from east edge of top inside of casing to water depth at MW24-B. Initial depth from measurement point was 64.8 feet bgs. Depth was measured at 74.4 feet resulting in a well volume (water column) of 9.6 feet or 1.54 gallons with a 2 inch casing. Initially bailed with intent of measuring volume via change in water depth. Water depth did not change by more than 0.1 feet throughout testing. After removal of approximately 2.5 gallons of water, a 5- gallon bucket was used to measure purge volume. The target "three well volumes" was 4.6 gallons. Once the 5-gallon bucket was filled, the bailer was used to collect water samples from the purged well. The well volume for the purge of MW24-B was approximately five well volumes instead of three. Samples were placed in ice chest as soon as containers were filled.

**20:39** Used interface probe to measure depths to water surface and bottom from top of inside east edge of casing at MW24-A. From casing edge, depths to water and bottom were 68.5 and 80.55 feet, respectively. Water column was 11.7 feet and well volume was approximately 1.872 gallons. Purged approximately 5.8 gallons from well with no change to water depth of 68.85 feet. Additional water was removed with bailer after purge to fill sample bottles, which were put on ice immediately.



## Daily Site Visit Report

- 20:38** Used interface probe to measure depths to water surface and bottom from top of inside east edge of casing at MW24-E. From casing edge, depths to water and bottom were 55.45 and 67.65 feet, respectively. Water column was 12.2 feet and well volume was approximately 1.95 gallons. Purged approximately 6 gallons from well with corresponding increase water depth to 60.19 feet bgs. Waters level recovered to 88.2% prior to sampling (56.89 feet bgs). Additional water was removed with bailer after purge to fill sample bottles, which were put on ice immediately.
- 20:37** Used interface probe to measure depths to water surface and bottom from top of inside east edge of casing at MW24-D. From casing edge, depths to water and bottom were 67.70 and 56.06 feet, respectively. Water column was 11.64 feet and well volume was approximately 1.86 gallons. Purged approximately 4 gallons before work was halted for the day. Will restart tomorrow.

### Next Steps & Recommendations

- 1 Continue purging and water sampling remaining monitoring wells.

# Daily Site Visit Report



## Site Photos

Viewing Direction: East



West of gate facing east. Locked on arrival.

Viewing Direction: West



East of MW24-B facing west.

Viewing Direction: East



West of MW24-A facing east. Rain started after ~12:30.

Viewing Direction: East



West of MW24-E facing east.



## Daily Site Visit Report

Viewing Direction: West



East of MW24-D facing west.

Viewing Direction: East



West of gate facing east. Gate locked at departure.



## 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 font.



## Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	9/1/2024
Site Location Name:	East Pecos Pipeline Spill	Report Run Date:	9/2/2024 1:08 AM
Client Contact Name:	Jim Raley	API #:	
Client Contact Phone #:	575-748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

### Summary of Times

Arrived at Site	9/1/2024 7:08 AM
Departed Site	9/1/2024 4:15 PM

### Field Notes

- 7:39** Completed JSA on arrival. On site to continue purging and sampling monitoring wells.
- 7:43** Monitoring wells to be purged (three volumes) with bailer. Samples to be collected with bailer after purges and subsequent recovery. Purging and sampling procedures per EPA LSASDPROC-301-R6. Water removed from wells to be disposed of within fenced remediation area.
- 14:48** Used interface probe to measure depths to water surface and bottom from top of inside east edge of casing at MW24-D. From casing edge, depths to water and bottom were 56.09 and 68.00 feet, respectively. Water column was 11.91 feet and well volume was approximately 1.91 gallons. Target total purge volume was 5.84 gallons. Purged approximately 6 gallons from well over two sessions between recovery periods. Water level recovered to 99.9% prior to sampling (56.1 feet bgs). Additional water was removed with bailer after purge to fill sample bottles, which were put on ice immediately.
- 13:39** Used interface probe to measure depths to water surface and bottom from top of inside east edge of casing at MW24-G. From casing edge, depths to water and bottom were 57.23 and 68.80 feet, respectively. Water column was 11.57 feet and well volume was approximately 1.85 gallons. Target total purge volume was 5.64 gallons. Purged approximately 6.0 gallons from well to corresponding increase water depth of 65.70 feet bgs. Water level recovered to 98.8% prior to sampling (57.37 feet bgs). Additional water was removed with bailer after purge to fill sample bottles, which were put on ice immediately.



## Daily Site Visit Report

**14:06** Used interface probe to measure depths to water surface and bottom from top of inside east edge of casing at MW24-F. From casing edge, depths to water and bottom were 63.88 and 76.5 feet, respectively. Water column was 12.62 feet and well volume was approximately 2.02 gallons. Target total purge volume was 6.18 gallons. Purged approximately 7.0 gallons from well. Water level recovered to 96.6% prior to sampling (64.31 feet bgs). Additional water was removed with bailer after purge to fill sample bottles, which were put on ice immediately.

**15:55** Monitoring well MW24-C had not been completed. Used interface probe to measure depths to water surface and bottom from top of inside east edge of casing at MW24-C. From casing edge, depths to water and bottom were 100.83 and 101.90 feet, respectively. Water column was 1.07 feet. Attempted to purge with bailer but was unable to collect a sample. Sample collection at MW24-C cannot proceed until well depth is increased.

**15:56** Closed fence around release area.

**16:14** Locked gate prior to departure.

### Next Steps & Recommendations

1

## Daily Site Visit Report



## Site Photos

Viewing Direction: East



West of gate facing east. Gate locked at arrival.

Viewing Direction: West



Northeast of MW24-D facing southwest.

Viewing Direction: East



West of MW24-G facing east.

Viewing Direction: East



West of MW24-F facing east.





## Daily Site Visit Report

Viewing Direction: South



North of MW24-C facing south.

Viewing Direction: East



West of decontamination area facing east.  
Closed fence.

Viewing Direction: East



West of gate facing east. Gate locked at  
departure.

## 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 font.

Signature

## **APPENDIX D – Monitor Well Survey Data**



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

09/05/2024

Kent Stallings  
Senior Geologist  
Vertex Resource Services, Inc.  
3101 Boyd Drive,  
Carlsbad, NM 88220

Emailed to: [kstallings@vertexresource.com](mailto:kstallings@vertexresource.com) on date of this letter.

Re: East Pecos Pipeline

We have completed the survey of the newly installed monitor wells (MW) at East Pecos Pipeline, Eddy County, New Mexico.

The following table summarizes the coordinate and elevation data for the monitor well locations, top-of- casing (TOC) north side on site. Location C (LOC-C) is a temporary monitor well.

Description	Northing (USft)	Easting (USft)	Latitude (DD)	Longitude (DD)	Elevation Top of Casing (USft)	Elevation Adjacent Ground (USft)
MW-A	370427.60	654485.25	32.01786011	-103.96825685	2884.04	2881.34
MW-B	370249.15	655094.26	32.01736389	-103.96629384	2880.73	2877.52
LOC-C	370149.82	654718.35	32.01709435	-103.96750778	2879.32	2876.67
MW-D	369918.80	655366.37	32.01645324	-103.96541951	2877.98	2874.73
MW-E	369862.27	654847.65	32.01630268	-103.96709375	2879.59	2876.38
MW-F	369657.21	655110.31	32.01573654	-103.96624854	2875.54	2872.78
MW-G	369295.61	655083.86	32.01474277	-103.96633784	2874.79	2871.44
TBM	369656.62	655109.69	32.01573492	-103.96625055	2872.84	--
F258	366349.18	643861.69	32.00674275	-104.00257401	2883.21	--

Horizontal coordinates are shown in New Mexico State Plane East Zone Grid (NAD83) in US survey feet. Horizontal coordinates are scaled to the ground using a combined scale factor of 1.00021010413447.

Elevations (orthometric heights), shown in US survey feet established by use a closed survey level loop tied to a newly installed temporary benchmark (TBM). TBM is tied using GPS RTK observations to an NGS Benchmark "F 258" that has a published elevation of 2883.21'. Datum for vertical data is NAVD88.

A handwritten signature in blue ink, appearing to read "Ryan C Cortez", is written over a horizontal line.

Ryan C Cortez, NMPS 22761

9/5/2024  
Date (Signed)





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



10/30/2024, 8:18:31 AM

GIS WATERS PODs

- Active
- Pending

OSE District Boundary

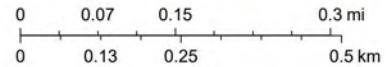
New Mexico State Trust Lands

Subsurface Estate

NHD Flowlines

Stream River

1:9,028



Esri, HERE, IPC, Esri, HERE, Garmin, IPC, Maxar

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 04653 POD6</a>		CUB	ED	SE	SE	SE	22	26S	29E	597782.1	3543171.9		482	74	67	7
<a href="#">C 04653 POD5</a>		CUB	ED	SE	SE	SE	22	26S	29E	597784.0	3543186.7		497	72	67	5
<a href="#">C 03605 POD1</a>		CUB	ED	SE	NE	SW	27	26S	29E	596989.7	3541983.3		967	45	0	45
<a href="#">C 04630 POD1</a>		CUB	ED	SW	SE	SW	22	26S	29E	596792.0	3543275.4		999			
<a href="#">C 01354 X-3</a>		CUB	ED	NE	NW	SW	23	26S	29E	598323.2	3543837.6		1322	170		
<a href="#">C 04876 POD4</a>		CUB	ED	NW	NE	SE	34	26S	29E	597590.0	3541141.9		1575	100		
<a href="#">C 04876 POD3</a>		CUB	ED	SW	NE	SE	34	26S	29E	597553.1	3541126.4		1592	100		
<a href="#">C 04876 POD2</a>		CUB	ED	SW	NE	SE	34	26S	29E	597496.8	3541123.7		1598	100		
<a href="#">C 04876 POD6</a>		CUB	ED	SW	NE	SE	34	26S	29E	597589.6	3541101.8		1615	100		
<a href="#">C 04823 POD1</a>		CUB	ED	SW	NE	SE	34	26S	29E	597531.0	3541085.0		1634	45		
<a href="#">C 04876 POD7</a>		CUB	ED	SW	NE	SE	34	26S	29E	597512.9	3541081.4		1639	100		
<a href="#">C 04876 POD1</a>		CUB	ED	SW	NE	SE	34	26S	29E	597483.0	3541075.3		1647	100		
<a href="#">C 04876 POD5</a>		CUB	ED	NW	SE	SE	34	26S	29E	597608.6	3541058.6		1658	100		
<a href="#">C 04876 POD8</a>		CUB	ED	NW	SE	SE	34	26S	29E	597634.8	3541041.6		1675	100		
<a href="#">C 04823 POD2</a>		CUB	ED	NW	SE	SE	34	26S	29E	597501.0	3541035.1		1686	50		
<a href="#">C 04823 POD4</a>		CUB	ED	NW	SE	SE	34	26S	29E	597564.1	3541020.0		1697	60	49	11
<a href="#">C 04876 POD9</a>		CUB	ED	NW	SE	SE	34	26S	29E	597640.5	3541017.6		1699	100		
<a href="#">C 04823 POD8</a>		CUB	ED	NW	SE	SE	34	26S	29E	597583.1	3541009.4		1708	35		
<a href="#">C 04823 POD7</a>		CUB	ED	NW	SE	SE	34	26S	29E	597560.6	3541000.9		1717	35		
<a href="#">C 04823 POD6</a>		CUB	ED	NW	SE	SE	34	26S	29E	597529.2	3540996.6		1722	55		
<a href="#">C 04823 POD10</a>		CUB	ED	SW	SE	SE	34	26S	29E	597568.4	3540985.2		1732		35	
<a href="#">C 02038</a>		C	ED	SW	NE	SE	26	26S	29E	599204.0	3541992.0 *		1741	200		
<a href="#">C 04823 POD12</a>		CUB	ED	SW	SE	SE	34	26S	29E	597571.4	3540971.7		1746	55		
<a href="#">C 04876 POD16</a>		CUB	ED	SW	SE	SE	34	26S	29E	597493.7	3540975.3		1746	100		
<a href="#">C 04823 POD9</a>		CUB	ED	SW	SE	SE	34	26S	29E	597506.3	3540973.6		1747	50		
<a href="#">C 04823 POD11</a>		CUB	ED	SW	SE	SE	34	26S	29E	597529.8	3540961.8		1757	35		
<a href="#">C 04876 POD11</a>		CUB	ED	SW	SE	SE	34	26S	29E	597612.0	3540929.3		1787	100		

(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 04876 POD13</a>		CUB	ED	SW	SE	SE	34	26S	29E	597556.9	3540928.2		1789	100		
<a href="#">C 04876 POD10</a>		CUB	ED	SW	SE	SE	34	26S	29E	597651.4	3540923.2		1794	100		
<a href="#">C 04876 POD15</a>		CUB	ED	SW	SE	SE	34	26S	29E	597504.4	3540925.8		1794	100		
<a href="#">C 04876 POD12</a>		CUB	ED	SW	SE	SE	34	26S	29E	597598.7	3540918.4		1798	100		
<a href="#">C 04876 POD14</a>		CUB	ED	SW	SE	SE	34	26S	29E	597533.6	3540916.9		1802	100		

Average Depth to Water: **43 feet**

Minimum Depth: **0 feet**

Maximum Depth: **67 feet**

**Record Count:** 32

**UTM Filters (in meters):**

**Easting:** 597621

**Northing:** 3542717

**Radius:** 002000

\* 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.

10/30/24 8:02 AM MST


Water Column/Average Depth to Water



# 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	Tw	Rng	X	Y	Map
NA	C 04653 POD6	SE	SE	SE	22	26S	29E	597782.1	3543171.9	

\* UTM location was derived from PLSS - see Help

Driller License:	1249	Driller Company:	ATKINS ENGINEERING ASSOC. INC.		
Driller Name:	JACKIE D ATKINS				
Drill Start Date:	2022-07-25	Drill Finish Date:	2022-07-25	Plug Date:	2022-07-26
Log File Date:	2022-08-18	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:		Depth Well:	74	Depth Water:	67

## Water Bearing Stratifications:

Top	Bottom	Description
64	74	Limestone/Dolomite/Chalk

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 04653	Subbasin:	CUB	Cross Reference:
Primary Purpose:	EXP EXPLORATION			
Primary Status:	PMT Permit			
Total Acres:		Subfile:	Header:	
Total Diversion:	0.000	Cause/Case:		
Owner:	STEPHENS & JOHNSON OPERATING			
Contact:	WILLIAJM (MIKE) KINCAID			

## 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="#">729202</a>		EXPL	2022-07-11	PMT	LOG	C 04653 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 04653 POD1</a>	NA		SE	SE	SE	22	26S	29E	597826.1	3543180.3		
<a href="#">C 04653 POD2</a>	NA		SE	SE	SE	22	26S	29E	597825.1	3543169.8		
<a href="#">C 04653 POD3</a>	NA		SE	SE	SE	22	26S	29E	597805.2	3543169.0		
<a href="#">C 04653 POD4</a>	NA		SE	SE	SE	22	26S	29E	597805.8	3543182.9		
<a href="#">C 04653 POD5</a>	NA	Shallow	SE	SE	SE	22	26S	29E	597784.0	3543186.7		
<a href="#">C 04653 POD6</a>	NA	Shallow	SE	SE	SE	22	26S	29E	597782.1	3543171.9		

\* 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.



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

July 8, 2022

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4653 Pod-5-6

To whom it may concern:

Attached please find a well log & record for C-4653 POD-5-6 , and Plugging Record for C-4653 POD-6. , in duplicate. C-4653 POD 1-4 , will not be used, please note that these can be canceled.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton". The signature is written in a cursive, flowing style.

Lucas Middleton

Enclosures: as noted above

RECEIVED JUL 18 2022 10:57



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

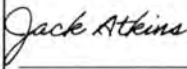
1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-6 (TW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4653			
	WELL OWNER NAME(S) Stephens & Johnson Operating Co.				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS PO BOX 2249				CITY Wichita Falls	STATE TX	ZIP 7307-2249	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 1	SECONDS 13.71	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	57	52.14	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE SE SE Sec. 22 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 7/25/2022		DRILLING ENDED 7/25/2022		DEPTH OF COMPLETED WELL (FT) Soil Boring		BORE HOLE DEPTH (FT) ±74	DEPTH WATER FIRST ENCOUNTERED (FT) ±67
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 67.1		DATE STATIC MEASURED 7/26/2022
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger						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						
	0	74	±6.5	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO.	C-4653	POD NO.	6	TRN NO.	729202
LOCATION	26S-29E-22 444			WELL TAG ID NO.	PAGE 1 OF 2

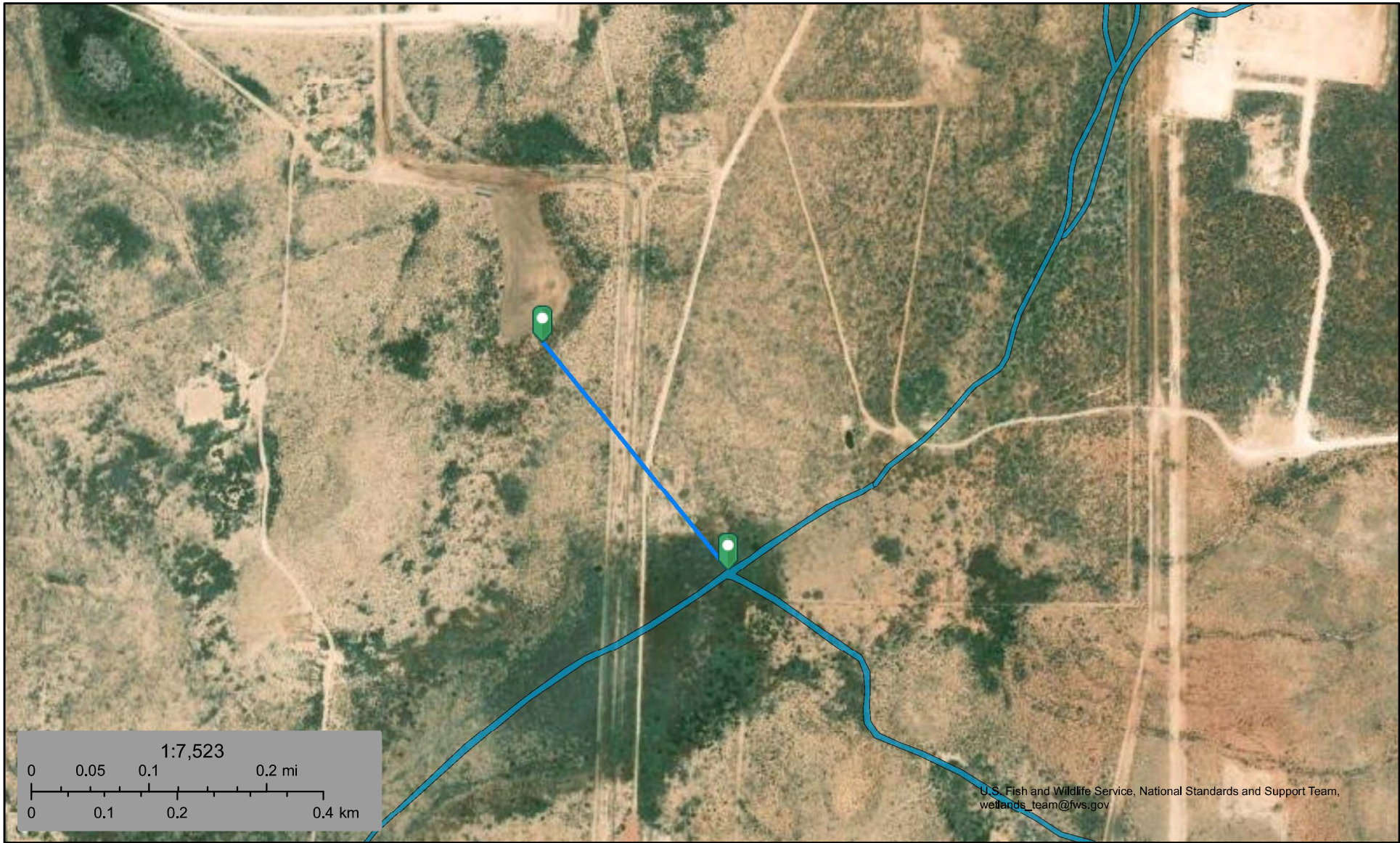


4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	14	14	Clay, Medium Plastic, with sand and caliche, Brown	Y    ✓ N	
	14	30	16	Sand, medium/fine grained, poorly graded, increasing clay, Tan	Y    ✓ N	
	30	44	14	Clay, Medium Plastic, with sand and caliche, gypsum Reddish Brown	Y    ✓ N	
	44	54	10	Sand, medium/fine grained, poorly graded, with clay, Tan	Y    ✓ N	
	54	60	6	Clay, Stiff, Medium Plastic, with brown sand Reddish Brown	Y    ✓ N	
	60	64	4	Clay, Stiff, Medium Plastic, with cemented sand, Reddish Brown	Y    ✓ N	
	64	74	10	Clay, Low Plastic, with sand and caliche, gypsum Reddish Brown, wet	✓ Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:				TOTAL ESTIMATED WELL YIELD (gpm):            0.00	
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.			
MISCELLANEOUS INFORMATION: Grouted from total depth to surface using augers as tremie Plugged using Type I/II neat cement (5.2 gallons per 94 lb. sack)						
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt, Lucas Middleton						
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  <div style="display: flex; justify-content: space-between;"> <div>             SIGNATURE OF DRILLER / PRINT SIGNEE NAME         </div> <div>           Jackie D. Atkins            DATE         </div> </div>					

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO. C-4653	POD NO. 6	TRN NO. 729202	
LOCATION 265.29E 22-444		WELL TAG ID NO.	PAGE 2 OF 2



Intermittent 1,116 feet



October 31, 2024

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

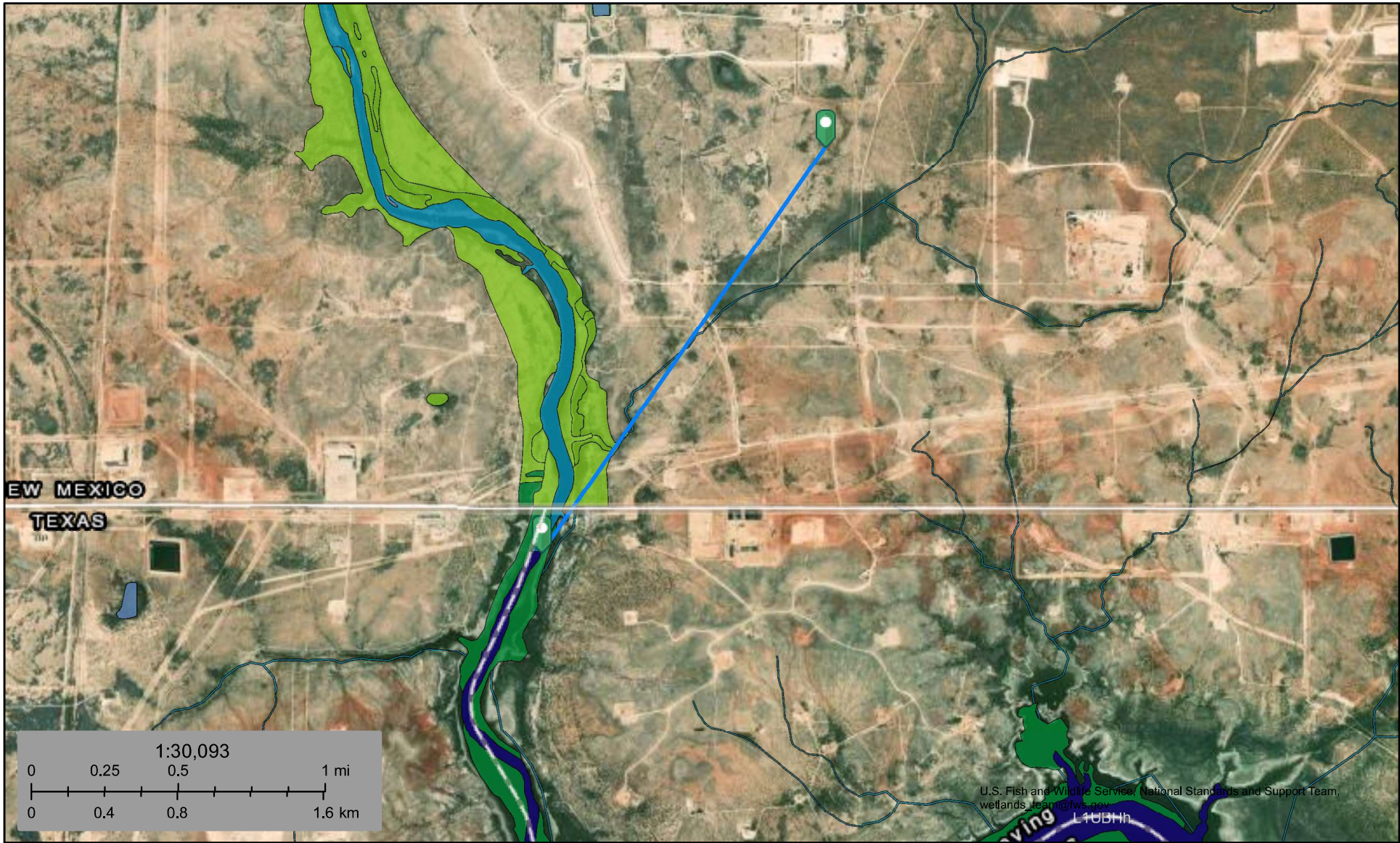
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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



Lake 7,524 feet



October 31, 2024

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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

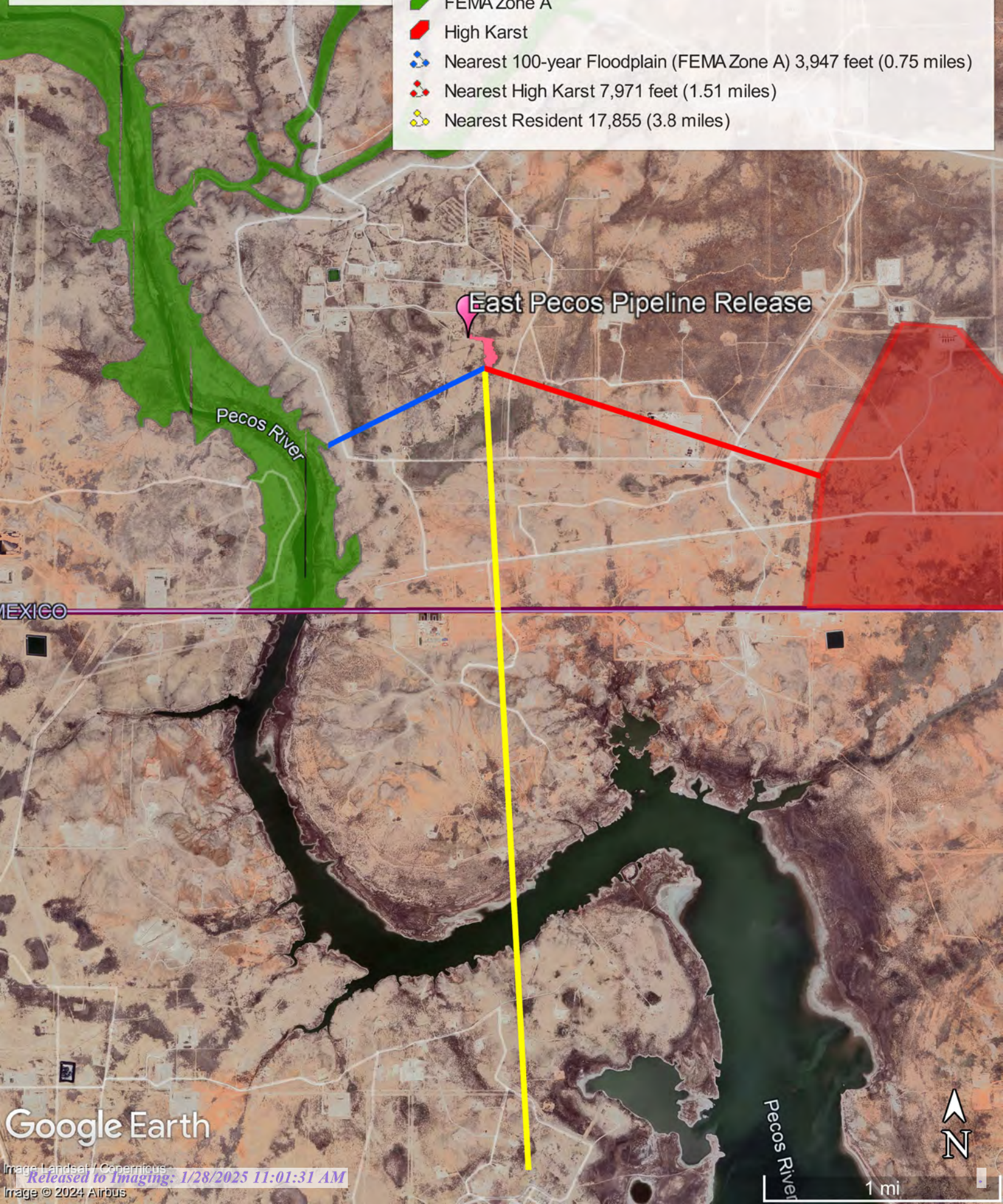


# East Pecos Pipeline Spill

Proximity Map

## Legend

- East Pecos Pipeline Release
- FEMA Zone A
- High Karst
- Nearest 100-year Floodplain (FEMA Zone A) 3,947 feet (0.75 miles)
- Nearest High Karst 7,971 feet (1.51 miles)
- Nearest Resident 17,855 (3.8 miles)



MEXICO

Google Earth



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 04719</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04719 POD1</a>	NA				NW	SE	NE	27	26S	29E	597646.9	3542706.2		28.1
<a href="#">C 04718</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04718 POD1</a>	NA				SW	NE	NE	27	26S	29E	597596.2	3542772.5		60.8
<a href="#">C 04850</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04850 POD5</a>	NA				SW	SE	NE	27	26S	29E	597557.8	3542675.5		75.6
					ED	<a href="#">C 04850 POD2</a>	NA				SW	NE	NE	27	26S	29E	597651.1	3542787.2		76.4
<a href="#">C 04716</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04716 POD1</a>	NA				NW	SE	NE	27	26S	29E	597638.9	3542637.4		81.6
<a href="#">C 04850</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04850 POD3</a>	NA				SW	NE	NE	27	26S	29E	597556.7	3542786.3		94.5
					ED	<a href="#">C 04850 POD4</a>	NA				NE	SW	NE	27	26S	29E	597746.7	3542677.3		131.8
					ED	<a href="#">C 04850 POD6</a>	NA				SW	SE	NE	27	26S	29E	597653.3	3542565.5		154.9
<a href="#">C 04717</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04717 POD1</a>	NA				SE	NW	NE	27	26S	29E	597489.9	3542803.2		156.9
<a href="#">C 04850</a>	CUB	MON	0.000	DEVON ENERGY	ED	<a href="#">C 04850 POD1</a>	NA				SE	SW	NE	27	26S	29E	597654.3	3542454.7		264.4
					ED	<a href="#">C 04850 POD7</a>	NA				SW	SE	NE	27	26S	29E	597654.3	3542454.7		264.4
<a href="#">C 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354 X-7</a>					NW	NE	27	26S	29E	597289.0	3542964.0 *		413.8	
<a href="#">C 01355</a>	CUB	EXP	0.000	GEORGE ROSS	ED	<a href="#">C 01355 X-7</a>					NW	NE	27	26S	29E	597289.0	3542964.0 *		413.8	
<a href="#">C 04653</a>	CUB	EXP	0.000	STEPHENS & JOHNSON OPERATING	ED	<a href="#">C 04653 POD6</a>	NA			Shallow	SE	SE	SE	22	26S	29E	597782.1	3543171.9		482.6
					ED	<a href="#">C 04653 POD3</a>	NA				SE	SE	SE	22	26S	29E	597805.2	3543169.0		488.1
					ED	<a href="#">C 04653 POD2</a>	NA				SE	SE	SE	22	26S	29E	597825.1	3543169.8		496.7
					ED	<a href="#">C 04653 POD5</a>	NA				Shallow	SE	SE	SE	22	26S	29E	597784.0	3543186.7	
					ED	<a href="#">C 04653 POD4</a>	NA				SE	SE	SE	22	26S	29E	597805.8	3543182.9		501.2
					ED	<a href="#">C 04653 POD 1</a>	NA				SE	SE	SE	22	26S	29E	597826.1	3543180.3		506.7
<a href="#">C 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354 X</a>					SW	NW	26	26S	29E	598093.0	3542499.0 *		519.9	
<a href="#">C 01355</a>	CUB	EXP	0.000	GEORGE ROSS	ED	<a href="#">C 01355 X</a>					SW	NW	26	26S	29E	598093.0	3542499.0 *		519.9	
<a href="#">C 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354 X-4</a>					SE	SE	22	26S	29E	597713.0	3543339.0 *		628.8	
<a href="#">C 01355</a>	CUB	EXP	0.000	GEORGE ROSS	ED	<a href="#">C 01355 X-4</a>					SE	SE	22	26S	29E	597713.0	3543339.0 *		628.8	
<a href="#">C 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354</a>					NW	SE	27	26S	29E	597263.0	3542160.0 *		662.1	
<a href="#">C 01355</a>	CUB	EXP	0.000	GEORGE ROSS	ED	<a href="#">C 01355</a>					NW	SE	27	26S	29E	597263.0	3542160.0 *		662.1	
<a href="#">C 01570</a>	C	STK	3.000	WALTER B PASCHAL	ED	<a href="#">C 01570</a>					NW	SW	26	26S	29E	598077.0	3542093.0 *		772.9	
<a href="#">C 04666</a>	CUB	MON	0.000	COTERRA ENERGY COMPANY	ED	<a href="#">C 04666 POD 2</a>	NA				SE	NE	SW	27	26S	29E	596960.9	3542036.3		948.2
<a href="#">C 03605</a>	CUB	MON	0.000	CIMAREX	ED	<a href="#">C 03605 POD1</a>					SE	NE	SW	27	26S	29E	596989.7	3541983.3		967.9
<a href="#">C 04630</a>	CUB	EXP	0.000	DEVON ENERGY	ED	<a href="#">C 04630 POD1</a>	NA				SW	SE	SW	22	26S	29E	596792.0	3543275.4		999.5
<a href="#">C 04666</a>	CUB	MON	0.000	COTERRA ENERGY COMPANY	ED	<a href="#">C 04666 POD 1</a>	NA				SE	NE	SW	27	26S	29E	596905.8	3542010.2		1,005.5
<a href="#">C 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354 X-6</a>					NW	SE	22	26S	29E	597297.0	3543769.0 *		1,100.8	
<a href="#">C 01355</a>	CUB	EXP	0.000	GEORGE ROSS	ED	<a href="#">C 01355 X-6</a>					NW	SE	22	26S	29E	597297.0	3543769.0 *		1,100.8	
					ED	<a href="#">C 01355 X-3</a>					NW	SW	23	26S	29E	598121.0	3543721.0 *		1,121.6	
<a href="#">C 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354 X-3</a>					NE	NW	SW	23	26S	29E	598323.2	3543837.6		1,322.4
<a href="#">C 03481</a>	C	PRO	0.000	ROSS-BRANTLEY JOINT VENTURE	ED	<a href="#">C 01354 X-3</a>					NE	NW	SW	23	26S	29E	598323.2	3543837.6		1,322.4

		(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 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354 X-5</a>					SW	SW	SW	22	26S	29E	596462.5	3543354.8		1,322.5
<a href="#">C 03479</a>	C	PRO	0.000	ROSS-BRANTLEY JOINT VENTURE	ED	<a href="#">C 01354 X-5</a>					SW	SW	SW	22	26S	29E	596462.5	3543354.8		1,322.5
<a href="#">C 01355</a>	CUB	EXP	0.000	GEORGE ROSS	ED	<a href="#">C 01355 X-5</a>					SW	SW	22	26S	29E	596479.0	3543421.0 *		1,341.6	
<a href="#">C 01354</a>	CUB	SRO	0.000	RECOVERY WATER COMPANY	ED	<a href="#">C 01354 X-2</a>					NW	SE	26	26S	29E	598895.0	3542093.0 *		1,418.6	
<a href="#">C 01355</a>	CUB	EXP	0.000	GEORGE ROSS	ED	<a href="#">C 01355 X-2</a>					NW	SE	26	26S	29E	598895.0	3542093.0 *		1,418.6	
<a href="#">C 01569</a>	C	STK	3.000	WALTER B PASCHAL	ED	<a href="#">C 01569</a>					SE	SE	NW	22	26S	29E	596978.0	3544093.0 *		1,518.8
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD4</a>	NA			Shallow	NW	NE	SE	34	26S	29E	597590.0	3541141.9		1,575.4
<a href="#">C 04872</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04872 POD8</a>	NA				SW	NE	NW	35	26S	39E	598445.1	3541370.6		1,578.6
					ED	<a href="#">C 04872 POD4</a>	NA				SW	NE	NW	35	26S	39E	598452.7	3541372.5		1,581.0
					ED	<a href="#">C 04872 POD15</a>	NA				SW	NE	NW	35	26S	39E	598464.8	3541368.6		1,590.7
					ED	<a href="#">C 04872 POD9</a>	NA				SE	NE	NW	35	26S	39E	598478.1	3541375.5		1,591.9
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD3</a>	NA			Shallow	SW	NE	SE	34	26S	29E	597553.1	3541126.4		1,592.0
					ED	<a href="#">C 04876 POD2</a>	NA			Shallow	SW	NE	SE	34	26S	29E	597496.8	3541123.7		1,598.1
<a href="#">C 04872</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04872 POD5</a>	NA				SE	NE	NW	35	26S	39E	598494.4	3541372.0		1,603.7
					ED	<a href="#">C 04872 POD14</a>	NA				SE	NE	NW	35	26S	39E	598503.6	3541372.1		1,608.6
					ED	<a href="#">C 04872 POD10</a>	NA				SE	NE	NW	35	26S	39E	598525.8	3541383.1		1,611.8
					ED	<a href="#">C 04872 POD3</a>	NA				SE	NE	NW	35	26S	39E	598523.0	3541378.1		1,614.4
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD6</a>	NA			Shallow	SW	NE	SE	34	26S	29E	597589.6	3541101.8		1,615.5
<a href="#">C 04872</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04872 POD2</a>	NA				SE	NE	NW	35	26S	39E	598541.8	3541380.4		1,623.1
					ED	<a href="#">C 04872 POD1</a>	NA				SE	NE	NW	35	26S	39E	598559.9	3541384.9		1,629.7
<a href="#">C 04823</a>	CUB	MON	0.000	WPX	ED	<a href="#">C 04823 POD1</a>	NA				SW	NE	SE	34	26S	29E	597531.0	3541085.0		1,634.5
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD7</a>	NA			Shallow	SW	NE	SE	34	26S	29E	597512.9	3541081.4		1,639.2
<a href="#">C 04872</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04872 POD13</a>	NA				SE	NE	NW	35	26S	39E	598572.0	3541381.4		1,639.6
					ED	<a href="#">C 04872 POD6</a>	NA				SE	NE	NW	35	26S	29E	598581.4	3541386.4		1,641.0
					ED	<a href="#">C 04872 POD11</a>	NA				SE	NE	NW	35	26S	39E	598595.0	3541393.0		1,643.7
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD1</a>	NA			Shallow	SW	NE	SE	34	26S	29E	597483.0	3541075.3		1,647.5
<a href="#">C 04872</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04872 POD7</a>	NA				NE	SE	NW	35	26S	29E	598613.9	3541391.0		1,656.5
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD5</a>	NA			Shallow	NW	SE	SE	34	26S	29E	597608.6	3541058.6		1,658.4
<a href="#">C 04872</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04872 POD12</a>	NA				SE	NE	NW	35	26S	39E	598619.4	3541392.3		1,658.8
<a href="#">C 04823</a>	CUB	MON	0.000	WPX	ED	<a href="#">C 04823 POD3</a>	NA				NW	SE	SE	34	26S	29E	597585.1	3541046.4		1,671.0
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD8</a>	NA			Shallow	NW	SE	SE	34	26S	29E	597634.8	3541041.6		1,675.5
<a href="#">C 04823</a>	CUB	MON	0.000	WPX	ED	<a href="#">C 04823 POD2</a>	NA				NW	SE	SE	34	26S	29E	597501.0	3541035.1		1,686.2
					ED	<a href="#">C 04823 POD4</a>	NA			Shallow	NW	SE	SE	34	26S	29E	597564.1	3541020.0		1,698.0
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD9</a>	NA			Shallow	NW	SE	SE	34	26S	29E	597640.5	3541017.6		1,699.5
<a href="#">C 04823</a>	CUB	MON	0.000	WPX	ED	<a href="#">C 04823 POD8</a>	NA				NW	SE	SE	34	26S	29E	597583.1	3541009.4		1,708.0
					ED	<a href="#">C 04823 POD7</a>	NA				NW	SE	SE	34	26S	29E	597560.6	3541000.9		1,717.2
					ED	<a href="#">C 04823 POD6</a>	NA				NW	SE	SE	34	26S	29E	597529.2	3540996.6		1,722.8
					ED	<a href="#">C 04823 POD5</a>	NA				NW	SE	SE	34	26S	29E	597503.8	3540994.8		1,726.2



(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
					ED	<a href="#">C 04823 POD10</a>	NA			SW	SE	SE	34	26S	29E	597568.4	3540985.2		1,732.6	
<a href="#">C 02038</a>	C	PRO	3.000	J.C. WILLIAMSON	ED	<a href="#">C 02038</a>				Shallow	SW	NE	SE	26	26S	29E	599204.0	3541992.0 *		1,741.1
<a href="#">C 04823</a>	CUB	MON	0.000	WPX	ED	<a href="#">C 04823 POD12</a>	NA			SW	SE	SE	34	26S	29E	597571.4	3540971.7		1,746.0	
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD16</a>	NA			Shallow	SW	SE	SE	34	26S	29E	597493.7	3540975.3		1,746.3
<a href="#">C 04823</a>	CUB	MON	0.000	WPX	ED	<a href="#">C 04823 POD9</a>	NA			SW	SE	SE	34	26S	29E	597506.3	3540973.6		1,747.2	
					ED	<a href="#">C 04823 POD11</a>	NA			SW	SE	SE	34	26S	29E	597529.8	3540961.8		1,757.6	
<a href="#">C 04876</a>	CUB	EXP	0.000	WPX ENERGY PERMIAN, LLC	ED	<a href="#">C 04876 POD11</a>	NA			Shallow	SW	SE	SE	34	26S	29E	597612.0	3540929.3		1,787.7
					ED	<a href="#">C 04876 POD13</a>	NA			Shallow	SW	SE	SE	34	26S	29E	597556.9	3540928.2		1,789.9
					ED	<a href="#">C 04876 POD10</a>	NA			Shallow	SW	SE	SE	34	26S	29E	597651.4	3540923.2		1,794.1
					ED	<a href="#">C 04876 POD15</a>	NA			Shallow	SW	SE	SE	34	26S	29E	597504.4	3540925.8		1,795.0
					ED	<a href="#">C 04876 POD12</a>	NA			Shallow	SW	SE	SE	34	26S	29E	597598.7	3540918.4		1,798.7
					ED	<a href="#">C 04876 POD14</a>	NA			Shallow	SW	SE	SE	34	26S	29E	597533.6	3540916.9		1,802.2

Record Count: 85

Filters Applied:

UTM Filters (in meters):

Eastings: 597621

Northings: 3542717

Radius: 002000

Sorted By: Distance

\* UTM location was derived from PLSS - see Help

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10/30/24 8:08 AM MST

Active & Inactive Points of Diversion

# 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 01354 X-7		NW	NE	27	26S	29E	597289.0	3542964.0 *	

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

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

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# Water Right Summary



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[list](#)

WR File Number:	C 01354	Subbasin:	CUB	Cross Reference:
Primary Purpose:	SRO SECONDARY RECOVERY OF OIL			
Primary Status:	CAN Cancelled			
Total Acres:		Subfile:	Header:	
Total Diversion:	0.000	Cause/Case:		
Owner:	RECOVERY WATER COMPANY			
Contact:				

## 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="#">128227</a>		APPRO	1966-12-19	CAN	CAN	CONVERSION C 01354	T		13400.000	

## Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
<a href="#">C 01354</a>				NW	SE	27	26S	29E	597263.0	3542160.0 *		
<a href="#">C 01354 X</a>				SW	NW	26	26S	29E	598093.0	3542499.0 *		
<a href="#">C 01354 X-2</a>				NW	SE	26	26S	29E	598895.0	3542093.0 *		
<a href="#">C 01354 X-3</a>			NE	NW	SW	23	26S	29E	598323.2	3543837.6		
<a href="#">C 01354 X-4</a>				SE	SE	22	26S	29E	597713.0	3543339.0 *		
<a href="#">C 01354 X-5</a>			SW	SW	SW	22	26S	29E	596462.5	3543354.8		SEE COMMENT SCREEN
<a href="#">C 01354 X-6</a>				NW	SE	22	26S	29E	597297.0	3543769.0 *		
<a href="#">C 01354 X-7</a>				NW	NE	27	26S	29E	597289.0	3542964.0 *		

\* UTM location was derived from PLSS - see Help

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10/31/24 7:09 AM MST


Water Rights Summary

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# 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 01570		NW	SW	26	26S	29E	598077.0	3542093.0 *	

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

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

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# Water Right Summary




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

WR File Number:	C 01570	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:	WALTER B PASCHAL			
Owner:	JACKIE C PASCHAL			
Owner:	KATHRYN F PASCHAL			
Owner:	BYRON W PASCHAL			

## Documents on File

(acre-feet per annum)										
Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptiv
 <a href="#">get images</a>	<a href="#">463761</a>	COWNF	1989-11-15	CHG	PRC	C 01570	T		0.000	
 <a href="#">get images</a>	<a href="#">463752</a>	72121	1974-12-02	PMT	APR	C 01570	T		3.000	

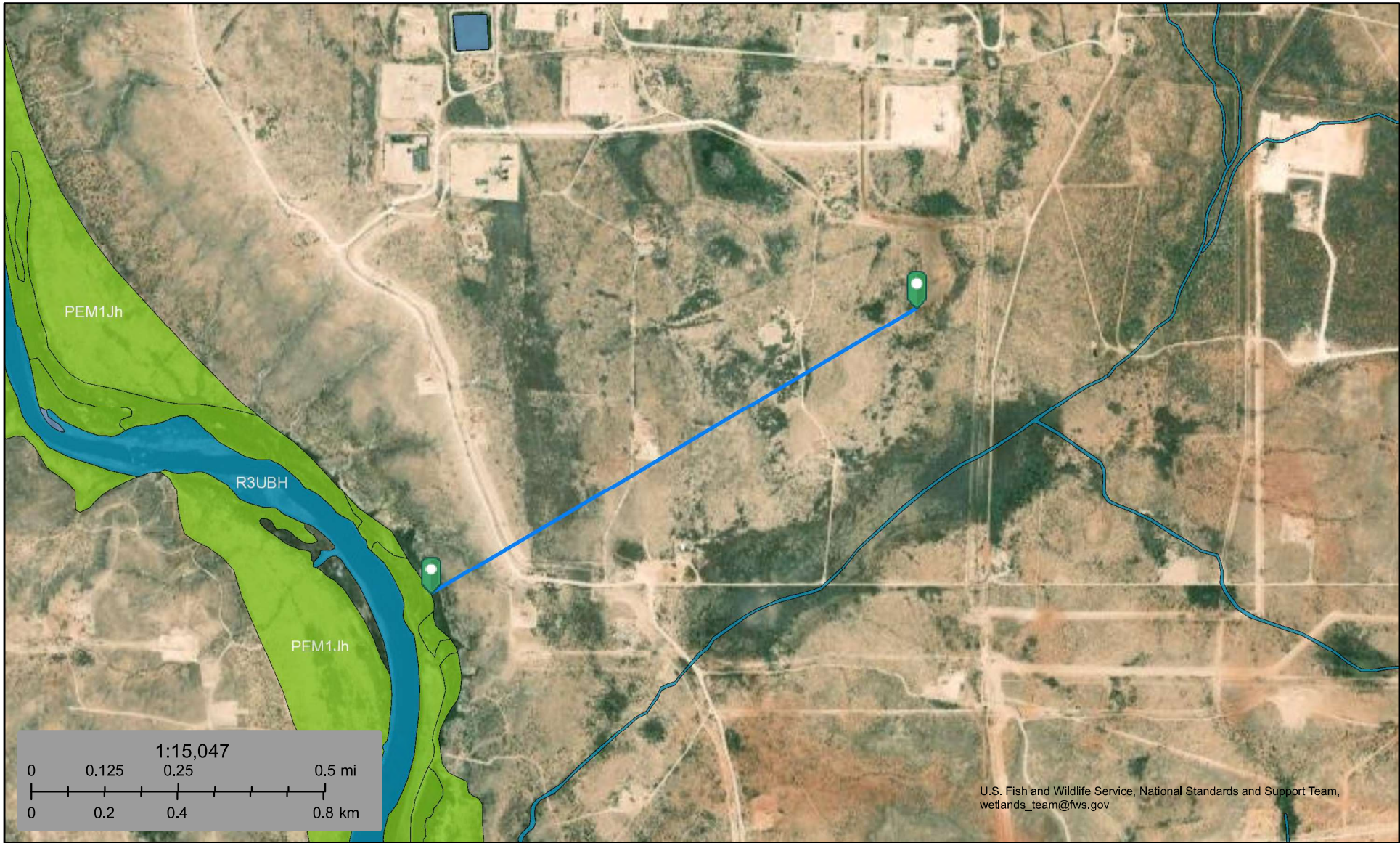
## Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
<a href="#">C 01570</a>				NW	SW	26	26S	29E	598077.0	3542093.0 *		

\* UTM location was derived from PLSS - see Help

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Wetland 4,291 feet



October 31, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

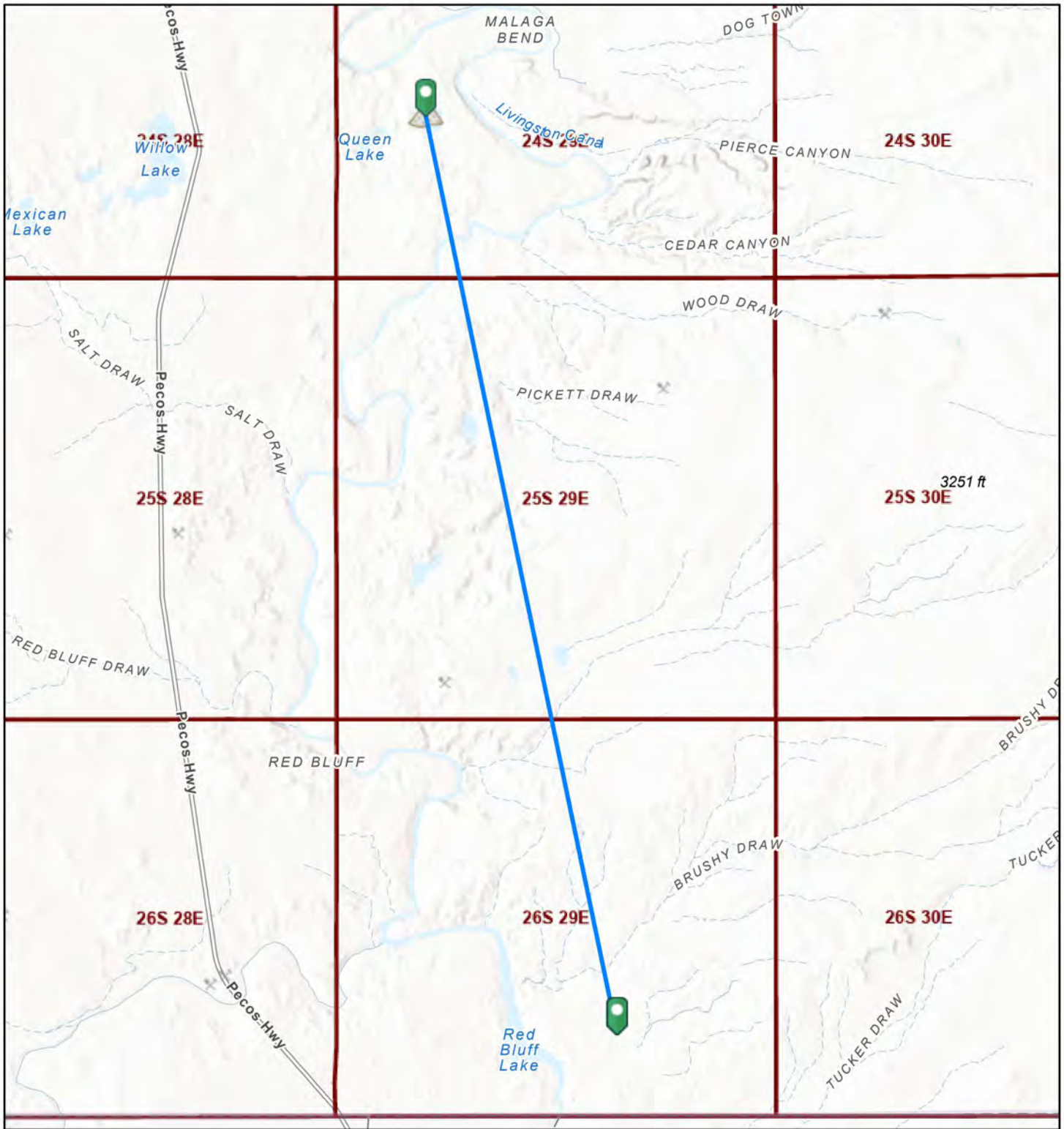
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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



# Salt Mine 67,780 feet



10/30/2024, 7:22:49 PM

## Registered Mines

- Aggregate, Stone etc.
- Aggregate, Stone etc.

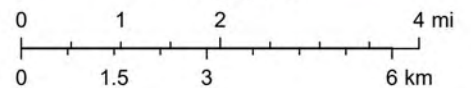


Salt



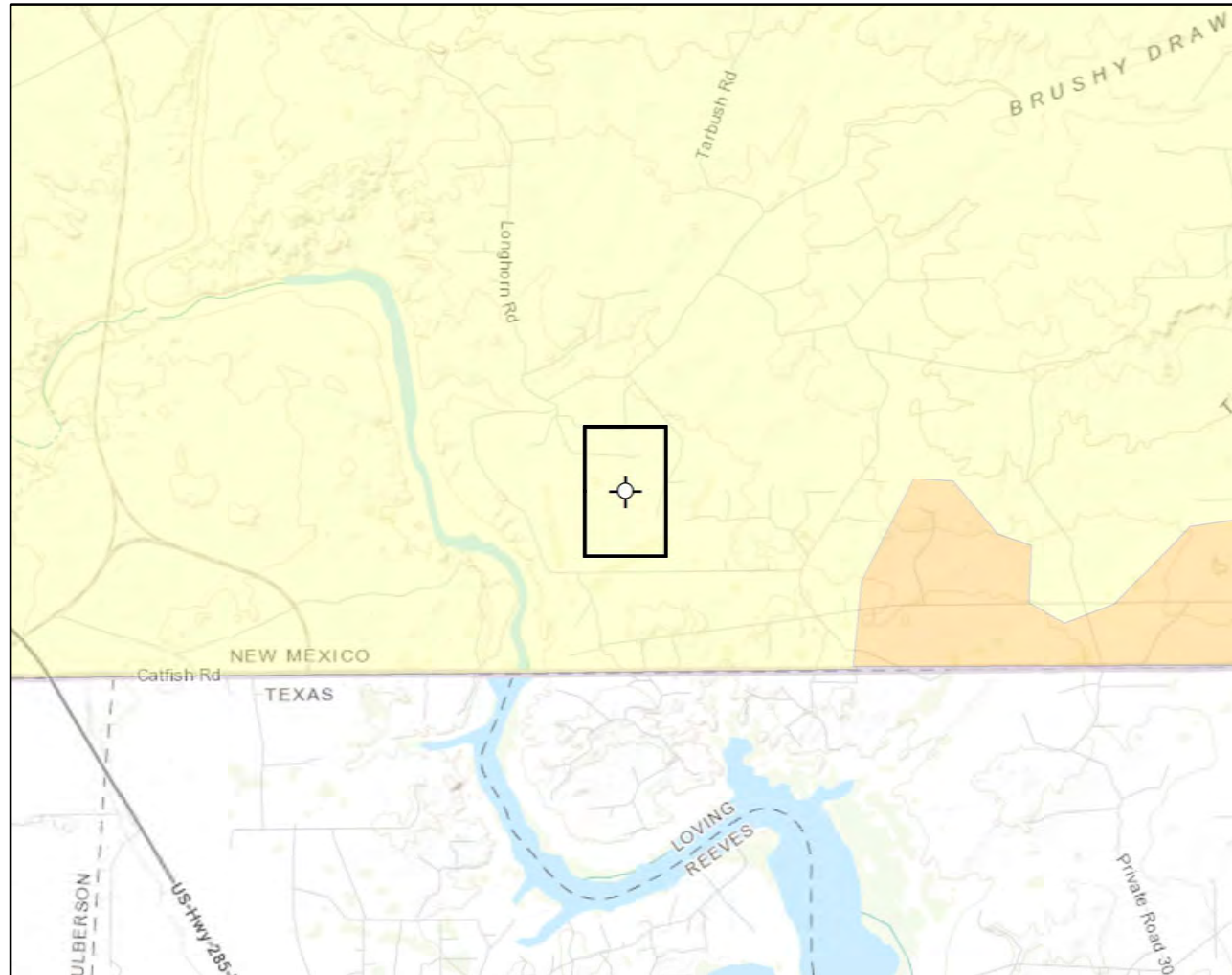
PLSS Townships

1:144,448



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

EMNRD MMD GIS Coordinator



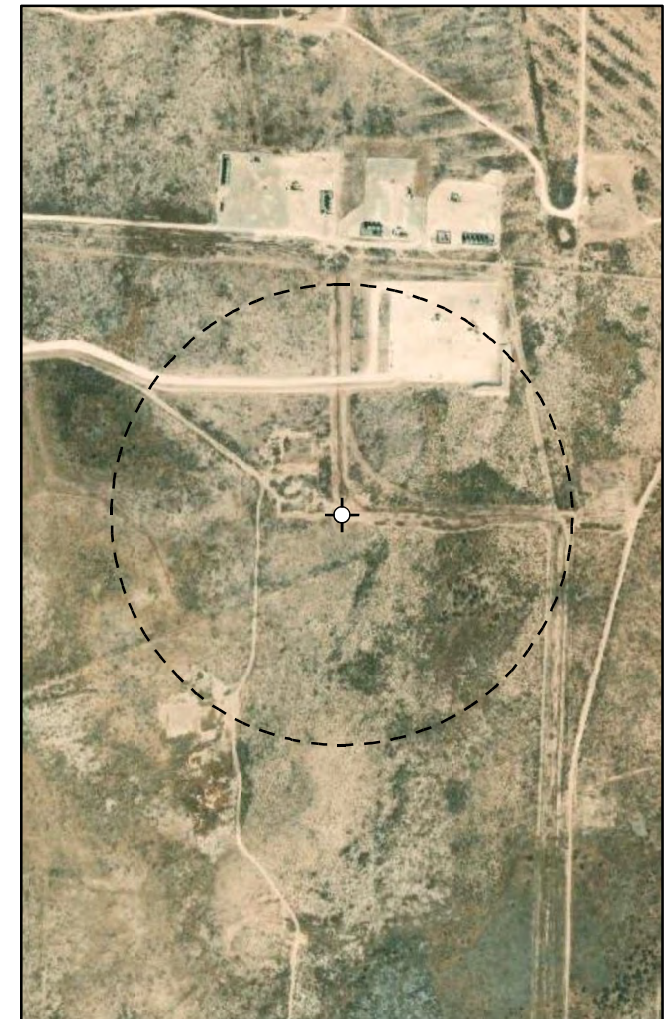
**Karst Potential**

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1,000 sq. ft)

**Overview Map**

0 0.25 0.5 1 mi



**Detail Map**

0 150 300 600 ft.



Map Center:  
Lat/Long: 32.017052, -103.967601

NAD 1983 UTM Zone 13N  
Date: Nov 24/22



**Karst Potential  
East Pecos Pipeline**

FIGURE:

x



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

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

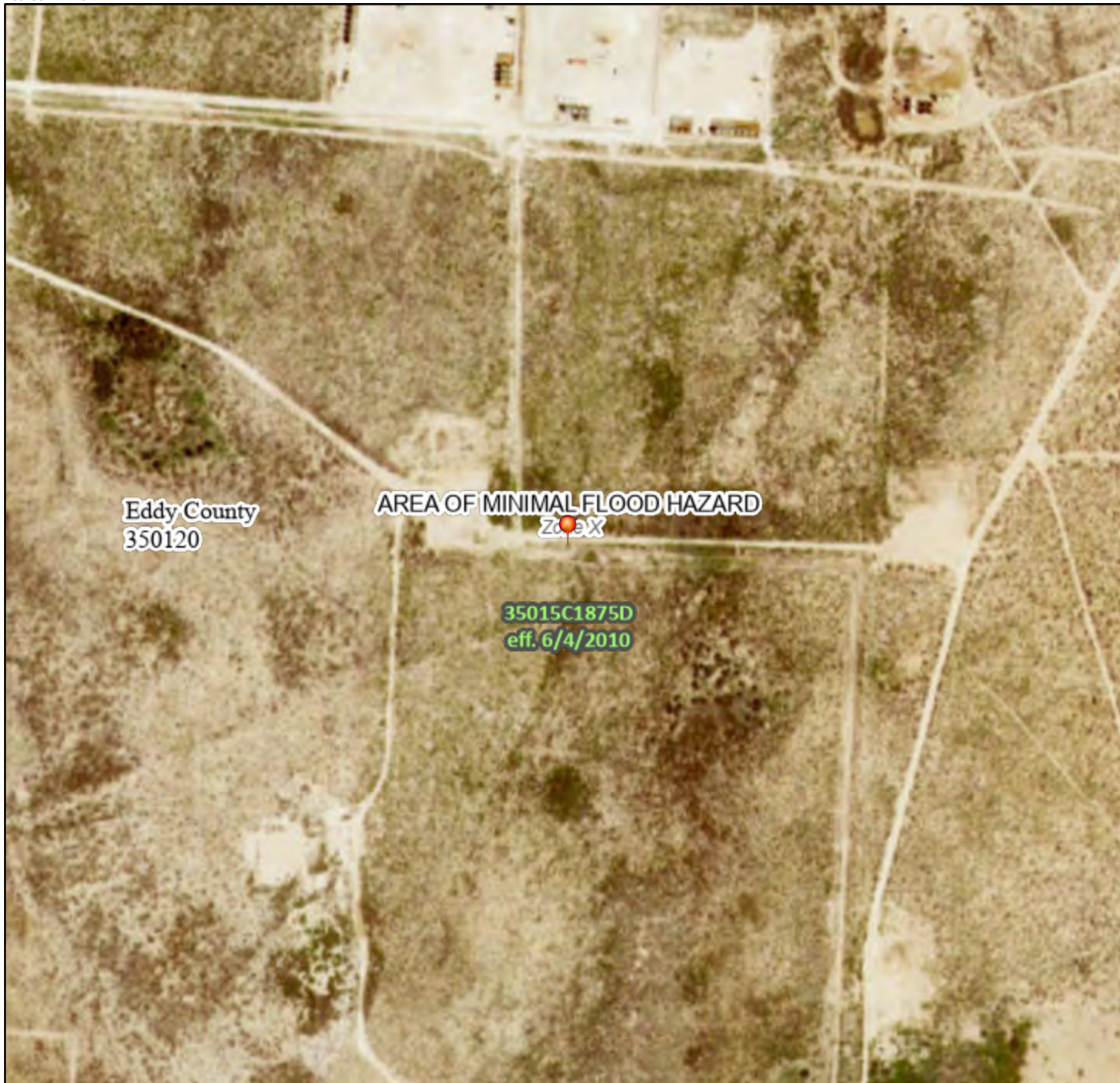
VERSATILITY. EXPERTISE.



# National Flood Hazard Layer FIRMette



103°58'22"W 32°1'17"N



## Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
OTHER FEATURES		Coastal Transect
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
OTHER FEATURES		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
MAP PANELS		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 1/24/2023 at 12:22 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

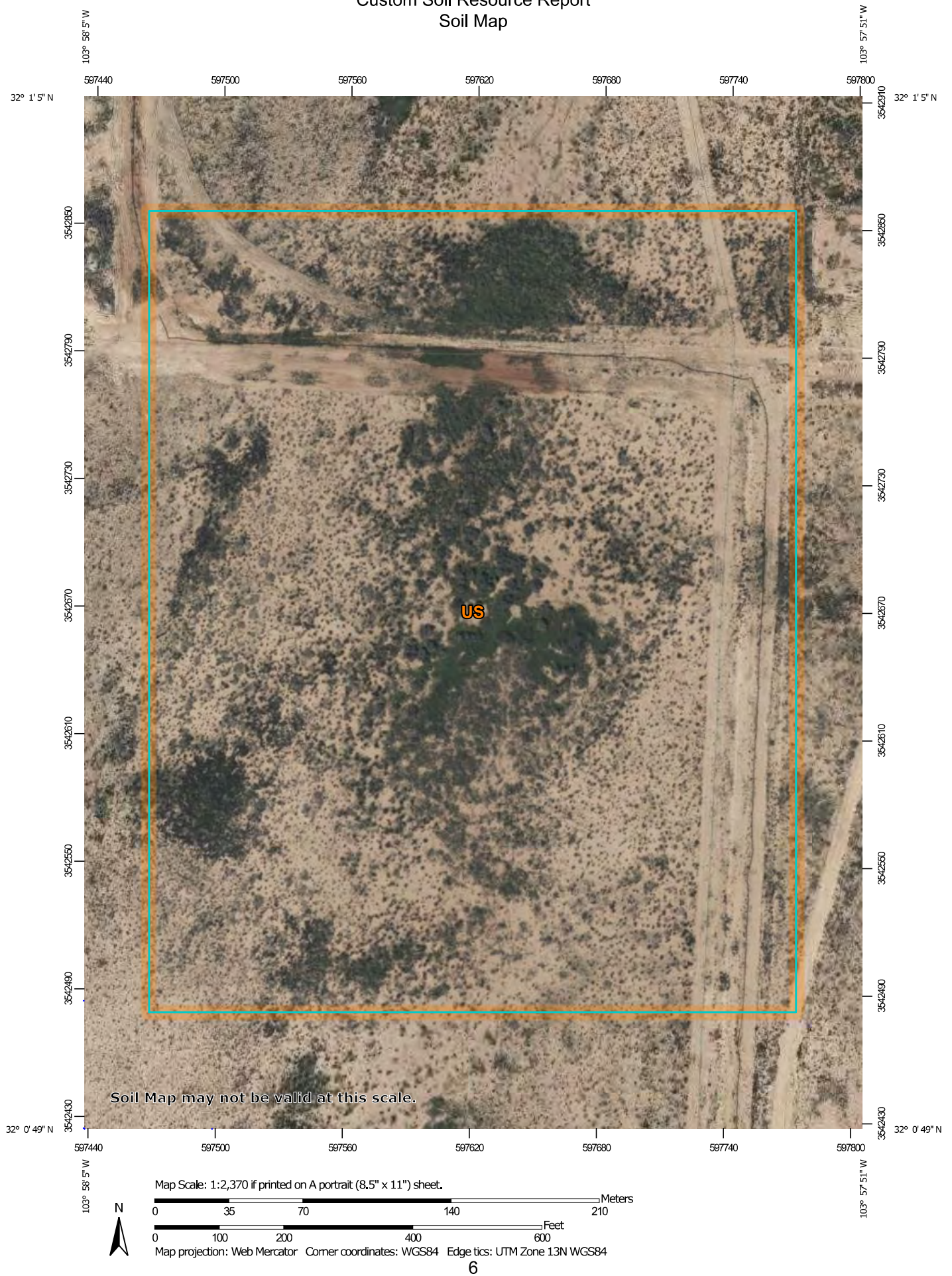
# Custom Soil Resource Report for Eddy Area, New Mexico



October 29, 2024




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 20, Sep 3, 2024

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

Date(s) aerial images were photographed: Mar 20, 2020—Mar 22, 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
US	Upton-Simona complex, 1 to 15 percent slopes, eroded	28.5	100.0%
<b>Totals for Area of Interest</b>		<b>28.5</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, onsite investigation is needed to define and locate the soils and miscellaneous areas.

## Custom Soil Resource Report

**Eddy Area, New Mexico****US—Upton-Simona complex, 1 to 15 percent slopes, eroded****Map Unit Setting**

*National map unit symbol:* 1w66  
*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**

*Upton and similar soils:* 40 percent  
*Simona and similar soils:* 35 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Upton****Setting**

*Landform:* Ridges, fans  
*Landform position (three-dimensional):* Side slope, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from limestone

**Typical profile**

*H1 - 0 to 9 inches:* gravelly loam  
*H2 - 9 to 13 inches:* gravelly loam  
*H3 - 13 to 21 inches:* cemented  
*H4 - 21 to 60 inches:* very gravelly loam

**Properties and qualities**

*Slope:* 1 to 15 percent  
*Depth to restrictive feature:* 7 to 20 inches to petrocalcic  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately high  
(0.01 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 75 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Very low (about 1.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* R070BC025NM - Shallow  
*Hydric soil rating:* No

## Custom Soil Resource Report

**Description of Simona****Setting**

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

**Typical profile**

*H1 - 0 to 6 inches:* gravelly fine sandy loam  
*H2 - 6 to 20 inches:* gravelly fine sandy loam  
*H3 - 20 to 24 inches:* indurated

**Properties and qualities**

*Slope:* 1 to 5 percent  
*Depth to restrictive feature:* 7 to 20 inches to petrocalcic  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Very low (about 2.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* R070BD002NM - Shallow Sandy  
*Hydric soil rating:* No

**Minor Components****Rock outcrop**

*Percent of map unit:* 9 percent  
*Hydric soil rating:* No

**Pajarito**

*Percent of map unit:* 8 percent  
*Ecological site:* R070BD003NM - Loamy Sand  
*Hydric soil rating:* No

**Dune land**

*Percent of map unit:* 8 percent  
*Hydric soil rating:* No

## Ecological site R070BC025NM Shallow

Accessed: 11/20/2022

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### General information

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

#### Figure 1. Mapped extent

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

**Table 1. Dominant plant species**

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

### Physiographic features

This site occurs on knolls, ridges, hillslopes alluvial fans and escarpments. Slopes range from 0 to 25 percent and average about 7 percent. Direction of slope varies and is usually not significant. Elevations range from 2,842 to 4,500 feet.

**Table 2. Representative physiographic features**

Landforms	(1) Hill (2) Ridge (3) Fan piedmont
Flooding frequency	None
Ponding frequency	None
Elevation	866–1,372 m
Slope	0–25%
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 180 to 220 days. The last killing frost is late March or early April, and the first killing frost is in late 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. Because of the shallow soil depth, the vegetation on this site can take advantage of moisture almost anytime it falls. Strong winds that blow from the west and southwest blow from January through June, which accelerates soil drying at a critical time 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)	220 days
Freeze-free period (average)	240 days
Precipitation total (average)	330 mm

Influencing water features

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

Soil features

The soils of this site are shallow to very shallow. Soils are derived from mixed calcareous eolian deposits derived from sedimentary rock. Surface layers are very cobbly loam, very gravelly loam, gravelly loam, cobbly loam, gravelly fine sandy loam or gravelly sandy loam.

There is an indurated caliche layer or limestone bedrock that occurs within 20 inches and averages less than 10 inches. Limestone or caliche layer may be the restrictive layer.

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

Characteristic soils:

- Lozier
- Potter
- Tencee
- Upton
- Ector
- Kimbrough

Table 4. Representative soil features

Surface texture	(1) Gravelly loam (2) Extremely gravelly loam (3) Extremely cobbly loam
Family particle size	(1) Loamy
Drainage class	Well drained
Permeability class	Very slow to moderately slow
Soil depth	10–51 cm
Surface fragment cover <=3"	15–40%
Available water capacity (0-101.6cm)	2.54 cm
Calcium carbonate equivalent (0-101.6cm)	15–60%

Electrical conductivity (0-101.6cm)	0–2 mmhos/cm
Sodium adsorption ratio (0-101.6cm)	0–1
Soil reaction (1:1 water) (0-101.6cm)	7.4–8.4
Subsurface fragment volume <=3" (Depth not specified)	13–42%
Subsurface fragment volume >3" (Depth not specified)	0–1%

## Ecological dynamics

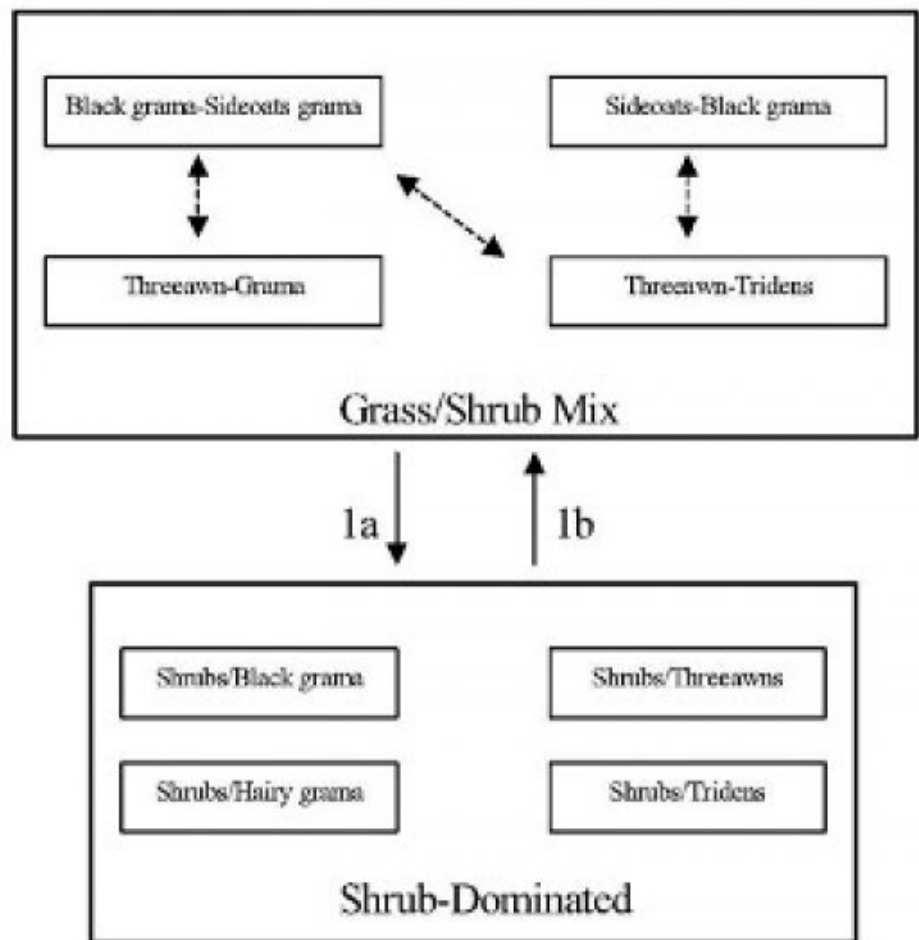
### Overview:

The Shallow site is associated with and Limestone Hills, Loamy, and Shallow Sandy sites. When associated with Limestone Hills, the Shallow site occurs on the summits, foot slopes and toeslopes of hills. Loamy sites often occur as areas between low elongated hills with rounded crests (Shallow site). When the Shallow Sandy site and Shallow site occur in association, the Shallow Sandy soils occupy the tops of low ridges and the Shallow site soils occur on the steeper sideslopes of the ridge. The historic plant community of the Shallow site has the aspect of a grassland/shrub mix, dominated by grasses, but with shrubs common throughout the site. Black grama is the dominant grass species; creosotebush, mesquite, and catclaw mimosa are common shrubs. Overgrazing and or extended drought can reduce grass cover, effect a change in grass species dominance, and may result in a shrub-dominated state. 1

## State and transition model

## Plant Communities and Transitional Pathways (diagram)

### MLRA-42, SD-3, Shallow



1a. Extended drought, overgrazing, no fire

1b. Brush control, Prescribed grazing

### State 1

#### Grass/Shrub Mix

### Community 1.1

#### Grass/Shrub Mix

Grassland/Shrub Mix: The historic plant community is dominated by black grama with sideoats grama as the sub-dominant. Blue grama, hairy grama, bush muhly, and sand dropseed also occur in significant amounts. Sideoats grama can occur as the dominant grass with black grama as sub-dominant on the western side of the Land Resource Unit SD-3. This may be due to higher average elevation on the west side. Retrogression within this state due to extended drought or overgrazing will cause a decrease in species such as black grama, sideoats grama, blue grama, and bush muhly. Threeawns may become the dominant grass species due to a decline in more palatable grasses or because of its ability to quickly recover following drought. Continued loss of grass cover and associated increase in amount of bare ground may result in a shrub-dominated state. Decreased fire frequencies may also be

an important component in the cause of this transition. Diagnosis: Grass cover is fairly uniform, however, surface gravel, cobble, and bare ground make up a large percent of total ground cover, and grass production during unfavorable years may only average 150-175 pounds per acre. Shrubs are common with canopy cover averaging five to ten percent. Evidence of erosion such as rills and gullies are rare, but may occur on slopes greater than eight percent.

Table 5. Annual production by plant type

Plant Type	Low (Kg/Hectare)	Representative Value (Kg/Hectare)	High (Kg/Hectare)
Grass/Grasslike	188	395	601
Shrub/Vine	71	147	224
Forb	22	47	72
Total	281	589	897

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	5-10%
Grass/grasslike foliar cover	10-15%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	5-8%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	40-60%

Figure 5. Plant community growth curve (percent production by month).  
NM2825, R042XC025NM Shallow HCPC. R042XC025NM Shallow HCPC 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  
Shrub-Dominated

Community 2.1  
Shrub-Dominated

Shrub-Dominated: This state is characterized by an increase in shrubs and a decrease in grass cover relative to grassland/shrub mix. As grass cover decreases shrubs increase, especially creosotebush, catclaw mimosa, whitethorn acacia, and mesquite. Each of these shrub species may become dominant in localized areas or across the site, depending on the spatial variability in soil characteristics and landscape position. Black grama, threeawns, hairy grama, or hairy tridens may be the dominant grass species. Fluffgrass, burrograss and broom snakeweed increase in representation. The Shallow site is resistant to state change, due to the natural rock armor of the soil and a shallow impermeable layer. The amount of rock fragments on the soil surface assist in retarding erosion. On Shallow sites with low slope, the shallow depth to either a petrocalcic layer or limestone bedrock helps to keep water perched and available to shallow rooted grasses for extended periods. 2 Diagnosis: Shrubs are the dominant species, especially creosotebush, catclaw mimosa, whitethorn acacia, or mesquite. Grass cover is variable ranging



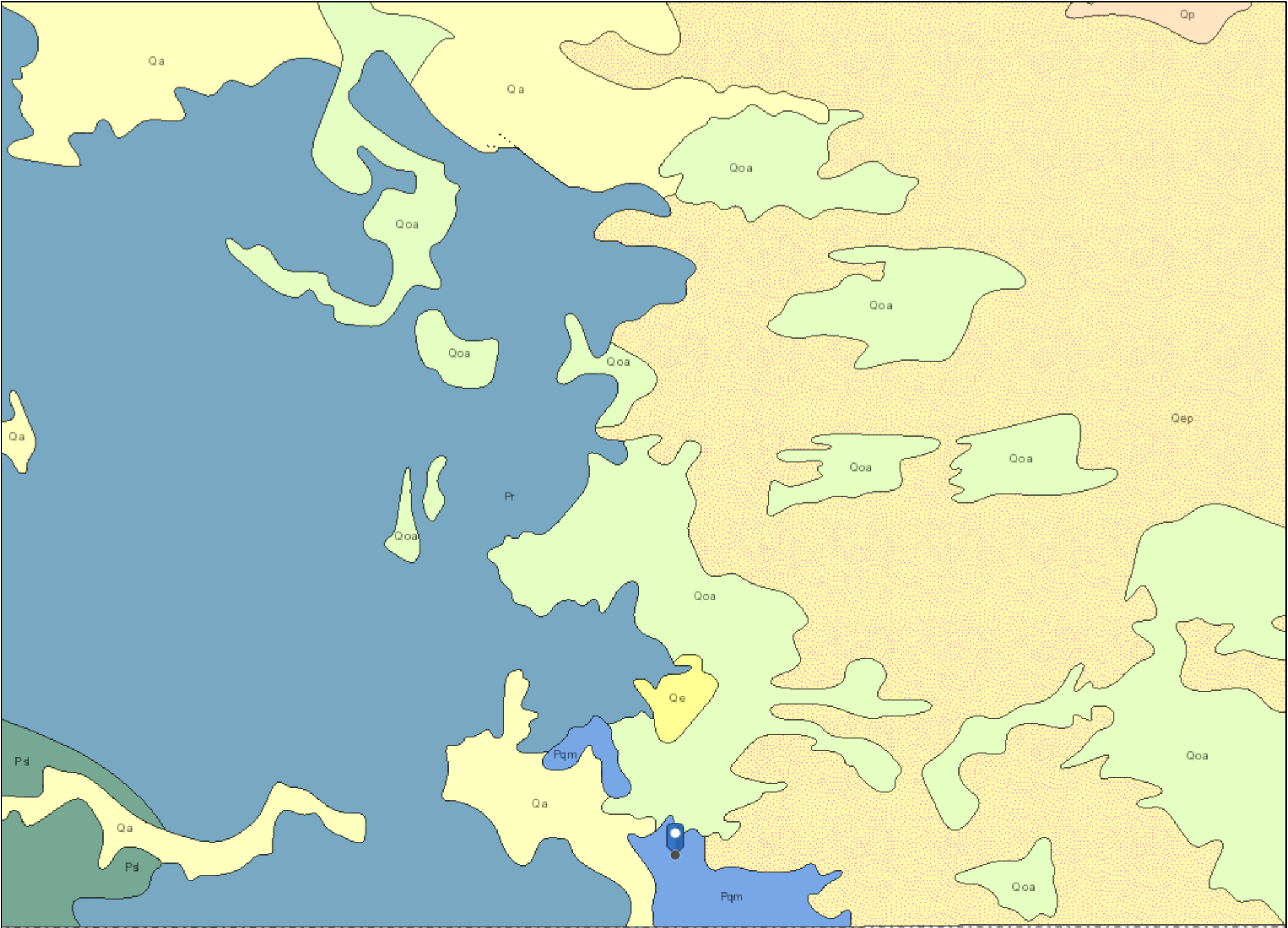
from patchy with large connected bare areas present to sparse with only a limited amount in shrub inter-spaces. Transition to Shrub-Dominated (1a) Overgrazing and or extended periods of drought, and suppression of natural fire regimes are thought to cause this transition. As grass cover is lost, soil fertility and available soil moisture decline, due to the reduction of organic matter and decreased infiltration.<sup>3</sup> Shrubs have the ability to extract nutrients and water from a greater area of soil than grasses and are better able to utilize limited water. Competition by shrubs for water and nutrients limits grass recruitment and establishment. Fire historically may have played a part in suppressing shrub expansion; fire suppression may therefore facilitate shrub expansion. Key indicators of approach to transition: \*Decrease or change in composition or distribution of grass cover. \*Increase in size and frequency of bare patches. \*Increase in amount of shrub seedlings. Transition back to Grassland/Shrub Mix (1b) Brush control is necessary to re-establish grasses. Prescribed grazing will help to ensure proper forage utilization and sustain grass cover. Once the transition is reversed and grass cover is re-established, periodic use of prescribed fire may assist in maintaining the Grassland/Shrub state.

## Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Kg/Hectare)	Foliar Cover (%)
<b>Grass/Grasslike</b>					
1				118–177	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	118–177	–
2				89–118	
	sideoats grama	BOCU	<i>Bouteloua curtipendula</i>	89–118	–
3				89–118	
	blue grama	BOGR2	<i>Bouteloua gracilis</i>	89–118	–
	hairy grama	BOHI2	<i>Bouteloua hirsuta</i>	89–118	–
4				29–59	
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	29–59	–
5				18–29	
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	18–29	–
6				29–59	
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	29–59	–
7				18–29	
	hairy woollygrass	ERPI5	<i>Erioneuron pilosum</i>	18–29	–
8				6–18	
	ear muhly	MUAR	<i>Muhlenbergia arenacea</i>	6–18	–
9				6–18	
	New Mexico feathergrass	HENE5	<i>Hesperostipa neomexicana</i>	6–18	–
10				6–18	
	low woollygrass	DAPU7	<i>Dasyochloa pulchella</i>	6–18	–
11				18–29	
	Grass, perennial	2GP	<i>Grass, perennial</i>	18–29	–
<b>Forb</b>					
12				12–29	
	stemless four-nerve daisy	TEACE	<i>Tetrandeureis acaulis</i> var. <i>epunctata</i>	12–29	–
13				6–18	
	woolly groundsel	PACA15	<i>Packera cana</i>	6–18	–

# East Pecos Pipeline Spill

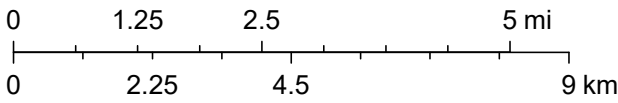


11/19/2022, 5:46:22 PM

Lithologic Units

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

1:144,448



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; U.S. Census



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)

January 12, 2023

Monica Peppin

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (575) 748-0176

FAX:

RE: East Pecos Pipeline Spill

OrderNo.: 2212E44

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 102 sample(s) on 12/29/2022 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-16 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:15:00 AM

Lab ID: 2212E44-001

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 9:23:00 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/30/2022 9:23:00 AM
Surr: DNOP	130	21-129	S	%Rec	1	12/30/2022 9:23:00 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 11:28:00 AM
Surr: BFB	115	37.7-212		%Rec	1	12/30/2022 11:28:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 11:28:00 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 11:28:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 11:28:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2022 11:28:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	12/30/2022 11:28:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	15000	1500		mg/Kg	500	1/3/2023 10:41:44 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-16 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:20:00 AM

Lab ID: 2212E44-002

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 9:33:27 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/30/2022 9:33:27 AM
Surr: DNOP	124	21-129		%Rec	1	12/30/2022 9:33:27 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 12:28:00 PM
Surr: BFB	114	37.7-212		%Rec	1	12/30/2022 12:28:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 12:28:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 12:28:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 12:28:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 12:28:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	12/30/2022 12:28:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	16000	1500		mg/Kg	500	1/3/2023 10:54:09 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-16 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:25:00 AM

Lab ID: 2212E44-003

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/30/2022 9:43:57 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/30/2022 9:43:57 AM
Surr: DNOP	117	21-129		%Rec	1	12/30/2022 9:43:57 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 1:26:00 PM
Surr: BFB	105	37.7-212		%Rec	1	12/30/2022 1:26:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 1:26:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 1:26:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 1:26:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 1:26:00 PM
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	12/30/2022 1:26:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	17000	1500		mg/Kg	500	1/3/2023 11:06:34 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-18 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:30:00 AM

Lab ID: 2212E44-004

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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)	17	14		mg/Kg	1	12/30/2022 9:54:25 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/30/2022 9:54:25 AM
Surr: DNOP	118	21-129		%Rec	1	12/30/2022 9:54:25 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 1:46:00 PM
Surr: BFB	106	37.7-212		%Rec	1	12/30/2022 1:46:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 1:46:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 1:46:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 1:46:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 1:46:00 PM
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	12/30/2022 1:46:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	17000	1500		mg/Kg	500	1/3/2023 11:18:59 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-18 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:35:00 AM

Lab ID: 2212E44-005

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/30/2022 10:04:55 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/30/2022 10:04:55 AM
Surr: DNOP	118	21-129		%Rec	1	12/30/2022 10:04:55 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 2:06:00 PM
Surr: BFB	110	37.7-212		%Rec	1	12/30/2022 2:06:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 2:06:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 2:06:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 2:06:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 2:06:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	12/30/2022 2:06:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	14000	1500		mg/Kg	500	1/3/2023 11:31:23 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-18 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:40:00 AM

Lab ID: 2212E44-006

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 10:15:24 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/30/2022 10:15:24 AM
Surr: DNOP	116	21-129		%Rec	1	12/30/2022 10:15:24 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 2:25:00 PM
Surr: BFB	106	37.7-212		%Rec	1	12/30/2022 2:25:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 2:25:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 2:25:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 2:25:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 2:25:00 PM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	12/30/2022 2:25:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	20000	600		mg/Kg	200	1/3/2023 11:43:47 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-19 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:45:00 AM

Lab ID: 2212E44-007

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 1:24:32 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/30/2022 1:24:32 PM
Surr: DNOP	153	21-129	S	%Rec	1	12/30/2022 1:24:32 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 2:45:00 PM
Surr: BFB	108	37.7-212		%Rec	1	12/30/2022 2:45:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 2:45:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 2:45:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 2:45:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 2:45:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	12/30/2022 2:45:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	3800	150		mg/Kg	50	1/3/2023 11:56:12 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-19 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:50:00 AM

Lab ID: 2212E44-008

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 4:48:20 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/30/2022 4:48:20 PM
Surr: DNOP	118	21-129		%Rec	1	12/30/2022 4:48:20 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 3:05:00 PM
Surr: BFB	109	37.7-212		%Rec	1	12/30/2022 3:05:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 3:05:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 3:05:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 3:05:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 3:05:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	12/30/2022 3:05:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	20000	1500		mg/Kg	500	1/3/2023 12:33:24 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	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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-19 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:55:00 AM

Lab ID: 2212E44-009

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 6:22:30 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/30/2022 6:22:30 PM
Surr: DNOP	121	21-129		%Rec	1	12/30/2022 6:22:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2022 3:24:00 PM
Surr: BFB	107	37.7-212		%Rec	1	12/30/2022 3:24:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 3:24:00 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2022 3:24:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2022 3:24:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2022 3:24:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	12/30/2022 3:24:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	14000	600		mg/Kg	200	1/3/2023 12:45:48 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	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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-20 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:00:00 AM

Lab ID: 2212E44-010

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/30/2022 6:32:55 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/30/2022 6:32:55 PM
Surr: DNOP	126	21-129		%Rec	1	12/30/2022 6:32:55 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 3:44:00 PM
Surr: BFB	106	37.7-212		%Rec	1	12/30/2022 3:44:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 3:44:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 3:44:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 3:44:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 3:44:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/30/2022 3:44:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	1200	60		mg/Kg	20	12/31/2022 2:59:24 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-20 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:05:00 AM

Lab ID: 2212E44-011

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/30/2022 6:43:20 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/30/2022 6:43:20 PM
Surr: DNOP	120	21-129		%Rec	1	12/30/2022 6:43:20 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 4:23:00 PM
Surr: BFB	111	37.7-212		%Rec	1	12/30/2022 4:23:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 4:23:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 4:23:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 4:23:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 4:23:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	12/30/2022 4:23:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	600		mg/Kg	200	1/4/2023 7:16:42 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-20 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:10:00 AM

Lab ID: 2212E44-012

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 6:53:46 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/30/2022 6:53:46 PM
Surr: DNOP	123	21-129		%Rec	1	12/30/2022 6:53:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 4:43:00 PM
Surr: BFB	109	37.7-212		%Rec	1	12/30/2022 4:43:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 4:43:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 4:43:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 4:43:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 4:43:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	12/30/2022 4:43:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	12000	600		mg/Kg	200	1/4/2023 7:29:06 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-21 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:15:00 AM

Lab ID: 2212E44-013

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/30/2022 7:04:12 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/30/2022 7:04:12 PM
Surr: DNOP	136	21-129	S	%Rec	1	12/30/2022 7:04:12 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 5:02:00 PM
Surr: BFB	108	37.7-212		%Rec	1	12/30/2022 5:02:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 5:02:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 5:02:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 5:02:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 5:02:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	12/30/2022 5:02:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	690	60		mg/Kg	20	1/3/2023 3:02:17 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-21 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:20:00 AM

Lab ID: 2212E44-014

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 7:14:39 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/30/2022 7:14:39 PM
Surr: DNOP	113	21-129		%Rec	1	12/30/2022 7:14:39 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2022 5:22:00 PM
Surr: BFB	104	37.7-212		%Rec	1	12/30/2022 5:22:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 5:22:00 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2022 5:22:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2022 5:22:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/30/2022 5:22:00 PM
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	12/30/2022 5:22:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	17000	600		mg/Kg	200	1/4/2023 7:41:31 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-21 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:25:00 AM

Lab ID: 2212E44-015

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/30/2022 7:25:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/30/2022 7:25:10 PM
Surr: DNOP	111	21-129		%Rec	1	12/30/2022 7:25:10 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 5:42:00 PM
Surr: BFB	109	37.7-212		%Rec	1	12/30/2022 5:42:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 5:42:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 5:42:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 5:42:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 5:42:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	12/30/2022 5:42:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	14000	600		mg/Kg	200	1/4/2023 7:53:55 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-22 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:30:00 AM

Lab ID: 2212E44-016

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 2:49:57 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 2:49:57 PM
Surr: DNOP	155	21-129	S	%Rec	1	12/31/2022 2:49:57 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 6:01:00 PM
Surr: BFB	103	37.7-212		%Rec	1	12/30/2022 6:01:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 6:01:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 6:01:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 6:01:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 6:01:00 PM
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	12/30/2022 6:01:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	240	60		mg/Kg	20	1/3/2023 3:39:31 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-22 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:35:00 AM

Lab ID: 2212E44-017

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/30/2022 7:46:21 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/30/2022 7:46:21 PM
Surr: DNOP	121	21-129		%Rec	1	12/30/2022 7:46:21 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 6:21:00 PM
Surr: BFB	110	37.7-212		%Rec	1	12/30/2022 6:21:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 6:21:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 6:21:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 6:21:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/30/2022 6:21:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	12/30/2022 6:21:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 3:51:55 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-22 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:40:00 AM

Lab ID: 2212E44-018

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 12:27:48 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 12:27:48 PM
Surr: DNOP	118	21-129		%Rec	1	12/31/2022 12:27:48 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 6:41:00 PM
Surr: BFB	108	37.7-212		%Rec	1	12/30/2022 6:41:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 6:41:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 6:41:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 6:41:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 6:41:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	12/30/2022 6:41:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 4:04:20 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-23 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:45:00 AM

Lab ID: 2212E44-019

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 12:59:27 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 12:59:27 PM
Surr: DNOP	130	21-129	S	%Rec	1	12/31/2022 12:59:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 7:01:00 PM
Surr: BFB	105	37.7-212		%Rec	1	12/30/2022 7:01:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 7:01:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 7:01:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 7:01:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 7:01:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	12/30/2022 7:01:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	6900	300		mg/Kg	100	1/4/2023 8:06:19 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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-23 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:50:00 AM

Lab ID: 2212E44-020

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 1:10:01 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 1:10:01 PM
Surr: DNOP	115	21-129		%Rec	1	12/31/2022 1:10:01 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 7:20:00 PM
Surr: BFB	107	37.7-212		%Rec	1	12/30/2022 7:20:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 7:20:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 7:20:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 7:20:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 7:20:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	12/30/2022 7:20:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	600		mg/Kg	200	1/4/2023 8:18:43 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-23 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 10:55:00 AM

Lab ID: 2212E44-021

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 1:32:56 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 1:32:56 PM
Surr: DNOP	124	21-129		%Rec	1	12/31/2022 1:32:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2022 1:18:15 PM
Surr: BFB	89.6	37.7-212		%Rec	1	12/30/2022 1:18:15 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 1:18:15 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2022 1:18:15 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2022 1:18:15 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2022 1:18:15 PM
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	12/30/2022 1:18:15 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	8700	300		mg/Kg	100	1/4/2023 8:31:07 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-24 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:00:00 AM

Lab ID: 2212E44-022

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 1:43:32 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 1:43:32 PM
Surr: DNOP	141	21-129	S	%Rec	1	12/31/2022 1:43:32 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/30/2022 2:29:07 PM
Surr: BFB	90.0	37.7-212		%Rec	1	12/30/2022 2:29:07 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/30/2022 2:29:07 PM
Toluene	ND	0.046		mg/Kg	1	12/30/2022 2:29:07 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/30/2022 2:29:07 PM
Xylenes, Total	ND	0.093		mg/Kg	1	12/30/2022 2:29:07 PM
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	12/30/2022 2:29:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	280	59		mg/Kg	20	1/3/2023 4:53:58 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-24 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:05:00 AM

Lab ID: 2212E44-023

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 1:54:08 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2022 1:54:08 PM
Surr: DNOP	126	21-129		%Rec	1	12/31/2022 1:54:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 3:39:49 PM
Surr: BFB	90.4	37.7-212		%Rec	1	12/30/2022 3:39:49 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 3:39:49 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 3:39:49 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 3:39:49 PM
Xylenes, Total	ND	0.095		mg/Kg	1	12/30/2022 3:39:49 PM
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	12/30/2022 3:39:49 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	310	60		mg/Kg	20	1/3/2023 5:31:11 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-24 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:10:00 AM

Lab ID: 2212E44-024

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 2:04:46 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 2:04:46 PM
Surr: DNOP	124	21-129		%Rec	1	12/31/2022 2:04:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/30/2022 4:03:24 PM
Surr: BFB	90.4	37.7-212		%Rec	1	12/30/2022 4:03:24 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/30/2022 4:03:24 PM
Toluene	ND	0.047		mg/Kg	1	12/30/2022 4:03:24 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/30/2022 4:03:24 PM
Xylenes, Total	ND	0.094		mg/Kg	1	12/30/2022 4:03:24 PM
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	12/30/2022 4:03:24 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 5:43:36 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-25 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:15:00 AM

Lab ID: 2212E44-025

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 2:15:24 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 2:15:24 PM
Surr: DNOP	122	21-129		%Rec	1	12/31/2022 2:15:24 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 4:26:54 PM
Surr: BFB	88.6	37.7-212		%Rec	1	12/30/2022 4:26:54 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 4:26:54 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 4:26:54 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 4:26:54 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 4:26:54 PM
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	12/30/2022 4:26:54 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	8100	300		mg/Kg	100	1/4/2023 8:43:32 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-25 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:20:00 AM

Lab ID: 2212E44-026

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 2:26:02 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 2:26:02 PM
Surr: DNOP	117	21-129		%Rec	1	12/31/2022 2:26:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 4:50:21 PM
Surr: BFB	90.2	37.7-212		%Rec	1	12/30/2022 4:50:21 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 4:50:21 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 4:50:21 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 4:50:21 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 4:50:21 PM
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	12/30/2022 4:50:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	12000	600		mg/Kg	200	1/4/2023 8:55:57 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-25 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:25:00 AM

Lab ID: 2212E44-027

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 2:36:43 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 2:36:43 PM
Surr: DNOP	117	21-129		%Rec	1	12/31/2022 2:36:43 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 5:13:41 PM
Surr: BFB	92.0	37.7-212		%Rec	1	12/30/2022 5:13:41 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 5:13:41 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 5:13:41 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 5:13:41 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/30/2022 5:13:41 PM
Surr: 4-Bromofluorobenzene	86.9	70-130		%Rec	1	12/30/2022 5:13:41 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	10000	300		mg/Kg	100	1/4/2023 9:08:22 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-26 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:30:00 AM

Lab ID: 2212E44-028

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 2:47:22 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 2:47:22 PM
Surr: DNOP	142	21-129	S	%Rec	1	12/31/2022 2:47:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/30/2022 6:24:24 PM
Surr: BFB	92.3	37.7-212		%Rec	1	12/30/2022 6:24:24 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 6:24:24 PM
Toluene	ND	0.047		mg/Kg	1	12/30/2022 6:24:24 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/30/2022 6:24:24 PM
Xylenes, Total	ND	0.095		mg/Kg	1	12/30/2022 6:24:24 PM
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	12/30/2022 6:24:24 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 6:33:14 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-26 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:35:00 AM

Lab ID: 2212E44-029

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 2:58:01 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 2:58:01 PM
Surr: DNOP	145	21-129	S	%Rec	1	12/31/2022 2:58:01 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 6:47:55 PM
Surr: BFB	90.7	37.7-212		%Rec	1	12/30/2022 6:47:55 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 6:47:55 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 6:47:55 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 6:47:55 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 6:47:55 PM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	12/30/2022 6:47:55 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 6:45:38 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	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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-26 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:40:00 AM

Lab ID: 2212E44-030

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 3:08:42 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2022 3:08:42 PM
Surr: DNOP	120	21-129		%Rec	1	12/31/2022 3:08:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 7:11:28 PM
Surr: BFB	89.9	37.7-212		%Rec	1	12/30/2022 7:11:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 7:11:28 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 7:11:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 7:11:28 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 7:11:28 PM
Surr: 4-Bromofluorobenzene	84.8	70-130		%Rec	1	12/30/2022 7:11:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 6:58:03 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-27 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:45:00 AM

Lab ID: 2212E44-031

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 3:19:22 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 3:19:22 PM
Surr: DNOP	127	21-129		%Rec	1	12/31/2022 3:19:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2022 7:35:05 PM
Surr: BFB	91.2	37.7-212		%Rec	1	12/30/2022 7:35:05 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 7:35:05 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2022 7:35:05 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2022 7:35:05 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2022 7:35:05 PM
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	12/30/2022 7:35:05 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	1500	60		mg/Kg	20	1/3/2023 8:12:31 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-27 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:50:00 AM

Lab ID: 2212E44-032

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	12/31/2022 3:30:02 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/31/2022 3:30:02 PM
Surr: DNOP	123	21-129		%Rec	1	12/31/2022 3:30:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/30/2022 7:58:39 PM
Surr: BFB	94.2	37.7-212		%Rec	1	12/30/2022 7:58:39 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/30/2022 7:58:39 PM
Toluene	ND	0.047		mg/Kg	1	12/30/2022 7:58:39 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/30/2022 7:58:39 PM
Xylenes, Total	ND	0.094		mg/Kg	1	12/30/2022 7:58:39 PM
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	12/30/2022 7:58:39 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	14000	600		mg/Kg	200	1/4/2023 9:45:34 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-27 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 11:55:00 AM

Lab ID: 2212E44-033

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 3:40:44 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 3:40:44 PM
Surr: DNOP	113	21-129		%Rec	1	12/31/2022 3:40:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/30/2022 8:22:14 PM
Surr: BFB	90.8	37.7-212		%Rec	1	12/30/2022 8:22:14 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/30/2022 8:22:14 PM
Toluene	ND	0.046		mg/Kg	1	12/30/2022 8:22:14 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/30/2022 8:22:14 PM
Xylenes, Total	ND	0.091		mg/Kg	1	12/30/2022 8:22:14 PM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	12/30/2022 8:22:14 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	12000	600		mg/Kg	200	1/4/2023 9:57:59 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-28 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022

Lab ID: 2212E44-034

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 3:51:35 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 3:51:35 PM
Surr: DNOP	118	21-129		%Rec	1	12/31/2022 3:51:35 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 8:45:49 PM
Surr: BFB	90.4	37.7-212		%Rec	1	12/30/2022 8:45:49 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 8:45:49 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 8:45:49 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 8:45:49 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/30/2022 8:45:49 PM
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	12/30/2022 8:45:49 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	960	60		mg/Kg	20	1/3/2023 9:39:24 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	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 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-28 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:05:00 AM

Lab ID: 2212E44-035

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 4:02:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 4:02:27 PM
Surr: DNOP	116	21-129		%Rec	1	12/31/2022 4:02:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 9:09:17 PM
Surr: BFB	91.9	37.7-212		%Rec	1	12/30/2022 9:09:17 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 9:09:17 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 9:09:17 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 9:09:17 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2022 9:09:17 PM
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	12/30/2022 9:09:17 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	10000	300		mg/Kg	100	1/4/2023 10:10:24 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-28 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:10:00 AM

Lab ID: 2212E44-036

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 4:13:15 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2022 4:13:15 PM
Surr: DNOP	114	21-129		%Rec	1	12/31/2022 4:13:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/30/2022 9:32:53 PM
Surr: BFB	89.7	37.7-212		%Rec	1	12/30/2022 9:32:53 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/30/2022 9:32:53 PM
Toluene	ND	0.046		mg/Kg	1	12/30/2022 9:32:53 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/30/2022 9:32:53 PM
Xylenes, Total	ND	0.092		mg/Kg	1	12/30/2022 9:32:53 PM
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	12/30/2022 9:32:53 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	600		mg/Kg	200	1/4/2023 10:22:48 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-29 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:15:00 PM

Lab ID: 2212E44-037

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 4:24:05 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 4:24:05 PM
Surr: DNOP	127	21-129		%Rec	1	12/31/2022 4:24:05 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/30/2022 9:56:28 PM
Surr: BFB	91.6	37.7-212		%Rec	1	12/30/2022 9:56:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 9:56:28 PM
Toluene	ND	0.047		mg/Kg	1	12/30/2022 9:56:28 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/30/2022 9:56:28 PM
Xylenes, Total	ND	0.095		mg/Kg	1	12/30/2022 9:56:28 PM
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	12/30/2022 9:56:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	250	60		mg/Kg	20	1/5/2023 8:01:47 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-29 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:20:00 PM

Lab ID: 2212E44-038

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 9:41:26 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 9:41:26 PM
Surr: DNOP	118	21-129		%Rec	1	12/31/2022 9:41:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 11:07:02 PM
Surr: BFB	92.9	37.7-212		%Rec	1	12/30/2022 11:07:02 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 11:07:02 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 11:07:02 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 11:07:02 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 11:07:02 PM
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	12/30/2022 11:07:02 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	300		mg/Kg	100	1/4/2023 10:35:13 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-29 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:25:00 PM

Lab ID: 2212E44-039

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 10:13:10 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 10:13:10 PM
Surr: DNOP	116	21-129		%Rec	1	12/31/2022 10:13:10 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/30/2022 11:30:24 PM
Surr: BFB	91.4	37.7-212		%Rec	1	12/30/2022 11:30:24 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/30/2022 11:30:24 PM
Toluene	ND	0.046		mg/Kg	1	12/30/2022 11:30:24 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/30/2022 11:30:24 PM
Xylenes, Total	ND	0.092		mg/Kg	1	12/30/2022 11:30:24 PM
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	12/30/2022 11:30:24 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	10000	600		mg/Kg	200	1/4/2023 10:47:37 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-30 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:30:00 PM

Lab ID: 2212E44-040

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 10:23:47 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2022 10:23:47 PM
Surr: DNOP	128	21-129		%Rec	1	12/31/2022 10:23:47 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2022 11:53:54 PM
Surr: BFB	90.1	37.7-212		%Rec	1	12/30/2022 11:53:54 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 11:53:54 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2022 11:53:54 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2022 11:53:54 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/30/2022 11:53:54 PM
Surr: 4-Bromofluorobenzene	85.1	70-130		%Rec	1	12/30/2022 11:53:54 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 11:18:41 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-30 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:35:00 PM

Lab ID: 2212E44-041

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 10:34:24 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2022 10:34:24 PM
Surr: DNOP	119	21-129		%Rec	1	12/31/2022 10:34:24 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 9:18:00 PM
Surr: BFB	105	37.7-212		%Rec	1	12/30/2022 9:18:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 9:18:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 9:18:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 9:18:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2022 9:18:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/30/2022 9:18:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 11:31:05 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-30 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:40:00 PM

Lab ID: 2212E44-042

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 10:45:02 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 10:45:02 PM
Surr: DNOP	140	21-129	S	%Rec	1	12/31/2022 10:45:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 10:17:00 PM
Surr: BFB	104	37.7-212		%Rec	1	12/30/2022 10:17:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 10:17:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 10:17:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 10:17:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2022 10:17:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	12/30/2022 10:17:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	120	60		mg/Kg	20	1/5/2023 8:14:08 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-31 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:45:00 PM

Lab ID: 2212E44-043

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	12/31/2022 10:55:42 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/31/2022 10:55:42 PM
Surr: DNOP	140	21-129	S	%Rec	1	12/31/2022 10:55:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2022 11:16:00 PM
Surr: BFB	105	37.7-212		%Rec	1	12/30/2022 11:16:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 11:16:00 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2022 11:16:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2022 11:16:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 11:16:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/30/2022 11:16:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	680	60		mg/Kg	20	1/5/2023 8:26:29 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-31 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:50:00 PM

Lab ID: 2212E44-044

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 11:06:21 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 11:06:21 PM
Surr: DNOP	125	21-129		%Rec	1	12/31/2022 11:06:21 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2022 11:36:00 PM
Surr: BFB	106	37.7-212		%Rec	1	12/30/2022 11:36:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/30/2022 11:36:00 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2022 11:36:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2022 11:36:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/30/2022 11:36:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/30/2022 11:36:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9300	300		mg/Kg	100	1/4/2023 11:00:01 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-31 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 12:55:00 PM

Lab ID: 2212E44-045

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	12/31/2022 11:17:02 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/31/2022 11:17:02 PM
Surr: DNOP	123	21-129		%Rec	1	12/31/2022 11:17:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2022 11:56:00 PM
Surr: BFB	105	37.7-212		%Rec	1	12/30/2022 11:56:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/30/2022 11:56:00 PM
Toluene	ND	0.048		mg/Kg	1	12/30/2022 11:56:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2022 11:56:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2022 11:56:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	12/30/2022 11:56:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	10000	300		mg/Kg	100	1/4/2023 11:12:26 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-32 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:00:00 PM

Lab ID: 2212E44-046

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 11:27:43 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 11:27:43 PM
Surr: DNOP	140	21-129	S	%Rec	1	12/31/2022 11:27:43 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 12:15:00 AM
Surr: BFB	105	37.7-212		%Rec	1	12/31/2022 12:15:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 12:15:00 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 12:15:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 12:15:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 12:15:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/31/2022 12:15:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/4/2023 12:57:58 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-32 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:05:00 PM

Lab ID: 2212E44-047

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 11:38:26 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 11:38:26 PM
Surr: DNOP	123	21-129		%Rec	1	12/31/2022 11:38:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 12:35:00 AM
Surr: BFB	109	37.7-212		%Rec	1	12/31/2022 12:35:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 12:35:00 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 12:35:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 12:35:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 12:35:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/31/2022 12:35:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/4/2023 1:10:23 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-32 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:10:00 PM

Lab ID: 2212E44-048

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	12/31/2022 11:49:19 PM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	12/31/2022 11:49:19 PM
Surr: DNOP	141	21-129	S	%Rec	1	12/31/2022 11:49:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 12:55:00 AM
Surr: BFB	109	37.7-212		%Rec	1	12/31/2022 12:55:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 12:55:00 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 12:55:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 12:55:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/31/2022 12:55:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/31/2022 12:55:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/4/2023 1:22:48 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-33 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:15:00 PM

Lab ID: 2212E44-049

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	1/1/2023 12:00:10 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/1/2023 12:00:10 AM
Surr: DNOP	130	21-129	S	%Rec	1	1/1/2023 12:00:10 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/31/2022 1:14:00 AM
Surr: BFB	108	37.7-212		%Rec	1	12/31/2022 1:14:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 1:14:00 AM
Toluene	ND	0.048		mg/Kg	1	12/31/2022 1:14:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	12/31/2022 1:14:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/31/2022 1:14:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	12/31/2022 1:14:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	59		mg/Kg	20	1/4/2023 1:35:13 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-33 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:20:00 PM

Lab ID: 2212E44-050

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/1/2023 12:11:02 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/1/2023 12:11:02 AM
Surr: DNOP	115	21-129		%Rec	1	1/1/2023 12:11:02 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 1:34:00 AM
Surr: BFB	112	37.7-212		%Rec	1	12/31/2022 1:34:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 1:34:00 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 1:34:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 1:34:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/31/2022 1:34:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	12/31/2022 1:34:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9900	300		mg/Kg	100	1/4/2023 11:24:51 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-33 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:25:00 PM

Lab ID: 2212E44-051

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/1/2023 12:21:52 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/1/2023 12:21:52 AM
Surr: DNOP	115	21-129		%Rec	1	1/1/2023 12:21:52 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/31/2022 2:13:00 AM
Surr: BFB	109	37.7-212		%Rec	1	12/31/2022 2:13:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 2:13:00 AM
Toluene	ND	0.048		mg/Kg	1	12/31/2022 2:13:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	12/31/2022 2:13:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/31/2022 2:13:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	12/31/2022 2:13:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9400	600		mg/Kg	200	1/4/2023 11:37:15 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-34 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:30:00 PM

Lab ID: 2212E44-052

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/1/2023 12:32:42 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/1/2023 12:32:42 AM
Surr: DNOP	132	21-129	S	%Rec	1	1/1/2023 12:32:42 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 2:33:00 AM
Surr: BFB	106	37.7-212		%Rec	1	12/31/2022 2:33:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 2:33:00 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 2:33:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 2:33:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 2:33:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	12/31/2022 2:33:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 6:52:34 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-34 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:35:00 PM

Lab ID: 2212E44-053

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/1/2023 12:43:30 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/1/2023 12:43:30 AM
Surr: DNOP	114	21-129		%Rec	1	1/1/2023 12:43:30 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 2:53:00 AM
Surr: BFB	112	37.7-212		%Rec	1	12/31/2022 2:53:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 2:53:00 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 2:53:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 2:53:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 2:53:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	12/31/2022 2:53:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 7:29:47 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-34 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:40:00 PM

Lab ID: 2212E44-054

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/1/2023 12:54:18 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/1/2023 12:54:18 AM
Surr: DNOP	117	21-129		%Rec	1	1/1/2023 12:54:18 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 3:12:00 AM
Surr: BFB	104	37.7-212		%Rec	1	12/31/2022 3:12:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 3:12:00 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 3:12:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 3:12:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 3:12:00 AM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	12/31/2022 3:12:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 7:42:11 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-35 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:45:00 PM

Lab ID: 2212E44-055

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	1/1/2023 1:05:00 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/1/2023 1:05:00 AM
Surr: DNOP	129	21-129	S	%Rec	1	1/1/2023 1:05:00 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/31/2022 3:32:00 AM
Surr: BFB	105	37.7-212		%Rec	1	12/31/2022 3:32:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 3:32:00 AM
Toluene	ND	0.048		mg/Kg	1	12/31/2022 3:32:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	12/31/2022 3:32:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/31/2022 3:32:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	12/31/2022 3:32:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	67	60		mg/Kg	20	1/3/2023 8:19:24 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-35 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:50:00 PM

Lab ID: 2212E44-056

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/1/2023 1:15:40 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/1/2023 1:15:40 AM
Surr: DNOP	122	21-129		%Rec	1	1/1/2023 1:15:40 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 3:52:00 AM
Surr: BFB	106	37.7-212		%Rec	1	12/31/2022 3:52:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 3:52:00 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 3:52:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 3:52:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 3:52:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	12/31/2022 3:52:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	61		mg/Kg	20	1/3/2023 8:31:48 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-35 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 1:55:00 PM

Lab ID: 2212E44-057

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/1/2023 1:26:18 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/1/2023 1:26:18 AM
Surr: DNOP	116	21-129		%Rec	1	1/1/2023 1:26:18 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 4:11:00 AM
Surr: BFB	105	37.7-212		%Rec	1	12/31/2022 4:11:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 4:11:00 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 4:11:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 4:11:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 4:11:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/31/2022 4:11:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	130	60		mg/Kg	20	1/3/2023 8:44:12 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-36 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 2:00:00 PM

Lab ID: 2212E44-058

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 5:06:57 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/31/2022 5:06:57 PM
Surr: DNOP	141	21-129	S	%Rec	1	12/31/2022 5:06:57 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 4:31:00 AM
Surr: BFB	109	37.7-212		%Rec	1	12/31/2022 4:31:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 4:31:00 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 4:31:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 4:31:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/31/2022 4:31:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/31/2022 4:31:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 8:56:36 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-36 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 2:15:00 PM

Lab ID: 2212E44-059

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 5:49:42 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 5:49:42 PM
Surr: DNOP	135	21-129	S	%Rec	1	12/31/2022 5:49:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 4:51:00 AM
Surr: BFB	111	37.7-212		%Rec	1	12/31/2022 4:51:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 4:51:00 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 4:51:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 4:51:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 4:51:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	12/31/2022 4:51:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 9:09:01 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-36 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 2:10:00 PM

Lab ID: 2212E44-060

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 6:00:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 6:00:22 PM
Surr: DNOP	128	21-129		%Rec	1	12/31/2022 6:00:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 5:10:00 AM
Surr: BFB	110	37.7-212		%Rec	1	12/31/2022 5:10:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 5:10:00 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 5:10:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 5:10:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/31/2022 5:10:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	12/31/2022 5:10:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/3/2023 9:21:25 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-37 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 2:15:00 PM

Lab ID: 2212E44-061

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 6:11:00 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 6:11:00 PM
Surr: DNOP	121	21-129		%Rec	1	12/31/2022 6:11:00 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 1:27:48 AM
Surr: BFB	91.2	37.7-212		%Rec	1	12/31/2022 1:27:48 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 1:27:48 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 1:27:48 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 1:27:48 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/31/2022 1:27:48 AM
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	12/31/2022 1:27:48 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	61		mg/Kg	20	1/3/2023 9:33:50 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-37 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 2:20:00 PM

Lab ID: 2212E44-062

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 6:21:36 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 6:21:36 PM
Surr: DNOP	135	21-129	S	%Rec	1	12/31/2022 6:21:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 2:38:10 AM
Surr: BFB	91.4	37.7-212		%Rec	1	12/31/2022 2:38:10 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 2:38:10 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 2:38:10 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 2:38:10 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 2:38:10 AM
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	12/31/2022 2:38:10 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	1800	60		mg/Kg	20	1/3/2023 9:46:14 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-37 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 2:25:00 PM

Lab ID: 2212E44-063

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 6:32:11 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 6:32:11 PM
Surr: DNOP	117	21-129		%Rec	1	12/31/2022 6:32:11 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 3:48:19 AM
Surr: BFB	89.3	37.7-212		%Rec	1	12/31/2022 3:48:19 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 3:48:19 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 3:48:19 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 3:48:19 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 3:48:19 AM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	12/31/2022 3:48:19 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	180	59		mg/Kg	20	1/3/2023 9:58:39 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-61 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:00:00 AM

Lab ID: 2212E44-064

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 6:42:44 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 6:42:44 PM
Surr: DNOP	168	21-129	S	%Rec	1	12/31/2022 6:42:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 4:11:40 AM
Surr: BFB	90.1	37.7-212		%Rec	1	12/31/2022 4:11:40 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 4:11:40 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 4:11:40 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 4:11:40 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/31/2022 4:11:40 AM
Surr: 4-Bromofluorobenzene	84.5	70-130		%Rec	1	12/31/2022 4:11:40 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	560	60		mg/Kg	20	1/3/2023 10:11:04 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-61 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:05:00 AM

Lab ID: 2212E44-065

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 6:53:17 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 6:53:17 PM
Surr: DNOP	117	21-129		%Rec	1	12/31/2022 6:53:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 4:35:04 AM
Surr: BFB	91.6	37.7-212		%Rec	1	12/31/2022 4:35:04 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 4:35:04 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 4:35:04 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 4:35:04 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/31/2022 4:35:04 AM
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	12/31/2022 4:35:04 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9500	600		mg/Kg	200	1/4/2023 12:14:28 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-61 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:10:00 AM

Lab ID: 2212E44-066

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 7:03:47 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/31/2022 7:03:47 PM
Surr: DNOP	142	21-129	S	%Rec	1	12/31/2022 7:03:47 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 4:58:28 AM
Surr: BFB	90.9	37.7-212		%Rec	1	12/31/2022 4:58:28 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 4:58:28 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 4:58:28 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 4:58:28 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 4:58:28 AM
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	12/31/2022 4:58:28 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	7000	300		mg/Kg	100	1/4/2023 12:26:53 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-62 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:15:00 AM

Lab ID: 2212E44-067

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 7:14:17 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2022 7:14:17 PM
Surr: DNOP	134	21-129	S	%Rec	1	12/31/2022 7:14:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 5:21:48 AM
Surr: BFB	92.1	37.7-212		%Rec	1	12/31/2022 5:21:48 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 5:21:48 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 5:21:48 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 5:21:48 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 5:21:48 AM
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	12/31/2022 5:21:48 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	160	60		mg/Kg	20	1/3/2023 11:13:05 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-62 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:20:00 AM

Lab ID: 2212E44-068

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	12/31/2022 7:24:46 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/31/2022 7:24:46 PM
Surr: DNOP	114	21-129		%Rec	1	12/31/2022 7:24:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 6:31:59 AM
Surr: BFB	91.1	37.7-212		%Rec	1	12/31/2022 6:31:59 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 6:31:59 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 6:31:59 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 6:31:59 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 6:31:59 AM
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	12/31/2022 6:31:59 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	1400	60		mg/Kg	20	1/3/2023 11:25:29 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-62 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:25:00 AM

Lab ID: 2212E44-069

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	12/31/2022 7:35:13 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/31/2022 7:35:13 PM
Surr: DNOP	118	21-129		%Rec	1	12/31/2022 7:35:13 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 6:55:25 AM
Surr: BFB	91.4	37.7-212		%Rec	1	12/31/2022 6:55:25 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 6:55:25 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 6:55:25 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 6:55:25 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 6:55:25 AM
Surr: 4-Bromofluorobenzene	87.1	70-130		%Rec	1	12/31/2022 6:55:25 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	96	60		mg/Kg	20	1/3/2023 11:37:54 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-63 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:30:00 AM

Lab ID: 2212E44-070

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 7:45:40 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 7:45:40 PM
Surr: DNOP	123	21-129		%Rec	1	12/31/2022 7:45:40 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 7:18:51 AM
Surr: BFB	91.2	37.7-212		%Rec	1	12/31/2022 7:18:51 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 7:18:51 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 7:18:51 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 7:18:51 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 7:18:51 AM
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	12/31/2022 7:18:51 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	530	60		mg/Kg	20	1/3/2023 11:50:19 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-63 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:35:00 AM

Lab ID: 2212E44-071

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 7:56:05 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 7:56:05 PM
Surr: DNOP	121	21-129		%Rec	1	12/31/2022 7:56:05 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 7:42:10 AM
Surr: BFB	92.4	37.7-212		%Rec	1	12/31/2022 7:42:10 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 7:42:10 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 7:42:10 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 7:42:10 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 7:42:10 AM
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	12/31/2022 7:42:10 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	370	60		mg/Kg	20	1/4/2023 12:27:32 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-63 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:40:00 AM

Lab ID: 2212E44-072

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	12/31/2022 8:06:30 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/31/2022 8:06:30 PM
Surr: DNOP	133	21-129	S	%Rec	1	12/31/2022 8:06:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 8:05:34 AM
Surr: BFB	89.7	37.7-212		%Rec	1	12/31/2022 8:05:34 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 8:05:34 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 8:05:34 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 8:05:34 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 8:05:34 AM
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	12/31/2022 8:05:34 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/4/2023 12:39:56 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-64 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:45:00 AM

Lab ID: 2212E44-073

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 8:16:53 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/31/2022 8:16:53 PM
Surr: DNOP	143	21-129	S	%Rec	1	12/31/2022 8:16:53 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 8:28:54 AM
Surr: BFB	88.6	37.7-212		%Rec	1	12/31/2022 8:28:54 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 8:28:54 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 8:28:54 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 8:28:54 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 8:28:54 AM
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	12/31/2022 8:28:54 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	410	60		mg/Kg	20	1/4/2023 2:06:47 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-64 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:50:00 AM

Lab ID: 2212E44-074

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	12/31/2022 8:27:24 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2022 8:27:24 PM
Surr: DNOP	115	21-129		%Rec	1	12/31/2022 8:27:24 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 8:52:16 AM
Surr: BFB	91.5	37.7-212		%Rec	1	12/31/2022 8:52:16 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/31/2022 8:52:16 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 8:52:16 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 8:52:16 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/31/2022 8:52:16 AM
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	12/31/2022 8:52:16 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	4200	150		mg/Kg	50	1/4/2023 12:39:17 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-64 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 10:55:00 AM

Lab ID: 2212E44-075

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 8:37:56 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 8:37:56 PM
Surr: DNOP	118	21-129		%Rec	1	12/31/2022 8:37:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 9:15:38 AM
Surr: BFB	91.3	37.7-212		%Rec	1	12/31/2022 9:15:38 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 9:15:38 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 9:15:38 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 9:15:38 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/31/2022 9:15:38 AM
Surr: 4-Bromofluorobenzene	87.1	70-130		%Rec	1	12/31/2022 9:15:38 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9700	600		mg/Kg	200	1/4/2023 12:51:42 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-65 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:00:00 AM

Lab ID: 2212E44-076

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 8:48:30 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2022 8:48:30 PM
Surr: DNOP	156	21-129	S	%Rec	1	12/31/2022 8:48:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 9:39:02 AM
Surr: BFB	91.6	37.7-212		%Rec	1	12/31/2022 9:39:02 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 9:39:02 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 9:39:02 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 9:39:02 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/31/2022 9:39:02 AM
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	12/31/2022 9:39:02 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	790	60		mg/Kg	20	1/4/2023 2:44:00 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-65 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:05:00 AM

Lab ID: 2212E44-077

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	12/31/2022 8:59:04 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2022 8:59:04 PM
Surr: DNOP	121	21-129		%Rec	1	12/31/2022 8:59:04 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 10:02:29 AM
Surr: BFB	89.9	37.7-212		%Rec	1	12/31/2022 10:02:29 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 10:02:29 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 10:02:29 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 10:02:29 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 10:02:29 AM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	12/31/2022 10:02:29 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9600	590		mg/Kg	200	1/4/2023 1:04:06 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-65 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:10:00 AM

Lab ID: 2212E44-078

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 2:11:26 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/2/2023 2:11:26 PM
Surr: DNOP	110	21-129		%Rec	1	1/2/2023 2:11:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 10:49:25 AM
Surr: BFB	91.0	37.7-212		%Rec	1	12/31/2022 10:49:25 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 10:49:25 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 10:49:25 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 10:49:25 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 10:49:25 AM
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	12/31/2022 10:49:25 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	3000	150		mg/Kg	50	1/4/2023 1:16:31 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-66 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:15:00 AM

Lab ID: 2212E44-079

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 2:21:59 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/2/2023 2:21:59 PM
Surr: DNOP	113	21-129		%Rec	1	1/2/2023 2:21:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/31/2022 11:12:55 AM
Surr: BFB	91.1	37.7-212		%Rec	1	12/31/2022 11:12:55 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 11:12:55 AM
Toluene	ND	0.049		mg/Kg	1	12/31/2022 11:12:55 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/31/2022 11:12:55 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/31/2022 11:12:55 AM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	12/31/2022 11:12:55 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	220	60		mg/Kg	20	1/4/2023 3:46:02 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-66 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:20:00 AM

Lab ID: 2212E44-080

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 2:32:31 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/2/2023 2:32:31 PM
Surr: DNOP	110	21-129		%Rec	1	1/2/2023 2:32:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/31/2022 11:36:28 AM
Surr: BFB	94.4	37.7-212		%Rec	1	12/31/2022 11:36:28 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/31/2022 11:36:28 AM
Toluene	ND	0.050		mg/Kg	1	12/31/2022 11:36:28 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/31/2022 11:36:28 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/31/2022 11:36:28 AM
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	12/31/2022 11:36:28 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	960	60		mg/Kg	20	1/4/2023 3:58:27 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-66 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:25:00 AM

Lab ID: 2212E44-081

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/2/2023 2:43:05 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/2/2023 2:43:05 PM
Surr: DNOP	109	21-129		%Rec	1	1/2/2023 2:43:05 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/3/2023 11:38:00 AM
Surr: BFB	109	37.7-212		%Rec	1	1/3/2023 11:38:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 11:38:00 AM
Toluene	ND	0.050		mg/Kg	1	1/3/2023 11:38:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/3/2023 11:38:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/3/2023 11:38:00 AM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/3/2023 11:38:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	2200	150		mg/Kg	50	1/4/2023 1:28:55 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-67 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:30:00 AM

Lab ID: 2212E44-082

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 3:58:04 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/2/2023 3:58:04 PM
Surr: DNOP	130	21-129	S	%Rec	1	1/2/2023 3:58:04 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 12:37:00 PM
Surr: BFB	113	37.7-212		%Rec	1	1/3/2023 12:37:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 12:37:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 12:37:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 12:37:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 12:37:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/3/2023 12:37:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	3000	150		mg/Kg	50	1/4/2023 1:41:20 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-67 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:35:00 AM

Lab ID: 2212E44-083

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 4:08:38 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/2/2023 4:08:38 PM
Surr: DNOP	115	21-129		%Rec	1	1/2/2023 4:08:38 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 1:38:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/3/2023 1:38:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/3/2023 1:38:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 1:38:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 1:38:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/3/2023 1:38:00 PM
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	1/3/2023 1:38:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	600		mg/Kg	200	1/4/2023 1:53:44 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.
	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

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-67 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:40:00 AM

Lab ID: 2212E44-084

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 4:19:14 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/2/2023 4:19:14 PM
Surr: DNOP	110	21-129		%Rec	1	1/2/2023 4:19:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/3/2023 1:57:00 PM
Surr: BFB	103	37.7-212		%Rec	1	1/3/2023 1:57:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 1:57:00 PM
Toluene	ND	0.050		mg/Kg	1	1/3/2023 1:57:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/3/2023 1:57:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 1:57:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	1/3/2023 1:57:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	600		mg/Kg	200	1/4/2023 2:06:08 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-12 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:00:00 AM

Lab ID: 2212E44-085

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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)	190	15		mg/Kg	1	1/2/2023 4:29:50 PM
Motor Oil Range Organics (MRO)	130	49		mg/Kg	1	1/2/2023 4:29:50 PM
Surr: DNOP	110	21-129		%Rec	1	1/2/2023 4:29:50 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 2:17:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/3/2023 2:17:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/3/2023 2:17:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 2:17:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 2:17:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/3/2023 2:17:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/3/2023 2:17:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	600		mg/Kg	200	1/4/2023 2:43:21 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-12 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:05:00 AM

Lab ID: 2212E44-086

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/2/2023 4:50:58 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/2/2023 4:50:58 PM
Surr: DNOP	107	21-129		%Rec	1	1/2/2023 4:50:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 2:37:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/3/2023 2:37:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 2:37:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 2:37:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 2:37:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 2:37:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/3/2023 2:37:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9300	600		mg/Kg	200	1/4/2023 2:55:45 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-12 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/22/2022 9:10:00 AM

Lab ID: 2212E44-087

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 5:01:35 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/2/2023 5:01:35 PM
Surr: DNOP	110	21-129		%Rec	1	1/2/2023 5:01:35 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 2:56:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/3/2023 2:56:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 2:56:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 2:56:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 2:56:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/3/2023 2:56:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/3/2023 2:56:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	600		mg/Kg	200	1/4/2023 3:08:09 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-68 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:45:00 AM

Lab ID: 2212E44-088

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/2/2023 5:12:12 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/2/2023 5:12:12 PM
Surr: DNOP	108	21-129		%Rec	1	1/2/2023 5:12:12 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/3/2023 3:16:00 PM
Surr: BFB	111	37.7-212		%Rec	1	1/3/2023 3:16:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 3:16:00 PM
Toluene	ND	0.050		mg/Kg	1	1/3/2023 3:16:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/3/2023 3:16:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/3/2023 3:16:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/3/2023 3:16:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	4900	150		mg/Kg	50	1/4/2023 3:20:33 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-68 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:50:00 AM

Lab ID: 2212E44-089

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	13		mg/Kg	1	1/2/2023 5:22:51 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/2/2023 5:22:51 PM
Surr: DNOP	109	21-129		%Rec	1	1/2/2023 5:22:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 3:36:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/3/2023 3:36:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 3:36:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 3:36:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 3:36:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/3/2023 3:36:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/3/2023 3:36:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	67	60		mg/Kg	20	1/4/2023 6:14:56 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-68 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 11:55:00 AM

Lab ID: 2212E44-090

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 5:33:29 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/2/2023 5:33:29 PM
Surr: DNOP	107	21-129		%Rec	1	1/2/2023 5:33:29 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 3:56:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/3/2023 3:56:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 3:56:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 3:56:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 3:56:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/3/2023 3:56:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/3/2023 3:56:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	70	60		mg/Kg	20	1/4/2023 6:27:20 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-69 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:00:00 PM

Lab ID: 2212E44-091

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/2/2023 5:44:06 PM
Motor Oil Range Organics (MRO)	120	50		mg/Kg	1	1/2/2023 5:44:06 PM
Surr: DNOP	101	21-129		%Rec	1	1/2/2023 5:44:06 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 5:53:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/3/2023 5:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/3/2023 5:53:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 5:53:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 5:53:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/3/2023 5:53:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/3/2023 5:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	560	60		mg/Kg	20	1/4/2023 10:59:15 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-69 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:05:00 PM

Lab ID: 2212E44-092

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 6:05:08 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/2/2023 6:05:08 PM
Surr: DNOP	105	21-129		%Rec	1	1/2/2023 6:05:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 6:13:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/3/2023 6:13:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 6:13:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 6:13:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 6:13:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/3/2023 6:13:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/3/2023 6:13:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	9900	600		mg/Kg	200	1/5/2023 11:17:53 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-69 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:10:00 PM

Lab ID: 2212E44-093

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/2/2023 6:15:49 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/2/2023 6:15:49 PM
Surr: DNOP	105	21-129		%Rec	1	1/2/2023 6:15:49 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 6:33:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/3/2023 6:33:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/3/2023 6:33:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 6:33:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 6:33:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/3/2023 6:33:00 PM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/3/2023 6:33:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	8300	300		mg/Kg	100	1/5/2023 11:30:18 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-70 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:15:00 PM

Lab ID: 2212E44-094

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/3/2023 2:04:51 PM
Motor Oil Range Organics (MRO)	57	49		mg/Kg	1	1/3/2023 2:04:51 PM
Surr: DNOP	126	21-129		%Rec	1	1/3/2023 2:04:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/3/2023 6:53:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/3/2023 6:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 6:53:00 PM
Toluene	ND	0.050		mg/Kg	1	1/3/2023 6:53:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/3/2023 6:53:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 6:53:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/3/2023 6:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	350	60		mg/Kg	20	1/4/2023 12:50:56 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-70 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:20:00 PM

Lab ID: 2212E44-095

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/3/2023 11:52:38 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/3/2023 11:52:38 AM
Surr: DNOP	107	21-129		%Rec	1	1/3/2023 11:52:38 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/3/2023 7:12:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/3/2023 7:12:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 7:12:00 PM
Toluene	ND	0.050		mg/Kg	1	1/3/2023 7:12:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/3/2023 7:12:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 7:12:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/3/2023 7:12:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	9900	600		mg/Kg	200	1/5/2023 11:42:42 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-70 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:25:00 PM

Lab ID: 2212E44-096

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/3/2023 12:03:11 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/3/2023 12:03:11 PM
Surr: DNOP	109	21-129		%Rec	1	1/3/2023 12:03:11 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 7:32:00 PM
Surr: BFB	107	37.7-212		%Rec	1	1/3/2023 7:32:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/3/2023 7:32:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 7:32:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 7:32:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/3/2023 7:32:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/3/2023 7:32:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	11000	600		mg/Kg	200	1/5/2023 11:55:07 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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-71 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:30:00 PM

Lab ID: 2212E44-097

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/4/2023 1:34:54 PM
Motor Oil Range Organics (MRO)	84	49		mg/Kg	1	1/4/2023 1:34:54 PM
Surr: DNOP	116	21-129		%Rec	1	1/4/2023 1:34:54 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/3/2023 7:52:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/3/2023 7:52:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 7:52:00 PM
Toluene	ND	0.050		mg/Kg	1	1/3/2023 7:52:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/3/2023 7:52:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 7:52:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	1/3/2023 7:52:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	460	60		mg/Kg	20	1/4/2023 1:28:11 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-71 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:35:00 PM

Lab ID: 2212E44-098

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/3/2023 12:24:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/3/2023 12:24:22 PM
Surr: DNOP	100	21-129		%Rec	1	1/3/2023 12:24:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/3/2023 8:11:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/3/2023 8:11:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/3/2023 8:11:00 PM
Toluene	ND	0.048		mg/Kg	1	1/3/2023 8:11:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/3/2023 8:11:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/3/2023 8:11:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/3/2023 8:11:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	440	60		mg/Kg	20	1/4/2023 1:40:36 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-71 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:40:00 PM

Lab ID: 2212E44-099

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/3/2023 12:34:58 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/3/2023 12:34:58 PM
Surr: DNOP	104	21-129		%Rec	1	1/3/2023 12:34:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 8:31:00 PM
Surr: BFB	102	37.7-212		%Rec	1	1/3/2023 8:31:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 8:31:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 8:31:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 8:31:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/3/2023 8:31:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	1/3/2023 8:31:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	540	60		mg/Kg	20	1/4/2023 1:53:00 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-72 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:45:00 PM

Lab ID: 2212E44-100

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/3/2023 12:45:33 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/3/2023 12:45:33 PM
Surr: DNOP	105	21-129		%Rec	1	1/3/2023 12:45:33 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/3/2023 8:51:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/3/2023 8:51:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 8:51:00 PM
Toluene	ND	0.050		mg/Kg	1	1/3/2023 8:51:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/3/2023 8:51:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 8:51:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/3/2023 8:51:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	370	60		mg/Kg	20	1/4/2023 2:05:25 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-72 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:50:00 PM

Lab ID: 2212E44-101

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	15		mg/Kg	1	1/3/2023 12:56:13 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/3/2023 12:56:13 PM
Surr: DNOP	98.5	21-129		%Rec	1	1/3/2023 12:56:13 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 10:49:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/3/2023 10:49:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/3/2023 10:49:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 10:49:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 10:49:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/3/2023 10:49:00 PM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/3/2023 10:49:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	260	60		mg/Kg	20	1/4/2023 2:17:50 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	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.		

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## Analytical Report

Lab Order 2212E44

Date Reported: 1/12/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-72 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/21/2022 12:55:00 PM

Lab ID: 2212E44-102

Matrix: SOIL

Received Date: 12/29/2022 7:30:00 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	14		mg/Kg	1	1/3/2023 1:06:51 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/3/2023 1:06:51 PM
Surr: DNOP	106	21-129		%Rec	1	1/3/2023 1:06:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/3/2023 11:48:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/3/2023 11:48:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/3/2023 11:48:00 PM
Toluene	ND	0.049		mg/Kg	1	1/3/2023 11:48:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/3/2023 11:48:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/3/2023 11:48:00 PM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/3/2023 11:48:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	98	60		mg/Kg	20	1/5/2023 11:05:28 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.		

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-72391</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72391</b>		RunNo: <b>93647</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380712</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72391</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72391</b>		RunNo: <b>93647</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380713</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	101	90	110			

Sample ID: <b>MB-72413</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72413</b>		RunNo: <b>93692</b>							
Prep Date: <b>1/3/2023</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381942</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72413</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72413</b>		RunNo: <b>93692</b>							
Prep Date: <b>1/3/2023</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381943</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Sample ID: <b>MB-72414</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72414</b>		RunNo: <b>93692</b>							
Prep Date: <b>1/3/2023</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381972</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72414</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72414</b>		RunNo: <b>93692</b>							
Prep Date: <b>1/3/2023</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381973</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	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 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#: 2212E44  
12-Jan-23

Client: Devon Energy  
Project: East Pecos Pipeline Spill

Sample ID: MB-72427	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 72427	RunNo: 93696
Prep Date: 1/3/2023	Analysis Date: 1/3/2023	SeqNo: 3382053 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-72427	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 72427	RunNo: 93696
Prep Date: 1/3/2023	Analysis Date: 1/3/2023	SeqNo: 3382054 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	15	1.5 15.00 0 102 90 110

Sample ID: MB-72428	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 72428	RunNo: 93696
Prep Date: 1/3/2023	Analysis Date: 1/4/2023	SeqNo: 3382083 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-72428	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 72428	RunNo: 93696
Prep Date: 1/3/2023	Analysis Date: 1/4/2023	SeqNo: 3382084 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	16	1.5 15.00 0 105 90 110

Sample ID: MB-72432	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 72432	RunNo: 93724
Prep Date: 1/4/2023	Analysis Date: 1/4/2023	SeqNo: 3383193 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-72432	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 72432	RunNo: 93724
Prep Date: 1/4/2023	Analysis Date: 1/4/2023	SeqNo: 3383194 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 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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-72383</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72383</b>		RunNo: <b>93644</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3379607</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.00	0	96.0	64.4	127			
Surr: DNOP	6.2		5.000		125	21	129			

Sample ID: <b>MB-72383</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72383</b>		RunNo: <b>93644</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3379608</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		121	21	129			

Sample ID: <b>2212E44-018AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-22 4'</b>	Batch ID: <b>72390</b>		RunNo: <b>93660</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380168</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	65	15	49.41	0	132	36.1	154			
Surr: DNOP	8.2		4.941		165	21	129			S

Sample ID: <b>2212E44-018AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-22 4'</b>	Batch ID: <b>72390</b>		RunNo: <b>93660</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380169</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	15	48.92	0	125	36.1	154	6.47	33.9	
Surr: DNOP	7.9		4.892		161	21	129	0	0	S

Sample ID: <b>2212E44-038AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-29 2'</b>	Batch ID: <b>72400</b>		RunNo: <b>93660</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380191</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	14	46.95	0	95.3	36.1	154			
Surr: DNOP	5.8		4.695		124	21	129			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: 2212E44-038AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: BH22-29 2'	Batch ID: 72400	RunNo: 93660
Prep Date: 12/30/2022	Analysis Date: 12/31/2022	SeqNo: 3380192 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	43	15 48.73 0 87.9 36.1 154 4.32 33.9
Surr: DNOP	5.7	4.873 118 21 129 0 0

Sample ID: 2212E44-058AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: BH22-36 0'	Batch ID: 72402	RunNo: 93660
Prep Date: 12/30/2022	Analysis Date: 12/31/2022	SeqNo: 3380213 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	51	14 47.94 0 107 36.1 154
Surr: DNOP	6.4	4.794 134 21 129 S

Sample ID: 2212E44-058AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: BH22-36 0'	Batch ID: 72402	RunNo: 93660
Prep Date: 12/30/2022	Analysis Date: 12/31/2022	SeqNo: 3380214 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	51	14 47.80 0 107 36.1 154 0.0961 33.9
Surr: DNOP	6.5	4.780 135 21 129 0 0 S

Sample ID: LCS-72390	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 72390	RunNo: 93660
Prep Date: 12/30/2022	Analysis Date: 12/31/2022	SeqNo: 3380234 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	49	15 50.00 0 97.4 64.4 127
Surr: DNOP	6.6	5.000 131 21 129 S

Sample ID: LCS-72400	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 72400	RunNo: 93660
Prep Date: 12/30/2022	Analysis Date: 12/31/2022	SeqNo: 3380235 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	49	15 50.00 0 98.0 64.4 127
Surr: DNOP	6.2	5.000 125 21 129

Sample ID: LCS-72402	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 72402	RunNo: 93660
Prep Date: 12/30/2022	Analysis Date: 12/31/2022	SeqNo: 3380236 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-72402</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72402</b>		RunNo: <b>93660</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380236</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	15	50.00	0	98.4	64.4	127			
Surr: DNOP	6.3		5.000		126	21	129			

Sample ID: <b>MB-72390</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72390</b>		RunNo: <b>93660</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380237</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		115	21	129			

Sample ID: <b>MB-72400</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72400</b>		RunNo: <b>93660</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380238</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		122	21	129			

Sample ID: <b>MB-72402</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72402</b>		RunNo: <b>93660</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380239</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		119	21	129			

Sample ID: <b>LCS-72404</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72404</b>		RunNo: <b>93671</b>							
Prep Date: <b>1/1/2023</b>	Analysis Date: <b>1/2/2023</b>		SeqNo: <b>3380882</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	15	50.00	0	101	64.4	127			
Surr: DNOP	7.0		5.000		140	21	129			S

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: MB-72404	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 72404	RunNo: 93671								
Prep Date: 1/1/2023	Analysis Date: 1/2/2023	SeqNo: 3380883 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	21	129			

Sample ID: MB-72404	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 72404	RunNo: 93673								
Prep Date: 1/1/2023	Analysis Date: 1/3/2023	SeqNo: 3381070 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.0	21	129			

Sample ID: LCS-72405	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 72405	RunNo: 93677								
Prep Date: 1/2/2023	Analysis Date: 1/3/2023	SeqNo: 3381146 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	15	50.00	0	85.4	64.4	127			
Surr: DNOP	5.6		5.000		111	21	129			

Sample ID: MB-72405	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 72405	RunNo: 93677								
Prep Date: 1/2/2023	Analysis Date: 1/3/2023	SeqNo: 3381148 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		99.2	21	129			

Sample ID: 2212E44-094AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-70 0'	Batch ID: 72405	RunNo: 93677								
Prep Date: 1/2/2023	Analysis Date: 1/3/2023	SeqNo: 3381883 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	14	47.13	0	92.6	36.1	154			
Surr: DNOP	5.6		4.713		119	21	129			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>2212E44-094AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-70 0'</b>	Batch ID: <b>72405</b>	RunNo: <b>93677</b>								
Prep Date: <b>1/2/2023</b>	Analysis Date: <b>1/3/2023</b>	SeqNo: <b>3381884</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	15	50.10	0	98.5	36.1	154	12.3	33.9	
Surr: DNOP	6.4		5.010		127	21	129	0	0	

Sample ID: <b>MB-72404</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72404</b>	RunNo: <b>93736</b>								
Prep Date: <b>1/1/2023</b>	Analysis Date: <b>1/3/2023</b>	SeqNo: <b>3383540</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		97.6	21	129			

Sample ID: <b>MB-72404</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72404</b>	RunNo: <b>93821</b>								
Prep Date: <b>1/1/2023</b>	Analysis Date: <b>1/9/2023</b>	SeqNo: <b>3386940</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	8.8		10.00		88.4	21	129			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>ics-72377</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72377</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380310</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	5.0	25.00	0	106	72.3	137			
Surr: BFB	2300		1000		230	37.7	212			S

Sample ID: <b>mb-72377</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72377</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380311</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	1100		1000		110	37.7	212			

Sample ID: <b>ics-72382</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72382</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380334</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	5.0	25.00	0	105	72.3	137			
Surr: BFB	2300		1000		230	37.7	212			S

Sample ID: <b>mb-72382</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72382</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380335</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	1100		1000		108	37.7	212			

Sample ID: <b>2212e44-041ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-30 2'</b>	Batch ID: <b>72382</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380337</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	4.9	24.56	0	106	70	130			
Surr: BFB	2300		982.3		235	37.7	212			S

Sample ID: <b>2212e44-041amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-30 2'</b>	Batch ID: <b>72382</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380338</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#: 2212E44

12-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: 2212e44-041amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-30 2'	Batch ID: 72382	RunNo: 93664
Prep Date: 12/29/2022	Analysis Date: 12/30/2022	SeqNo: 3380338 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	28	4.9 24.73 0 113 70 130 7.33 20
Surr: BFB	2500	989.1 250 37.7 212 0 0 S

Sample ID: 2212e44-021ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-23 4'	Batch ID: 72379	RunNo: 93665
Prep Date: 12/29/2022	Analysis Date: 12/30/2022	SeqNo: 3380425 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	28	5.0 24.80 0 112 70 130
Surr: BFB	2000	992.1 198 37.7 212

Sample ID: 2212e44-021amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-23 4'	Batch ID: 72379	RunNo: 93665
Prep Date: 12/29/2022	Analysis Date: 12/30/2022	SeqNo: 3380426 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	28	4.9 24.73 0 113 70 130 0.734 20
Surr: BFB	2000	989.1 198 37.7 212 0 0

Sample ID: 2212e44-061ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-37 0'	Batch ID: 72384	RunNo: 93665
Prep Date: 12/29/2022	Analysis Date: 12/31/2022	SeqNo: 3380447 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	27	5.0 24.98 0 108 70 130
Surr: BFB	2000	999.0 196 37.7 212

Sample ID: 2212e44-061amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-37 0'	Batch ID: 72384	RunNo: 93665
Prep Date: 12/29/2022	Analysis Date: 12/31/2022	SeqNo: 3380448 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	26	4.9 24.68 0 106 70 130 2.76 20
Surr: BFB	2000	987.2 201 37.7 212 0 0

Sample ID: lcs-72379	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: LCSS	Batch ID: 72379	RunNo: 93665
Prep Date: 12/29/2022	Analysis Date: 12/30/2022	SeqNo: 3380473 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>ics-72379</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72379</b>		RunNo: <b>93665</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380473</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	72.3	137			
Surr: BFB	2000		1000		198	37.7	212			

Sample ID: <b>ics-72384</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72384</b>		RunNo: <b>93665</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380474</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	5.0	25.00	0	106	72.3	137			
Surr: BFB	1900		1000		194	37.7	212			

Sample ID: <b>mb-72379</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72379</b>		RunNo: <b>93665</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380476</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	920		1000		91.5	37.7	212			

Sample ID: <b>mb-72384</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72384</b>		RunNo: <b>93665</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380477</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		90.8	37.7	212			

Sample ID: <b>LCS-72392</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72392</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381332</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	5.0	25.00	0	103	72.3	137			
Surr: BFB	2200		1000		225	37.7	212			S

Sample ID: <b>mb-72392</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72392</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381333</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	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#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>mb-72392</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72392</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381333</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	1100		1000		110	37.7	212			

Sample ID: <b>2212E44-081ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-66 4'</b>	Batch ID: <b>72392</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381335</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	5.0	24.80	0	104	70	130			
Surr: BFB	2400		992.1		239	37.7	212			S

Sample ID: <b>2212E44-081amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-66 4'</b>	Batch ID: <b>72392</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381336</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	5.0	24.80	0	104	70	130	0.653	20	
Surr: BFB	2300		992.1		232	37.7	212	0	0	S

Sample ID: <b>2212E44-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-16 0'</b>	Batch ID: <b>72377</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381346</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	24.83	0	93.0	70	130			
Surr: BFB	2200		993.0		222	37.7	212			S

Sample ID: <b>2212E44-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-16 0'</b>	Batch ID: <b>72377</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381347</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.58	0	91.0	70	130	3.16	20	
Surr: BFB	2100		983.3		215	37.7	212	0	0	S

Sample ID: <b>LCS-72396</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72396</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381358</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#: 2212E44

12-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-72396</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72396</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381358</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	5.0	25.00	0	106	72.3	137			
Surr: BFB	2400		1000		238	37.7	212			S

Sample ID: <b>mb-72396</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72396</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381359</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	1100		1000		108	37.7	212			

Sample ID: <b>2212E44-101ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-72 2'</b>	Batch ID: <b>72396</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381361</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	4.9	24.34	0	101	70	130			
Surr: BFB	2200		973.7		229	37.7	212			S

Sample ID: <b>2212E44-101amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-72 2'</b>	Batch ID: <b>72396</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381362</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	4.8	24.18	0	102	70	130	0.228	20	
Surr: BFB	2300		967.1		234	37.7	212	0	0	S

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: <b>ics-72377</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72377</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380364</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	114	80	120			
Toluene	1.2	0.050	1.000	0	116	80	120			
Ethylbenzene	1.2	0.050	1.000	0	116	80	120			
Xylenes, Total	3.5	0.10	3.000	0	116	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		122	70	130			

Sample ID: <b>mb-72377</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72377</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380365</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	1.2		1.000		122	70	130			

Sample ID: <b>ics-72382</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72382</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380388</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	111	80	120			
Toluene	1.1	0.050	1.000	0	112	80	120			
Ethylbenzene	1.1	0.050	1.000	0	112	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		123	70	130			

Sample ID: <b>mb-72382</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72382</b>		RunNo: <b>93664</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380389</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	1.2		1.000		120	70	130			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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

WO#: 2212E44

12-Jan-23

**Client:** Devon Energy**Project:** East Pecos Pipeline Spill

Sample ID: <b>2212e44-042ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-30 4'</b>	Batch ID: <b>72382</b>	RunNo: <b>93664</b>								
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>	SeqNo: <b>3380392</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	0.9852	0	123	68.8	120			S
Toluene	1.2	0.049	0.9852	0	125	73.6	124			S
Ethylbenzene	1.2	0.049	0.9852	0	126	72.7	129			
Xylenes, Total	3.7	0.099	2.956	0	126	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9852		118	70	130			

Sample ID: <b>2212e44-042amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-30 4'</b>	Batch ID: <b>72382</b>	RunNo: <b>93664</b>								
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>	SeqNo: <b>3380393</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	0.9940	0	116	68.8	120	4.81	20	
Toluene	1.2	0.050	0.9940	0	118	73.6	124	4.44	20	
Ethylbenzene	1.2	0.050	0.9940	0	118	72.7	129	5.15	20	
Xylenes, Total	3.6	0.099	2.982	0	119	75.7	126	4.63	20	
Surr: 4-Bromofluorobenzene	1.2		0.9940		120	70	130	0	0	

Sample ID: <b>2212e44-022ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-24 0'</b>	Batch ID: <b>72379</b>	RunNo: <b>93665</b>								
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>	SeqNo: <b>3380487</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.023	0.9320	0	112	68.8	120			
Toluene	1.1	0.047	0.9320	0	114	73.6	124			
Ethylbenzene	1.1	0.047	0.9320	0	117	72.7	129			
Xylenes, Total	3.3	0.093	2.796	0.01742	116	75.7	126			
Surr: 4-Bromofluorobenzene	0.82		0.9320		87.9	70	130			

Sample ID: <b>2212e44-022amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-24 0'</b>	Batch ID: <b>72379</b>	RunNo: <b>93665</b>								
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>	SeqNo: <b>3380488</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.023	0.9337	0	106	68.8	120	5.38	20	
Toluene	1.0	0.047	0.9337	0	108	73.6	124	4.74	20	
Ethylbenzene	1.0	0.047	0.9337	0	110	72.7	129	6.16	20	
Xylenes, Total	3.1	0.093	2.801	0.01742	108	75.7	126	6.70	20	
Surr: 4-Bromofluorobenzene	0.82		0.9337		87.9	70	130	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44

12-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: 2212e44-062ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: BH22-37 2'	Batch ID: 72384			RunNo: 93665						
Prep Date: 12/29/2022	Analysis Date: 12/31/2022			SeqNo: 3380509			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	0.9960	0	95.5	68.8	120			
Toluene	0.99	0.050	0.9960	0	99.0	73.6	124			
Ethylbenzene	0.99	0.050	0.9960	0	99.7	72.7	129			
Xylenes, Total	3.0	0.10	2.988	0.01824	98.2	75.7	126			
Surr: 4-Bromofluorobenzene	0.86		0.9960		86.0	70	130			

Sample ID: 2212e44-062amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-37 2'	Batch ID: 72384	RunNo: 93665								
Prep Date: 12/29/2022	Analysis Date: 12/31/2022	SeqNo: 3380510 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9747	0	99.7	68.8	120	2.18	20	
Toluene	1.0	0.049	0.9747	0	102	73.6	124	1.15	20	
Ethylbenzene	1.0	0.049	0.9747	0	103	72.7	129	1.20	20	
Xylenes, Total	3.0	0.097	2.924	0.01824	102	75.7	126	1.58	20	
Surr: 4-Bromofluorobenzene	0.85		0.9747		86.9	70	130	0	0	

Sample ID: LCS-72379		SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS		Batch ID: 72379			RunNo: 93665					
Prep Date: 12/29/2022		Analysis Date: 12/30/2022			SeqNo: 3380534		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.4	80	120			
Toluene	0.89	0.050	1.000	0	89.0	80	120			
Ethylbenzene	0.89	0.050	1.000	0	89.0	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.4	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	70	130			

Sample ID: LCS-72384		SampType: LCS		TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS		Batch ID: 72384		RunNo: 93665						
Prep Date: 12/29/2022		Analysis Date: 12/31/2022		SeqNo: 3380535		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.2	80	120			
Toluene	0.90	0.050	1.000	0	90.0	80	120			
Ethylbenzene	0.89	0.050	1.000	0	89.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.0	80	120			
Surr: 4-Bromofluorobenzene	0.88		1.000		87.7	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

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## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2212E44

12-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: <b>mb-72379</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72379</b>		RunNo: <b>93665</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/30/2022</b>		SeqNo: <b>3380536</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	0.87		1.000		86.9	70	130			

Sample ID: <b>mb-72384</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72384</b>		RunNo: <b>93665</b>							
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>12/31/2022</b>		SeqNo: <b>3380537</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	0.86		1.000		85.7	70	130			

Sample ID: <b>LCS-72392</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72392</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381384</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	113	80	120			
Toluene	1.1	0.050	1.000	0	114	80	120			
Ethylbenzene	1.1	0.050	1.000	0	114	80	120			
Xylenes, Total	3.4	0.10	3.000	0	114	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		123	70	130			

Sample ID: <b>mb-72392</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72392</b>		RunNo: <b>93680</b>							
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>		SeqNo: <b>3381385</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	1.2		1.000		123	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

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

WO#: 2212E44

12-Jan-23

**Client:** Devon Energy**Project:** East Pecos Pipeline Spill

Sample ID: <b>2212E44-082ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-67 0'</b>	Batch ID: <b>72392</b>	RunNo: <b>93680</b>								
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>	SeqNo: <b>3381390</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9881	0	111	68.8	120			
Toluene	1.1	0.049	0.9881	0	113	73.6	124			
Ethylbenzene	1.1	0.049	0.9881	0	113	72.7	129			
Xylenes, Total	3.3	0.099	2.964	0	113	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9881		122	70	130			

Sample ID: <b>2212E44-082amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-67 0'</b>	Batch ID: <b>72392</b>	RunNo: <b>93680</b>								
Prep Date: <b>12/30/2022</b>	Analysis Date: <b>1/3/2023</b>	SeqNo: <b>3381391</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9862	0	110	68.8	120	0.834	20	
Toluene	1.1	0.049	0.9862	0	112	73.6	124	0.708	20	
Ethylbenzene	1.1	0.049	0.9862	0	114	72.7	129	0.540	20	
Xylenes, Total	3.4	0.099	2.959	0	114	75.7	126	0.741	20	
Surr: 4-Bromofluorobenzene	1.2		0.9862		122	70	130	0	0	

Sample ID: <b>2212E44-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-16 2'</b>	Batch ID: <b>72377</b>	RunNo: <b>93680</b>								
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>1/3/2023</b>	SeqNo: <b>3381400</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.024	0.9634	0	102	68.8	120			
Toluene	1.0	0.048	0.9634	0	105	73.6	124			
Ethylbenzene	1.0	0.048	0.9634	0	105	72.7	129			
Xylenes, Total	3.0	0.096	2.890	0	105	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9634		121	70	130			

Sample ID: <b>2212E44-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-16 2'</b>	Batch ID: <b>72377</b>	RunNo: <b>93680</b>								
Prep Date: <b>12/29/2022</b>	Analysis Date: <b>1/3/2023</b>	SeqNo: <b>3381401</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9690	0	105	68.8	120	3.16	20	
Toluene	1.0	0.048	0.9690	0	108	73.6	124	3.46	20	
Ethylbenzene	1.1	0.048	0.9690	0	108	72.7	129	4.01	20	
Xylenes, Total	3.2	0.097	2.907	0	109	75.7	126	4.09	20	
Surr: 4-Bromofluorobenzene	1.2		0.9690		120	70	130	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2212E44  
12-Jan-23

Client: Devon Energy  
Project: East Pecos Pipeline Spill

Sample ID: LCS-72396	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 72396	RunNo: 93680								
Prep Date: 12/30/2022	Analysis Date: 1/3/2023	SeqNo: 3381412			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	112	80	120			
Toluene	1.1	0.050	1.000	0	114	80	120			
Ethylbenzene	1.1	0.050	1.000	0	114	80	120			
Xylenes, Total	3.4	0.10	3.000	0	114	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		122	70	130			

Sample ID: mb-72396	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 72396	RunNo: 93680								
Prep Date: 12/30/2022	Analysis Date: 1/3/2023	SeqNo: 3381413			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		122	70	130			

Sample ID: 2212E44-102ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-72 4'	Batch ID: 72396	RunNo: 93680								
Prep Date: 12/30/2022	Analysis Date: 1/4/2023	SeqNo: 3381416			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9901	0	111	68.8	120			
Toluene	1.1	0.050	0.9901	0	113	73.6	124			
Ethylbenzene	1.1	0.050	0.9901	0	113	72.7	129			
Xylenes, Total	3.3	0.099	2.970	0	113	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9901		120	70	130			

Sample ID: 2212E44-102amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-72 4'	Batch ID: 72396	RunNo: 93680								
Prep Date: 12/30/2022	Analysis Date: 1/4/2023	SeqNo: 3381417			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9833	0	114	68.8	120	1.33	20	
Toluene	1.1	0.049	0.9833	0	116	73.6	124	1.91	20	
Ethylbenzene	1.1	0.049	0.9833	0	116	72.7	129	2.24	20	
Xylenes, Total	3.4	0.098	2.950	0	116	75.7	126	2.60	20	
Surr: 4-Bromofluorobenzene	1.2		0.9833		121	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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: **2212E44**

RcptNo: 1

Received By: **Cheyenne Cason** 12/29/2022 7:30:00 AM

Completed By: **Cheyenne Cason** 12/29/2022 8:17:08 AM

Reviewed By: *ju 12/29/22*

*Chad*

*Chad*

## 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: *KPC 12-29-22*

## 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	0.8	Good	Not Present	IR Yogi		
2	1.6	Good	Not Present	IR Yogi		

## Chain-of-Custody Record

Client:

Doron / WJPH

Mailing Address:

Jim Brady

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard☒ Rush

5 days

Project Name:

East Pecos Pipeline Spill

Project #:

22E-03982

Project Manager:

Monica Pappin

Sampler: MW / MJP

On Ice: ☒ Yes ☐ No ZR Yogi

# of Coolers: 2 1.6-0=1.6

Cooler Temp(Including CF): 0.8-0=0.8 (°C)

Container Type and #

Preservative Type

HEAL NO. 2212E44

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

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Sample Name

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Released to Imaging: 1/28/2025 11:01:31 AM

*Received by OCD: 12/17/2024 11:20:33 AM*

# Chain-of-Custody Record

Client:

DUN/WPX

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ AZ Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard

Rush 5 Day

Project Name:

East Pecos Pipeline Spill

Project #:

22E-03982

Project Manager:

Monica Pappin

Sampler: MW/MSP

On Ice:

☒ Yes ☐ No

# of Coolers:

2 1.6-0±1.6

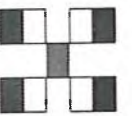
Cooler Temp(Including CF): 0.8-0±0.8 (°C)

Container Type and #

Preservative Type

HEAL NO. 22E44

BTEX / MTBE / TMB's (8021)  
TPH:8015D(GRO / DRO / MRO)  
8081 Pesticides/8082 PCB's  
EDB (Method 504.1)  
PAHs by 8310 or 8270SIMS  
RCRA 8 Metals  
Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>  
8260 (VOA)  
8270 (Semi-VOA)  
Total Coliform (Present/Absent)



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL NO.	Remarks
12/22	11:15	Soil	BH22-25	402	Ice	025	
11:20			BH22-25			026	
11:25			BH22-25			027	
11:30			BH22-26			028	
11:38			BH22-26			029	
11:40			BH22-26			030	
11:45			BH22-27			031	
11:50			BH22-27			032	
11:55			BH22-27			033	
10:00			BH22-28			034	
10:05			BH22-28			035	
10:10			BH22-28			036	

Date: Time: Relinquished by:

Received by:

Via:

Date Time

Remarks:

Date: Time: Relinquished by:

Received by:

Via:

Date Time

Date: Time: Relinquished by:

Received by:

Via:

Date Time



Released to Imaging: 1/28/2025 11:01:31 AM

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

4901 Hawkins NE - Albuquerque, NM 87109

## Analysis Request

## Analysis Request

MTBE / TMB's (8021)  
15D(GRO / DRO / MRO)  
Pesticides/8082 PCB's  
(method 504.1)  
by 8310 or 8270SIMS  
3 Metals  
Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>  
(VOA)  
Semi-VOA)  
Poliform (Present/Absent)

BTEX	MTBE / TMB's (8021)
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl	F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

✓	(BTEX) MTBE / TMB's (8021)
✓	TPH:8015D(GRO / DRO / MRO)
	8081 Pesticides/8082 PCB's
	EDB (Method 504.1)
	PAHs by 8310 or 8270SIMS
	RCRA 8 Metals
✓	(Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )
	8260 (VOA)
	8270 (Semi-VOA)
	Total Coliform (Present/Absent)

	✓	BTEX	MTBE / TMB's (8021)
	✓		TPH:8015D(GRO / DRO / MRO)
			8081 Pesticides/8082 PCB's
			EDB (Method 504.1)
			PAHs by 8310 or 8270SIMS
			RCRA 8 Metals
	✓	Cl	F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
			8260 (VOA)
			8270 (Semi-VOA)
			Total Coliform (Present/Absent)

		✓ BTEX / MTBE / TMB's (8021)
		✓ TPH:8015D(GRO / DRO / MRO)
		8081 Pesticides/8082 PCB's
		EDB (Method 504.1)
		PAHs by 8310 or 8270SIMS
		RCRA 8 Metals
		✓ Cl F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
		8260 (VOA)
		8270 (Semi-VOA)
		Total Coliform (Present/Absent)

			✓	BTEX	MTBE / TMB's (8021)
			✓	TPH:	8015D(GRO / DRO / MRO)
				8081 Pesticides/8082 PCB's	
				EDB (Method 504.1)	
				PAHs by 8310 or 8270SIMS	
				RCRA 8 Metals	
			✓	Cl	F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
				8260 (VOA)	
				8270 (Semi-VOA)	
				Total Coliform (Present/Absent)	

				✓	BTEX) MTBE / TMB's (8021)
				✓	TPH:8015D(GRO / DRO / MRO)
					8081 Pesticides/8082 PCB's
					EDB (Method 504.1)
					PAHs by 8310 or 8270SIMS
					RCRA 8 Metals
				✓	Cl <sup>-</sup> , F <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , PO <sub>4</sub> <sup>3-</sup> , SO <sub>4</sub> <sup>2-</sup>
					8260 (VOA)
					8270 (Semi-VOA)
					Total Coliform (Present/Absent)

				✓	BTEX	MTBE / TMB's (8021)
				✓	TPH:8015D(GRO / DRO / MRO)	
					8081 Pesticides/8082 PCB's	
					EDB (Method 504.1)	
					PAHs by 8310 or 8270SIMS	
					RCRA 8 Metals	
				✓	Cl	F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
					8260 (VOA)	
					8270 (Semi-VOA)	
					Total Coliform (Present/Absent)	

				<	(BTEX) MTBE / TMB's (8021)
				<	TPH:8015D(GRO / DRO / MRO)
					8081 Pesticides/8082 PCB's
					EDB (Method 504.1)
					PAHs by 8310 or 8270SIMS
					RCRA 8 Metals
				<	(Cl) F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>x</sub>
					8260 (VOA)
					8270 (Semi-VOA)
					Total Coliform (Present/Absent)

[illegible][illegible][illegible][illegible][illegible][illegible]

Remarks:											<	BTEX	MTBE / TMB's (8021)	
												<	TPH:8015D(GRO / DRO / MRO)	
													8081 Pesticides/8082 PCB's	
													EDB (Method 504.1)	
													PAHs by 8310 or 8270SIMS	
													RCRA 8 Metals	
												<	Cl	F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
													8260 (VOA)	
													8270 (Semi-VOA)	
												Total Coliform (Present/Absent)		

[illegible][illegible]

Received by OCD: 12/17/2024 11:20:33 AM

Released to Imaging: 1/28/2025 11:01:31 AM

☒ Rush 5 Days

Project Name: East Pecos Pipeline Sp. 11

Project #: 22E-03982

### Project Manager:

☐ Level 4 (Full Validation)

Maice Peppin

Sampler: MWS/MJF

On Ice: ☒ Yes ☐ No

Cooler Temp (including CF): 0.8-0 = 0.8 (°C)

Container Type and #	Preservative Type
----------------------	-------------------

HEAL NO. 112 E 44

~~BTEX~~ / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

### EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

## RCRA 8 Metals

(Cl) F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

4901 Hawkins NE - Albuquerque, NM 87109  
Tel. 505-345-3975 Fax 505-345-4107  
**Analysis Request**

**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**  
www.hallenvironmental.com

## Analysis Request

Received by: Via:

Date Time

Remarks:

Received by: Via:

Date Time

will	will	will
------	------	------

One copy 2/24/14 0730

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 identified on the analytical report.

Received by *OCD: 12/17/2024 11:20:33 AM*



Released to Imaging: 1/28/2025 11:01:31 AM

Any sub-contracted date will be sub-contracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted date will be sub-contracted to other accredited laboratories. This serves as notice of this possibility.

Mr Cassin 12/29/22 0730

Released to Imaging: 1/28/2025 11:01:31 AM

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

4901 Hawkins NE - Albuquerque, NM 87109

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

Fax 505-345-4107

## Analysis Request

MTBE / TMB's (8021)
15D(GRO / DRO / MRO)
Pesticides/8082 PCB's
(Method 504.1)
by 8310 or 8270SIMS
8 Metals
Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO
(VOA)
(Semi-VOA)
oliform (Present/Absent)

BTEX / MTBE / TMB's (8021)
TPH:8015D(GRO / DRO / MRO)
8081 Pesticides/8082 PCB's
EDB (Method 504.1)
PAHs by 8310 or 8270SIMS
RCRA 8 Metals
Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
8260 (VOA)
8270 (Semi-VOA)
Total Coliform (Present/Absent)

✓	(BTEX) MTBE / TMB's (8021)
✓	TPH:8015D(GRO / DRO / MRO)
	8081 Pesticides/8082 PCB's
	EDB (Method 504.1)
	PAHs by 8310 or 8270SIMS
	RCRA 8 Metals
✓	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
	8260 (VOA)
	8270 (Semi-VOA)
	Total Coliform (Present/Absent)

		(BTEX) MTBE / TMB's (8021)
		TPH:8015D(GRO / DRO / MRO)
		8081 Pesticides/8082 PCB's
		EDB (Method 504.1)
		PAHs by 8310 or 8270SIMS
		RCRA 8 Metals
		Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
		8260 (VOA)
		8270 (Semi-VOA)
		Total Coliform (Present/Absent)

		(BTEX) MTBE / TMB's (8021)
		TPH:8015D(GRO / DRO / MRO)
		8081 Pesticides/8082 PCB's
		EDB (Method 504.1)
		PAHs by 8310 or 8270SIMS
		RCRA 8 Metals
		C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
		8260 (VOA)
		8270 (Semi-VOA)
		Total Coliform (Present/Absent)

				(BTEX) MTBE / TMB's (8021)
				TPH:8015D(GRO / DRO / MRO)
				8081 Pesticides/8082 PCB's
				EDB (Method 504.1)
				PAHs by 8310 or 8270SIMS
				RCRA 8 Metals
				C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
				8260 (VOA)
				8270 (Semi-VOA)
				Total Coliform (Present/Absent)

				BTEX / MTBE / TMB's (8021)
				TPH:8015D(GRO / DRO / MRO)
				8081 Pesticides/8082 PCB's
				EDB (Method 504.1)
				PAHs by 8310 or 8270SIMS
				RCRA 8 Metals
				C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
				8260 (VOA)
				8270 (Semi-VOA)
				Total Coliform (Present/Absent)

					BTEX / MTBE / TMB's (8021)
					TPH:8015D(GRO / DRO / MRO)
					8081 Pesticides/8082 PCB's
					EDB (Method 504.1)
					PAHs by 8310 or 8270SIMS
					RCRA 8 Metals
					C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
					8260 (VOA)
					8270 (Semi-VOA)
					Total Coliform (Present/Absent)

					BTEX / MTBE / TMB's (8021)
					TPH:8015D(GRO / DRO / MRO)
					8081 Pesticides/8082 PCB's
					EDB (Method 504.1)
					PAHs by 8310 or 8270SIMS
					RCRA 8 Metals
					C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
					8260 (VOA)
					8270 (Semi-VOA)
					Total Coliform (Present/Absent)

[illegible]

					BTEX / MTBE / TMB's (8021)
					TPH:8015D(GRO / DRO / MRO)
					8081 Pesticides/8082 PCB's
					EDB (Method 504.1)
					PAHs by 8310 or 8270SIMS
					RCRA 8 Metals
					C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
					8260 (VOA)
					8270 (Semi-VOA)
					Total Coliform (Present/Absent)

	BTEX / MTBE / TMB's (8021)
	TPH:8015D(GRO / DRO / MRO)
	8081 Pesticides/8082 PCB's
	EDB (Method 504.1)
	PAHs by 8310 or 8270SIMS
	RCRA 8 Metals
	C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
	8260 (VOA)
	8270 (Semi-VOA)
	Total Coliform (Present/Absent)

	BTEX / MTBE / TMB's (8021)
	TPH:8015D(GRO / DRO / MRO)
	8081 Pesticides/8082 PCB's
	EDB (Method 504.1)
	PAHs by 8310 or 8270SIMS
	RCRA 8 Metals
	C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO
	8260 (VOA)
	8270 (Semi-VOA)
	Total Coliform (Present/Absent)

	BTEX / MTBE / TMB's (8021)
	TPH:8015D(GRO / DRO / MRO)
	8081 Pesticides/8082 PCB's
	EDB (Method 504.1)
	PAHs by 8310 or 8270SIMS
	RCRA 8 Metals
	C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO
	8260 (VOA)
	8270 (Semi-VOA)
	Total Coliform (Present/Absent)

Remarks:						<	BTEX / MTBE / TMB's (8021)
						<	TPH:8015D(GRO / DRO / MRO)
							8081 Pesticides/8082 PCB's
							EDB (Method 504.1)
							PAHs by 8310 or 8270SIMS
							RCRA 8 Metals
						< \	C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO
							8260 (VOA)
							8270 (Semi-VOA)
						Total Coliform (Present/Absent)	

		BTEX / MTBE / TMB's (8021)
		TPH:8015D(GRO / DRO / MRO)
		8081 Pesticides/8082 PCB's
		EDB (Method 504.1)
		PAHs by 8310 or 8270SIMS
		RCRA 8 Metals
		C, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
		8260 (VOA)
		8270 (Semi-VOA)
		Total Coliform (Present/Absent)

[illegible]

samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any subcontracted date WILL BE THE DATE OF ANALYSIS.

Received by OCD: 12/17/2024 11:20:33 AM

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Received by OCD: 12/17/2024 11:20:33 AM





# Chain-of-Custody Record

Client: Denton/WPX

Mailing Address: Jim Robery

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☒ Rush 5 Day

Project Name:

East Peas Pipeline Spill

Project #:

22E-03982

Project Manager:

Monica Peppin

Sampler: MW/MTP

On Ice: ☒ Yes ☐ No

# of Coolers: 2 1.6-0-1.6

Cooler Temp (including CF): 0.8-0-0.8 (°C)

Container Type and # Preservative Type HEAL No.

402 1 UW 098-097

12/21 12:30 50:1 BH22-71 0

12:35 1 BH22-71 2

12:40 1 BH22-71 4

12:45 1 BH22-72 0

12:50 1 BH22-72 2

12:55 1 BH22-72 4

102

Date: Time: Relinquished by: Received by: Via: Date Time

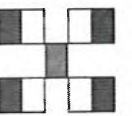
12/21 12:30 50:1 BH22-71 0

12:35 1 BH22-71 2

12:40 1 BH22-71 4

12:45 1 BH22-72 0

12:50 1 BH22-72 2



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

☒ BTEX/ ☐ MTBE / ☐ TMB's (8021)  
☐ TPH:8015D(GRO / DRO / MRO)  
☐ 8081 Pesticides/8082 PCB's  
☐ EDB (Method 504.1)  
☐ PAHs by 8310 or 8270SIMS  
☐ RCRA 8 Metals  
☒ ☐ F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>  
☐ 8260 (VOA)  
☐ 8270 (Semi-VOA)  
☐ Total Coliform (Present/Absent)

Remarks:





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)

January 16, 2023

Kent Stallings

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: East Pecos Pipeline Spill

OrderNo.: 2301065

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 84 sample(s) on 1/4/2023 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 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-54 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:30:00 AM

Lab ID: 2301065-001

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/5/2023 8:17:34 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2023 8:17:34 PM
Surr: DNOP	114	21-129		%Rec	1	1/5/2023 8:17:34 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 10:16:00 AM
Surr: BFB	111	37.7-212		%Rec	1	1/6/2023 10:16:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 10:16:00 AM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 10:16:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 10:16:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 10:16:00 AM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/6/2023 10:16:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	3100	150		mg/Kg	50	1/5/2023 1:09:34 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-54 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:35:00 AM

Lab ID: 2301065-002

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/5/2023 8:48:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/5/2023 8:48:59 PM
Surr: DNOP	119	21-129		%Rec	1	1/5/2023 8:48:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 11:15:00 AM
Surr: BFB	114	37.7-212		%Rec	1	1/6/2023 11:15:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 11:15:00 AM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 11:15:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 11:15:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 11:15:00 AM
Surr: 4-Bromofluorobenzene	131	70-130	S	%Rec	1	1/6/2023 11:15:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	3800	150		mg/Kg	50	1/6/2023 10:54:21 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-54 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:40:00 AM

Lab ID: 2301065-003

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/5/2023 8:59:29 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/5/2023 8:59:29 PM
Surr: DNOP	137	21-129	S	%Rec	1	1/5/2023 8:59:29 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 12:14:00 PM
Surr: BFB	107	37.7-212		%Rec	1	1/6/2023 12:14:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 12:14:00 PM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 12:14:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 12:14:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/6/2023 12:14:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/6/2023 12:14:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	970	61		mg/Kg	20	1/5/2023 11:05:44 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-55 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:15:00 AM

Lab ID: 2301065-004

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/5/2023 9:10:01 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/5/2023 9:10:01 PM
Surr: DNOP	140	21-129	S	%Rec	1	1/5/2023 9:10:01 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 12:34:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/6/2023 12:34:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 12:34:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 12:34:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 12:34:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 12:34:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/6/2023 12:34:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	190	60		mg/Kg	20	1/5/2023 11:42:46 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-55 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:20:00 AM

Lab ID: 2301065-005

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	1/5/2023 9:20:31 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/5/2023 9:20:31 PM
Surr: DNOP	117	21-129		%Rec	1	1/5/2023 9:20:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 12:53:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/6/2023 12:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JR
Benzene	ND	0.025		mg/Kg	1	1/6/2023 12:53:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 12:53:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 12:53:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 12:53:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/6/2023 12:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	840	60		mg/Kg	20	1/5/2023 11:55:06 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-55 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:25:00 AM

Lab ID: 2301065-006

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/5/2023 9:31:04 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/5/2023 9:31:04 PM
Surr: DNOP	144	21-129	S	%Rec	1	1/5/2023 9:31:04 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 1:13:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/6/2023 1:13:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 1:13:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 1:13:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 1:13:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 1:13:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/6/2023 1:13:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	200	61		mg/Kg	20	1/5/2023 12:07:27 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-56 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:00:00 AM

Lab ID: 2301065-007

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/5/2023 9:41:36 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/5/2023 9:41:36 PM
Surr: DNOP	131	21-129	S	%Rec	1	1/5/2023 9:41:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 1:33:00 PM
Surr: BFB	116	37.7-212		%Rec	1	1/6/2023 1:33:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 1:33:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 1:33:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 1:33:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 1:33:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/6/2023 1:33:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	3400	150		mg/Kg	50	1/6/2023 11:06:42 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-56 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:05:00 AM

Lab ID: 2301065-008

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/5/2023 9:52:10 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2023 9:52:10 PM
Surr: DNOP	111	21-129		%Rec	1	1/5/2023 9:52:10 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 1:52:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/6/2023 1:52:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 1:52:00 PM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 1:52:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 1:52:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 1:52:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/6/2023 1:52:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	14000	600		mg/Kg	200	1/6/2023 11:19:03 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-56 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:10:00 AM

Lab ID: 2301065-009

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/5/2023 10:13:14 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/5/2023 10:13:14 PM
Surr: DNOP	113	21-129		%Rec	1	1/5/2023 10:13:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 2:12:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/6/2023 2:12:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 2:12:00 PM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 2:12:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 2:12:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 2:12:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/6/2023 2:12:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	17000	1500		mg/Kg	500	1/6/2023 11:31:25 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-40 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 12:00:00 PM

Lab ID: 2301065-010

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	2100	140		mg/Kg	10	1/5/2023 10:23:49 PM
Motor Oil Range Organics (MRO)	1500	460		mg/Kg	10	1/5/2023 10:23:49 PM
Surr: DNOP	0	21-129	S	%Rec	10	1/5/2023 10:23:49 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	1/6/2023 2:32:00 PM
Surr: BFB	110	37.7-212		%Rec	5	1/6/2023 2:32:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 2:32:00 PM
Toluene	ND	0.24		mg/Kg	5	1/6/2023 2:32:00 PM
Ethylbenzene	ND	0.24		mg/Kg	5	1/6/2023 2:32:00 PM
Xylenes, Total	ND	0.49		mg/Kg	5	1/6/2023 2:32:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	5	1/6/2023 2:32:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	39000	3000		mg/Kg	1000	1/6/2023 11:43:46 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-40 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 12:05:00 PM

Lab ID: 2301065-011

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/5/2023 10:34:25 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/5/2023 10:34:25 PM
Surr: DNOP	119	21-129		%Rec	1	1/5/2023 10:34:25 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 3:11:00 PM
Surr: BFB	113	37.7-212		%Rec	1	1/6/2023 3:11:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	0.076	0.024		mg/Kg	1	1/6/2023 3:11:00 PM
Toluene	0.34	0.048		mg/Kg	1	1/6/2023 3:11:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 3:11:00 PM
Xylenes, Total	0.47	0.096		mg/Kg	1	1/6/2023 3:11:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/6/2023 3:11:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	19000	1500		mg/Kg	500	1/6/2023 11:56:07 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-40 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 12:10:00 PM

Lab ID: 2301065-012

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/5/2023 10:45:00 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/5/2023 10:45:00 PM
Surr: DNOP	120	21-129		%Rec	1	1/5/2023 10:45:00 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 3:31:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/6/2023 3:31:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 3:31:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 3:31:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 3:31:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 3:31:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/6/2023 3:31:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	17000	600		mg/Kg	200	1/6/2023 12:08:28 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-50 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 12:15:00 PM

Lab ID: 2301065-013

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/5/2023 10:55:36 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2023 10:55:36 PM
Surr: DNOP	127	21-129		%Rec	1	1/5/2023 10:55:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 3:51:00 PM
Surr: BFB	107	37.7-212		%Rec	1	1/6/2023 3:51:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 3:51:00 PM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 3:51:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 3:51:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 3:51:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	1/6/2023 3:51:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 1:58:36 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-50 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 12:20:00 PM

Lab ID: 2301065-014

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/5/2023 11:06:14 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2023 11:06:14 PM
Surr: DNOP	109	21-129		%Rec	1	1/5/2023 11:06:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 4:10:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/6/2023 4:10:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 4:10:00 PM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 4:10:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 4:10:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 4:10:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/6/2023 4:10:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	210	61		mg/Kg	20	1/5/2023 2:10:57 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-50 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 12:25:00 PM

Lab ID: 2301065-015

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/5/2023 11:16:51 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2023 11:16:51 PM
Surr: DNOP	117	21-129		%Rec	1	1/5/2023 11:16:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 4:30:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/6/2023 4:30:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 4:30:00 PM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 4:30:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 4:30:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 4:30:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/6/2023 4:30:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 2:23:19 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-51 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 11:45:00 AM

Lab ID: 2301065-016

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/5/2023 11:27:29 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/5/2023 11:27:29 PM
Surr: DNOP	139	21-129	S	%Rec	1	1/5/2023 11:27:29 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 4:50:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/6/2023 4:50:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 4:50:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 4:50:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 4:50:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 4:50:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/6/2023 4:50:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	3600	150		mg/Kg	50	1/6/2023 12:20:49 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-51 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 11:50:00 AM

Lab ID: 2301065-017

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/5/2023 11:38:18 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2023 11:38:18 PM
Surr: DNOP	113	21-129		%Rec	1	1/5/2023 11:38:18 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 5:09:00 PM
Surr: BFB	115	37.7-212		%Rec	1	1/6/2023 5:09:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 5:09:00 PM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 5:09:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 5:09:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 5:09:00 PM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	1/6/2023 5:09:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	5100	300		mg/Kg	100	1/6/2023 12:33:10 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-51 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 11:55:00 AM

Lab ID: 2301065-018

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/5/2023 11:49:05 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/5/2023 11:49:05 PM
Surr: DNOP	112	21-129		%Rec	1	1/5/2023 11:49:05 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 5:29:00 PM
Surr: BFB	114	37.7-212		%Rec	1	1/6/2023 5:29:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 5:29:00 PM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 5:29:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 5:29:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 5:29:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/6/2023 5:29:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	5500	300		mg/Kg	100	1/6/2023 12:45:30 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-52 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 10:00:00 AM

Lab ID: 2301065-019

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/5/2023 11:59:52 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/5/2023 11:59:52 PM
Surr: DNOP	157	21-129	S	%Rec	1	1/5/2023 11:59:52 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 5:49:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/6/2023 5:49:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 5:49:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 5:49:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 5:49:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 5:49:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/6/2023 5:49:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	98	61		mg/Kg	20	1/5/2023 3:37:24 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-52 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 10:05:00 AM

Lab ID: 2301065-020

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 12:10:38 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 12:10:38 AM
Surr: DNOP	137	21-129	S	%Rec	1	1/6/2023 12:10:38 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 6:08:00 PM
Surr: BFB	103	37.7-212		%Rec	1	1/6/2023 6:08:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 6:08:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 6:08:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 6:08:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 6:08:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/6/2023 6:08:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	91	60		mg/Kg	20	1/5/2023 3:49:46 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-52 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 10:10:00 AM

Lab ID: 2301065-021

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 12:52:48 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 12:52:48 AM
Surr: DNOP	139	21-129	S	%Rec	1	1/6/2023 12:52:48 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 10:23:00 AM
Surr: BFB	106	37.7-212		%Rec	1	1/5/2023 10:23:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 10:23:00 AM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 10:23:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 10:23:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/5/2023 10:23:00 AM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/5/2023 10:23:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	470	60		mg/Kg	20	1/5/2023 4:02:07 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-53 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:45:00 AM

Lab ID: 2301065-022

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 1:24:16 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2023 1:24:16 AM
Surr: DNOP	135	21-129	S	%Rec	1	1/6/2023 1:24:16 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/5/2023 11:22:00 AM
Surr: BFB	116	37.7-212		%Rec	1	1/5/2023 11:22:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.023		mg/Kg	1	1/5/2023 11:22:00 AM
Toluene	ND	0.047		mg/Kg	1	1/5/2023 11:22:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/5/2023 11:22:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	1/5/2023 11:22:00 AM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	1/5/2023 11:22:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 4:39:09 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-53 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:50:00 AM

Lab ID: 2301065-023

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/6/2023 1:34:38 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/6/2023 1:34:38 AM
Surr: DNOP	129	21-129	S	%Rec	1	1/6/2023 1:34:38 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/5/2023 12:21:00 PM
Surr: BFB	113	37.7-212		%Rec	1	1/5/2023 12:21:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 12:21:00 PM
Toluene	ND	0.047		mg/Kg	1	1/5/2023 12:21:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/5/2023 12:21:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/5/2023 12:21:00 PM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	1/5/2023 12:21:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	120	60		mg/Kg	20	1/5/2023 5:16:12 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-53 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 9:55:00 AM

Lab ID: 2301065-024

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 1:45:01 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 1:45:01 AM
Surr: DNOP	117	21-129		%Rec	1	1/6/2023 1:45:01 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 12:40:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/5/2023 12:40:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 12:40:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 12:40:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 12:40:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/5/2023 12:40:00 PM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	1/5/2023 12:40:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	210	59		mg/Kg	20	1/5/2023 5:28:32 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-46 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 2:00:00 PM

Lab ID: 2301065-025

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 1:55:23 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2023 1:55:23 AM
Surr: DNOP	144	21-129	S	%Rec	1	1/6/2023 1:55:23 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/5/2023 1:00:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/5/2023 1:00:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 1:00:00 PM
Toluene	ND	0.050		mg/Kg	1	1/5/2023 1:00:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/5/2023 1:00:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/5/2023 1:00:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/5/2023 1:00:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 6:30:17 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-46 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 2:05:00 PM

Lab ID: 2301065-026

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 2:05:45 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 2:05:45 AM
Surr: DNOP	109	21-129		%Rec	1	1/6/2023 2:05:45 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 1:19:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/5/2023 1:19:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 1:19:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 1:19:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 1:19:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/5/2023 1:19:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/5/2023 1:19:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 6:42:39 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-46 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 2:10:00 PM

Lab ID: 2301065-027

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 2:16:07 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 2:16:07 AM
Surr: DNOP	108	21-129		%Rec	1	1/6/2023 2:16:07 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 1:39:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/5/2023 1:39:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 1:39:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 1:39:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 1:39:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/5/2023 1:39:00 PM
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	1/5/2023 1:39:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 6:55:00 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-47 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 1:45:00 PM

Lab ID: 2301065-028

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/6/2023 2:26:30 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/6/2023 2:26:30 AM
Surr: DNOP	134	21-129	S	%Rec	1	1/6/2023 2:26:30 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/5/2023 1:59:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/5/2023 1:59:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 1:59:00 PM
Toluene	ND	0.047		mg/Kg	1	1/5/2023 1:59:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/5/2023 1:59:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	1/5/2023 1:59:00 PM
Surr: 4-Bromofluorobenzene	129	70-130		%Rec	1	1/5/2023 1:59:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 7:07:21 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-47 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 1:50:00 PM

Lab ID: 2301065-029

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 2:47:10 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 2:47:10 AM
Surr: DNOP	107	21-129		%Rec	1	1/6/2023 2:47:10 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 2:19:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/5/2023 2:19:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 2:19:00 PM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 2:19:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 2:19:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/5/2023 2:19:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/5/2023 2:19:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 7:19:41 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-47 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 1:55:00 PM

Lab ID: 2301065-030

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/6/2023 2:57:39 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/6/2023 2:57:39 AM
Surr: DNOP	92.9	21-129		%Rec	1	1/6/2023 2:57:39 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 2:38:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/5/2023 2:38:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 2:38:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 2:38:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 2:38:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/5/2023 2:38:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/5/2023 2:38:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	59		mg/Kg	20	1/5/2023 7:32:02 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-48 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 12:55:00 PM

Lab ID: 2301065-031

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 3:08:12 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 3:08:12 AM
Surr: DNOP	110	21-129		%Rec	1	1/6/2023 3:08:12 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 3:18:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/5/2023 3:18:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 3:18:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 3:18:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 3:18:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/5/2023 3:18:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/5/2023 3:18:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	1800	60		mg/Kg	20	1/5/2023 7:44:22 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-48 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 1:00:00 PM

Lab ID: 2301065-032

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 3:18:46 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2023 3:18:46 AM
Surr: DNOP	112	21-129		%Rec	1	1/6/2023 3:18:46 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/5/2023 3:37:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/5/2023 3:37:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.023		mg/Kg	1	1/5/2023 3:37:00 PM
Toluene	ND	0.047		mg/Kg	1	1/5/2023 3:37:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/5/2023 3:37:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	1/5/2023 3:37:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/5/2023 3:37:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	6200	300		mg/Kg	100	1/6/2023 1:22:33 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-48 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 1:05:00 PM

Lab ID: 2301065-033

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 3:29:23 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 3:29:23 AM
Surr: DNOP	113	21-129		%Rec	1	1/6/2023 3:29:23 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 3:57:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/5/2023 3:57:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 3:57:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 3:57:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 3:57:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/5/2023 3:57:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/5/2023 3:57:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9300	300		mg/Kg	100	1/6/2023 1:34:54 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-49 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 12:35:00 PM

Lab ID: 2301065-034

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 3:40:00 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 3:40:00 AM
Surr: DNOP	125	21-129		%Rec	1	1/6/2023 3:40:00 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/5/2023 4:17:00 PM
Surr: BFB	111	37.7-212		%Rec	1	1/5/2023 4:17:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.023		mg/Kg	1	1/5/2023 4:17:00 PM
Toluene	ND	0.046		mg/Kg	1	1/5/2023 4:17:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/5/2023 4:17:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	1/5/2023 4:17:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/5/2023 4:17:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 8:46:07 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-49 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 12:40:00 PM

Lab ID: 2301065-035

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 3:50:46 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/6/2023 3:50:46 AM
Surr: DNOP	108	21-129		%Rec	1	1/6/2023 3:50:46 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 4:36:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/5/2023 4:36:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 4:36:00 PM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 4:36:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 4:36:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/5/2023 4:36:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/5/2023 4:36:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	65	60		mg/Kg	20	1/5/2023 8:58:27 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-49 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/29/2022 12:45:00 PM

Lab ID: 2301065-036

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 4:01:31 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 4:01:31 AM
Surr: DNOP	110	21-129		%Rec	1	1/6/2023 4:01:31 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/5/2023 4:56:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/5/2023 4:56:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.023		mg/Kg	1	1/5/2023 4:56:00 PM
Toluene	ND	0.046		mg/Kg	1	1/5/2023 4:56:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/5/2023 4:56:00 PM
Xylenes, Total	ND	0.091		mg/Kg	1	1/5/2023 4:56:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/5/2023 4:56:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	62	60		mg/Kg	20	1/5/2023 9:10:49 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-57 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:25:00 AM

Lab ID: 2301065-037

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 4:12:15 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 4:12:15 AM
Surr: DNOP	139	21-129	S	%Rec	1	1/6/2023 4:12:15 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 5:16:00 PM
Surr: BFB	111	37.7-212		%Rec	1	1/5/2023 5:16:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 5:16:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 5:16:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 5:16:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/5/2023 5:16:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/5/2023 5:16:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	270	61		mg/Kg	20	1/5/2023 9:23:10 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-57 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:30:00 AM

Lab ID: 2301065-038

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 4:22:58 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 4:22:58 AM
Surr: DNOP	109	21-129		%Rec	1	1/6/2023 4:22:58 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/5/2023 5:35:00 PM
Surr: BFB	120	37.7-212		%Rec	1	1/5/2023 5:35:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 5:35:00 PM
Toluene	ND	0.050		mg/Kg	1	1/5/2023 5:35:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/5/2023 5:35:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/5/2023 5:35:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/5/2023 5:35:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	250	60		mg/Kg	20	1/5/2023 9:35:32 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-57 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:35:00 AM

Lab ID: 2301065-039

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 4:33:40 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 4:33:40 AM
Surr: DNOP	106	21-129		%Rec	1	1/6/2023 4:33:40 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/5/2023 5:55:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/5/2023 5:55:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 5:55:00 PM
Toluene	ND	0.050		mg/Kg	1	1/5/2023 5:55:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/5/2023 5:55:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/5/2023 5:55:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/5/2023 5:55:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	980	59		mg/Kg	20	1/5/2023 9:47:52 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-58 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:10:00 AM

Lab ID: 2301065-040

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 4:44:22 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 4:44:22 AM
Surr: DNOP	127	21-129		%Rec	1	1/6/2023 4:44:22 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 6:15:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/5/2023 6:15:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 6:15:00 PM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 6:15:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 6:15:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/5/2023 6:15:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/5/2023 6:15:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	68	60		mg/Kg	20	1/5/2023 10:00:13 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-58 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:15:00 AM

Lab ID: 2301065-041

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 12:15:40 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2023 12:15:40 PM
Surr: DNOP	115	21-129		%Rec	1	1/6/2023 12:15:40 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/5/2023 8:12:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/5/2023 8:12:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 8:12:00 PM
Toluene	ND	0.050		mg/Kg	1	1/5/2023 8:12:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/5/2023 8:12:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/5/2023 8:12:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/5/2023 8:12:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/5/2023 10:12:34 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-58 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:20:00 AM

Lab ID: 2301065-042

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 12:47:17 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 12:47:17 PM
Surr: DNOP	114	21-129		%Rec	1	1/6/2023 12:47:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 9:12:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/5/2023 9:12:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 9:12:00 PM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 9:12:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 9:12:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/5/2023 9:12:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/5/2023 9:12:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	82	60		mg/Kg	20	1/5/2023 11:14:19 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-59 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 8:55:00 AM

Lab ID: 2301065-043

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	18	15		mg/Kg	1	1/6/2023 12:57:46 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/6/2023 12:57:46 PM
Surr: DNOP	113	21-129		%Rec	1	1/6/2023 12:57:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/5/2023 10:10:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/5/2023 10:10:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 10:10:00 PM
Toluene	ND	0.050		mg/Kg	1	1/5/2023 10:10:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/5/2023 10:10:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/5/2023 10:10:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/5/2023 10:10:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	200	59		mg/Kg	20	1/5/2023 11:51:22 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-59 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:10:00 AM

Lab ID: 2301065-044

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 1:08:15 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 1:08:15 PM
Surr: DNOP	111	21-129		%Rec	1	1/6/2023 1:08:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/5/2023 10:30:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/5/2023 10:30:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 10:30:00 PM
Toluene	ND	0.048		mg/Kg	1	1/5/2023 10:30:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/5/2023 10:30:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/5/2023 10:30:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/5/2023 10:30:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	910	60		mg/Kg	20	1/6/2023 12:28:25 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	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.		

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CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-59 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 9:05:00 AM

Lab ID: 2301065-045

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	1/6/2023 1:18:45 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/6/2023 1:18:45 PM
Surr: DNOP	114	21-129		%Rec	1	1/6/2023 1:18:45 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 10:50:00 PM
Surr: BFB	107	37.7-212		%Rec	1	1/5/2023 10:50:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: JR
Benzene	ND	0.024		mg/Kg	1	1/5/2023 10:50:00 PM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 10:50:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 10:50:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/5/2023 10:50:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/5/2023 10:50:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	460	60		mg/Kg	20	1/6/2023 12:40:46 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-60 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 8:40:00 AM

Lab ID: 2301065-046

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	17	14		mg/Kg	1	1/6/2023 1:29:15 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 1:29:15 PM
Surr: DNOP	108	21-129		%Rec	1	1/6/2023 1:29:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 11:09:00 PM
Surr: BFB	103	37.7-212		%Rec	1	1/5/2023 11:09:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/5/2023 11:09:00 PM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 11:09:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 11:09:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/5/2023 11:09:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/5/2023 11:09:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	2300	60		mg/Kg	20	1/6/2023 1:17:49 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-60 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 8:45:00 AM

Lab ID: 2301065-047

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 1:39:51 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2023 1:39:51 PM
Surr: DNOP	110	21-129		%Rec	1	1/6/2023 1:39:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/5/2023 11:29:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/5/2023 11:29:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 11:29:00 PM
Toluene	ND	0.049		mg/Kg	1	1/5/2023 11:29:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/5/2023 11:29:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/5/2023 11:29:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/5/2023 11:29:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	61		mg/Kg	20	1/6/2023 1:30:10 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-60 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 8:50:00 AM

Lab ID: 2301065-048

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/6/2023 2:00:56 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/6/2023 2:00:56 PM
Surr: DNOP	106	21-129		%Rec	1	1/6/2023 2:00:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/5/2023 11:48:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/5/2023 11:48:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/5/2023 11:48:00 PM
Toluene	ND	0.050		mg/Kg	1	1/5/2023 11:48:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/5/2023 11:48:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/5/2023 11:48:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/5/2023 11:48:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	64	60		mg/Kg	20	1/6/2023 1:42:30 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-38 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:00:00 AM

Lab ID: 2301065-049

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 2:11:32 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 2:11:32 PM
Surr: DNOP	111	21-129		%Rec	1	1/6/2023 2:11:32 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 12:08:00 AM
Surr: BFB	106	37.7-212		%Rec	1	1/6/2023 12:08:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 12:08:00 AM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 12:08:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 12:08:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 12:08:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/6/2023 12:08:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/6/2023 1:54:50 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-38 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:05:00 AM

Lab ID: 2301065-050

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/6/2023 2:22:07 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/6/2023 2:22:07 PM
Surr: DNOP	111	21-129		%Rec	1	1/6/2023 2:22:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 12:28:00 AM
Surr: BFB	109	37.7-212		%Rec	1	1/6/2023 12:28:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 12:28:00 AM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 12:28:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 12:28:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 12:28:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/6/2023 12:28:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/6/2023 2:07:11 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-38 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:10:00 AM

Lab ID: 2301065-051

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 2:32:42 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 2:32:42 PM
Surr: DNOP	106	21-129		%Rec	1	1/6/2023 2:32:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 1:07:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/6/2023 1:07:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 1:07:00 AM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 1:07:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 1:07:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 1:07:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/6/2023 1:07:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/6/2023 2:19:32 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-39 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:15:00 AM

Lab ID: 2301065-052

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 2:43:23 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/6/2023 2:43:23 PM
Surr: DNOP	111	21-129		%Rec	1	1/6/2023 2:43:23 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 1:26:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/6/2023 1:26:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 1:26:00 AM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 1:26:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 1:26:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	1/6/2023 1:26:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/6/2023 1:26:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/6/2023 2:31:53 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-39 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:20:00 AM

Lab ID: 2301065-053

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 2:53:56 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 2:53:56 PM
Surr: DNOP	112	21-129		%Rec	1	1/6/2023 2:53:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 1:46:00 AM
Surr: BFB	112	37.7-212		%Rec	1	1/6/2023 1:46:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 1:46:00 AM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 1:46:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 1:46:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 1:46:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/6/2023 1:46:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	99	60		mg/Kg	20	1/6/2023 2:44:14 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-39 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:25:00 AM

Lab ID: 2301065-054

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 3:04:33 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/6/2023 3:04:33 PM
Surr: DNOP	112	21-129		%Rec	1	1/6/2023 3:04:33 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 2:05:00 AM
Surr: BFB	105	37.7-212		%Rec	1	1/6/2023 2:05:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 2:05:00 AM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 2:05:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 2:05:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 2:05:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/6/2023 2:05:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	4800	300		mg/Kg	100	1/6/2023 1:47:15 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-41 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:45:00 AM

Lab ID: 2301065-055

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 3:15:11 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 3:15:11 PM
Surr: DNOP	108	21-129		%Rec	1	1/6/2023 3:15:11 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 2:25:00 AM
Surr: BFB	107	37.7-212		%Rec	1	1/6/2023 2:25:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 2:25:00 AM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 2:25:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 2:25:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 2:25:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/6/2023 2:25:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	110	60		mg/Kg	20	1/6/2023 3:08:56 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.		

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CLIENT: Vertex Resources Services, Inc.  
Project: East Pecos Pipeline Spill  
Lab ID: 2301065-056

Client Sample ID: BH22-41 2'  
Collection Date: 12/31/2022 11:50:00 AM  
Received Date: 1/4/2023 7:15:00 AM

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	1/6/2023 3:25:50 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 3:25:50 PM
Surr: DNOP	113	21-129		%Rec	1	1/6/2023 3:25:50 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 2:44:00 AM
Surr: BFB	108	37.7-212		%Rec	1	1/6/2023 2:44:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: JR
Benzene	ND	0.025		mg/Kg	1	1/6/2023 2:44:00 AM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 2:44:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 2:44:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 2:44:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/6/2023 2:44:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	890	60		mg/Kg	20	1/6/2023 3:45:59 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	Page 56 of 99
	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 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-41 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 11:55:00 AM

Lab ID: 2301065-057

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 3:36:34 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 3:36:34 PM
Surr: DNOP	112	21-129		%Rec	1	1/6/2023 3:36:34 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 3:04:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/6/2023 3:04:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 3:04:00 AM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 3:04:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 3:04:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 3:04:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/6/2023 3:04:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	1600	60		mg/Kg	20	1/6/2023 3:58:20 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-42 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 12:00:00 PM

Lab ID: 2301065-058

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/6/2023 3:47:17 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/6/2023 3:47:17 PM
Surr: DNOP	113	21-129		%Rec	1	1/6/2023 3:47:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 3:23:00 AM
Surr: BFB	106	37.7-212		%Rec	1	1/6/2023 3:23:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 3:23:00 AM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 3:23:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 3:23:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 3:23:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/6/2023 3:23:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	2700	150		mg/Kg	50	1/6/2023 1:59:36 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-42 2'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 12:05:00 PM

Lab ID: 2301065-059

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 3:58:06 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 3:58:06 PM
Surr: DNOP	113	21-129		%Rec	1	1/6/2023 3:58:06 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 3:43:00 AM
Surr: BFB	110	37.7-212		%Rec	1	1/6/2023 3:43:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 3:43:00 AM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 3:43:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 3:43:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 3:43:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/6/2023 3:43:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9800	600		mg/Kg	200	1/6/2023 2:11:57 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-42 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/31/2022 12:10:00 PM

Lab ID: 2301065-060

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 4:37:30 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2023 4:37:30 PM
Surr: DNOP	108	21-129		%Rec	1	1/6/2023 4:37:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 4:02:00 AM
Surr: BFB	108	37.7-212		%Rec	1	1/6/2023 4:02:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 4:02:00 AM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 4:02:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 4:02:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 4:02:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/6/2023 4:02:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	1100	60		mg/Kg	20	1/6/2023 4:35:22 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-09 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:05:00 AM

Lab ID: 2301065-061

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	7300	290		mg/Kg	20	1/6/2023 10:34:43 AM
Motor Oil Range Organics (MRO)	4100	970		mg/Kg	20	1/6/2023 10:34:43 AM
Surr: DNOP	0	21-129	S	%Rec	20	1/6/2023 10:34:43 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	1/6/2023 8:06:00 PM
Surr: BFB	131	37.7-212		%Rec	5	1/6/2023 8:06:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 8:06:00 PM
Toluene	ND	0.24		mg/Kg	5	1/6/2023 8:06:00 PM
Ethylbenzene	ND	0.24		mg/Kg	5	1/6/2023 8:06:00 PM
Xylenes, Total	ND	0.49		mg/Kg	5	1/6/2023 8:06:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	5	1/6/2023 8:06:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	610		mg/Kg	200	1/6/2023 2:24:18 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-09 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:10:00 AM

Lab ID: 2301065-062

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 6:02:11 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 6:02:11 PM
Surr: DNOP	107	21-129		%Rec	1	1/6/2023 6:02:11 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 9:05:00 PM
Surr: BFB	114	37.7-212		%Rec	1	1/6/2023 9:05:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 9:05:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 9:05:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 9:05:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 9:05:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/6/2023 9:05:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	10000	600		mg/Kg	200	1/6/2023 2:36:39 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-09 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:15:00 AM

Lab ID: 2301065-063

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	130	15		mg/Kg	1	1/6/2023 6:12:47 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/6/2023 6:12:47 PM
Surr: DNOP	105	21-129		%Rec	1	1/6/2023 6:12:47 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	1/6/2023 10:04:00 PM
Surr: BFB	112	37.7-212		%Rec	5	1/6/2023 10:04:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 10:04:00 PM
Toluene	ND	0.25		mg/Kg	5	1/6/2023 10:04:00 PM
Ethylbenzene	ND	0.25		mg/Kg	5	1/6/2023 10:04:00 PM
Xylenes, Total	ND	0.50		mg/Kg	5	1/6/2023 10:04:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	5	1/6/2023 10:04:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9000	300		mg/Kg	100	1/10/2023 5:31:56 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-11 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:40:00 AM

Lab ID: 2301065-064

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	5400	300		mg/Kg	20	1/6/2023 6:23:22 PM
Motor Oil Range Organics (MRO)	3300	990		mg/Kg	20	1/6/2023 6:23:22 PM
Surr: DNOP	0	21-129	S	%Rec	20	1/6/2023 6:23:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	1/6/2023 10:24:00 PM
Surr: BFB	143	37.7-212		%Rec	5	1/6/2023 10:24:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 10:24:00 PM
Toluene	ND	0.24		mg/Kg	5	1/6/2023 10:24:00 PM
Ethylbenzene	ND	0.24		mg/Kg	5	1/6/2023 10:24:00 PM
Xylenes, Total	ND	0.48		mg/Kg	5	1/6/2023 10:24:00 PM
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	5	1/6/2023 10:24:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	10000	600		mg/Kg	200	1/6/2023 3:01:21 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-11 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:45:00 AM

Lab ID: 2301065-065

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 6:33:56 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 6:33:56 PM
Surr: DNOP	111	21-129		%Rec	1	1/6/2023 6:33:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/6/2023 10:43:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/6/2023 10:43:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 10:43:00 PM
Toluene	ND	0.050		mg/Kg	1	1/6/2023 10:43:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/6/2023 10:43:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/6/2023 10:43:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/6/2023 10:43:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9400	300		mg/Kg	100	1/10/2023 6:08:59 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-11 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:50:00 AM

Lab ID: 2301065-066

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	19	15		mg/Kg	1	1/6/2023 6:44:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 6:44:28 PM
Surr: DNOP	112	21-129		%Rec	1	1/6/2023 6:44:28 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 11:03:00 PM
Surr: BFB	107	37.7-212		%Rec	1	1/6/2023 11:03:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 11:03:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 11:03:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 11:03:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 11:03:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/6/2023 11:03:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9700	300		mg/Kg	100	1/6/2023 3:50:44 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-13 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 9:05:00 AM

Lab ID: 2301065-067

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	18000	730		mg/Kg	50	1/6/2023 6:54:59 PM
Motor Oil Range Organics (MRO)	9700	2400		mg/Kg	50	1/6/2023 6:54:59 PM
Surr: DNOP	0	21-129	S	%Rec	50	1/6/2023 6:54:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	1/6/2023 11:23:00 PM
Surr: BFB	118	37.7-212		%Rec	5	1/6/2023 11:23:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 11:23:00 PM
Toluene	ND	0.25		mg/Kg	5	1/6/2023 11:23:00 PM
Ethylbenzene	ND	0.25		mg/Kg	5	1/6/2023 11:23:00 PM
Xylenes, Total	ND	0.49		mg/Kg	5	1/6/2023 11:23:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	5	1/6/2023 11:23:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9700	600		mg/Kg	200	1/6/2023 4:03:06 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-13 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 9:10:00 AM

Lab ID: 2301065-068

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	130	15		mg/Kg	1	1/6/2023 7:15:52 PM
Motor Oil Range Organics (MRO)	81	49		mg/Kg	1	1/6/2023 7:15:52 PM
Surr: DNOP	111	21-129		%Rec	1	1/6/2023 7:15:52 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 11:42:00 PM
Surr: BFB	111	37.7-212		%Rec	1	1/6/2023 11:42:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 11:42:00 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 11:42:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 11:42:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 11:42:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/6/2023 11:42:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	590		mg/Kg	200	1/6/2023 4:15:26 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-13 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 9:15:00 AM

Lab ID: 2301065-069

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	19	14		mg/Kg	1	1/6/2023 7:36:40 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 7:36:40 PM
Surr: DNOP	118	21-129		%Rec	1	1/6/2023 7:36:40 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 12:02:00 AM
Surr: BFB	116	37.7-212		%Rec	1	1/7/2023 12:02:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/7/2023 12:02:00 AM
Toluene	ND	0.049		mg/Kg	1	1/7/2023 12:02:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/7/2023 12:02:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/7/2023 12:02:00 AM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/7/2023 12:02:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	12000	600		mg/Kg	200	1/6/2023 4:27:47 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-14 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 9:25:00 AM

Lab ID: 2301065-070

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	23000	740		mg/Kg	50	1/6/2023 7:47:07 PM
Motor Oil Range Organics (MRO)	11000	2500		mg/Kg	50	1/6/2023 7:47:07 PM
Surr: DNOP	0	21-129	S	%Rec	50	1/6/2023 7:47:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	99	25		mg/Kg	5	1/10/2023 7:58:00 AM
Surr: BFB	163	37.7-212		%Rec	5	1/10/2023 7:58:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.12		mg/Kg	5	1/10/2023 7:58:00 AM
Toluene	ND	0.25		mg/Kg	5	1/10/2023 7:58:00 AM
Ethylbenzene	ND	0.25		mg/Kg	5	1/10/2023 7:58:00 AM
Xylenes, Total	4.9	0.50		mg/Kg	5	1/10/2023 7:58:00 AM
Surr: 4-Bromofluorobenzene	156	70-130	S	%Rec	5	1/10/2023 7:58:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	600		mg/Kg	200	1/6/2023 4:40:08 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-14 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 9:30:00 AM

Lab ID: 2301065-071

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	5600	280		mg/Kg	20	1/6/2023 8:08:00 PM
Motor Oil Range Organics (MRO)	2300	930		mg/Kg	20	1/6/2023 8:08:00 PM
Surr: DNOP	0	21-129	S	%Rec	20	1/6/2023 8:08:00 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	71	24		mg/Kg	5	1/7/2023 1:01:00 AM
Surr: BFB	229	37.7-212	S	%Rec	5	1/7/2023 1:01:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.12		mg/Kg	5	1/7/2023 1:01:00 AM
Toluene	ND	0.24		mg/Kg	5	1/7/2023 1:01:00 AM
Ethylbenzene	0.35	0.24		mg/Kg	5	1/7/2023 1:01:00 AM
Xylenes, Total	2.5	0.49		mg/Kg	5	1/7/2023 1:01:00 AM
Surr: 4-Bromofluorobenzene	149	70-130	S	%Rec	5	1/7/2023 1:01:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	16000	600		mg/Kg	200	1/6/2023 4:52:29 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-14 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 9:35:00 AM

Lab ID: 2301065-072

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	5300	280		mg/Kg	20	1/6/2023 8:18:33 PM
Motor Oil Range Organics (MRO)	2400	950		mg/Kg	20	1/6/2023 8:18:33 PM
Surr: DNOP	0	21-129	S	%Rec	20	1/6/2023 8:18:33 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	67	24		mg/Kg	5	1/7/2023 1:20:00 AM
Surr: BFB	216	37.7-212	S	%Rec	5	1/7/2023 1:20:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.12		mg/Kg	5	1/7/2023 1:20:00 AM
Toluene	0.78	0.24		mg/Kg	5	1/7/2023 1:20:00 AM
Ethylbenzene	0.39	0.24		mg/Kg	5	1/7/2023 1:20:00 AM
Xylenes, Total	2.5	0.48		mg/Kg	5	1/7/2023 1:20:00 AM
Surr: 4-Bromofluorobenzene	146	70-130	S	%Rec	5	1/7/2023 1:20:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	19000	600		mg/Kg	200	1/6/2023 5:04:50 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-17 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 10:25:00 AM

Lab ID: 2301065-073

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	730	93		mg/Kg	10	1/10/2023 4:54:39 PM
Motor Oil Range Organics (MRO)	660	470		mg/Kg	10	1/10/2023 4:54:39 PM
Surr: DNOP	0	21-129	S	%Rec	10	1/10/2023 4:54:39 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 1:40:00 AM
Surr: BFB	109	37.7-212		%Rec	1	1/7/2023 1:40:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/7/2023 1:40:00 AM
Toluene	ND	0.049		mg/Kg	1	1/7/2023 1:40:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/7/2023 1:40:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/7/2023 1:40:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/7/2023 1:40:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	3300	150		mg/Kg	50	1/6/2023 5:17:10 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-17 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 10:30:00 AM

Lab ID: 2301065-074

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 8:39:42 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 8:39:42 PM
Surr: DNOP	115	21-129		%Rec	1	1/6/2023 8:39:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/7/2023 1:59:00 AM
Surr: BFB	106	37.7-212		%Rec	1	1/7/2023 1:59:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/7/2023 1:59:00 AM
Toluene	ND	0.048		mg/Kg	1	1/7/2023 1:59:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/7/2023 1:59:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/7/2023 1:59:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/7/2023 1:59:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	670	60		mg/Kg	20	1/6/2023 4:37:02 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-17 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 10:35:00 AM

Lab ID: 2301065-075

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 8:50:16 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/6/2023 8:50:16 PM
Surr: DNOP	115	21-129		%Rec	1	1/6/2023 8:50:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 2:19:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/7/2023 2:19:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/7/2023 2:19:00 AM
Toluene	ND	0.049		mg/Kg	1	1/7/2023 2:19:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/7/2023 2:19:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/7/2023 2:19:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/7/2023 2:19:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	1100	61		mg/Kg	20	1/6/2023 4:49:27 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-43 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 7:25:00 AM

Lab ID: 2301065-076

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	1/6/2023 9:00:50 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 9:00:50 PM
Surr: DNOP	112	21-129		%Rec	1	1/6/2023 9:00:50 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 2:38:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/7/2023 2:38:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JR
Benzene	ND	0.025		mg/Kg	1	1/7/2023 2:38:00 AM
Toluene	ND	0.049		mg/Kg	1	1/7/2023 2:38:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/7/2023 2:38:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/7/2023 2:38:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/7/2023 2:38:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JTT
Chloride	120	60		mg/Kg	20	1/6/2023 5:01:52 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-43 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 7:30:00 AM

Lab ID: 2301065-077

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	1/6/2023 9:11:19 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 9:11:19 PM
Surr: DNOP	108	21-129		%Rec	1	1/6/2023 9:11:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 2:58:00 AM
Surr: BFB	108	37.7-212		%Rec	1	1/7/2023 2:58:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JR
Benzene	ND	0.024		mg/Kg	1	1/7/2023 2:58:00 AM
Toluene	ND	0.049		mg/Kg	1	1/7/2023 2:58:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/7/2023 2:58:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/7/2023 2:58:00 AM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/7/2023 2:58:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JTT
Chloride	97	60		mg/Kg	20	1/6/2023 5:14:17 AM

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

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

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-43 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 7:35:00 AM

Lab ID: 2301065-078

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	1/6/2023 9:21:55 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/6/2023 9:21:55 PM
Surr: DNOP	111	21-129		%Rec	1	1/6/2023 9:21:55 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/7/2023 3:17:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/7/2023 3:17:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JR
Benzene	ND	0.024		mg/Kg	1	1/7/2023 3:17:00 AM
Toluene	ND	0.048		mg/Kg	1	1/7/2023 3:17:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/7/2023 3:17:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	1/7/2023 3:17:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/7/2023 3:17:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JTT
Chloride	99	60		mg/Kg	20	1/6/2023 5:51:32 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-44 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 7:45:00 AM

Lab ID: 2301065-079

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	1/6/2023 9:32:29 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2023 9:32:29 PM
Surr: DNOP	103	21-129		%Rec	1	1/6/2023 9:32:29 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/7/2023 3:37:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/7/2023 3:37:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JR
Benzene	ND	0.025		mg/Kg	1	1/7/2023 3:37:00 AM
Toluene	ND	0.050		mg/Kg	1	1/7/2023 3:37:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/7/2023 3:37:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/7/2023 3:37:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/7/2023 3:37:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JTT
Chloride	ND	60		mg/Kg	20	1/6/2023 6:03:56 AM

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

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

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-44 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 7:50:00 AM

Lab ID: 2301065-080

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 9:43:02 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 9:43:02 PM
Surr: DNOP	113	21-129		%Rec	1	1/6/2023 9:43:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 3:57:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/7/2023 3:57:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/7/2023 3:57:00 AM
Toluene	ND	0.049		mg/Kg	1	1/7/2023 3:57:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/7/2023 3:57:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/7/2023 3:57:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/7/2023 3:57:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	280	59		mg/Kg	20	1/6/2023 6:16:21 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-44 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 7:55:00 AM

Lab ID: 2301065-081

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 10:25:07 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 10:25:07 PM
Surr: DNOP	110	21-129		%Rec	1	1/6/2023 10:25:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 11:52:35 AM
Surr: BFB	91.9	37.7-212		%Rec	1	1/6/2023 11:52:35 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 11:52:35 AM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 11:52:35 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 11:52:35 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 11:52:35 AM
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	1/6/2023 11:52:35 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	340	60		mg/Kg	20	1/6/2023 6:28:46 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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-45 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 8:10:00 AM

Lab ID: 2301065-082

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/6/2023 10:56:42 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/6/2023 10:56:42 PM
Surr: DNOP	114	21-129		%Rec	1	1/6/2023 10:56:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 1:02:54 PM
Surr: BFB	91.6	37.7-212		%Rec	1	1/6/2023 1:02:54 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 1:02:54 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 1:02:54 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 1:02:54 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 1:02:54 PM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	1/6/2023 1:02:54 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/6/2023 1:45:00 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-45 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 8:15:00 AM

Lab ID: 2301065-083

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 11:07:16 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/6/2023 11:07:16 PM
Surr: DNOP	113	21-129		%Rec	1	1/6/2023 11:07:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 2:13:29 PM
Surr: BFB	91.4	37.7-212		%Rec	1	1/6/2023 2:13:29 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 2:13:29 PM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 2:13:29 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 2:13:29 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/6/2023 2:13:29 PM
Surr: 4-Bromofluorobenzene	84.0	70-130		%Rec	1	1/6/2023 2:13:29 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	61		mg/Kg	20	1/6/2023 2:22:13 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	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.		

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## Analytical Report

Lab Order 2301065

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-45 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/2/2023 8:20:00 AM

Lab ID: 2301065-084

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/6/2023 11:17:51 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2023 11:17:51 PM
Surr: DNOP	108	21-129		%Rec	1	1/6/2023 11:17:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 2:37:07 PM
Surr: BFB	90.7	37.7-212		%Rec	1	1/6/2023 2:37:07 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 2:37:07 PM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 2:37:07 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 2:37:07 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 2:37:07 PM
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	1/6/2023 2:37:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JTT</b>
Chloride	ND	60		mg/Kg	20	1/6/2023 2:34:37 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	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.		

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-72456</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72456</b>		RunNo: <b>93717</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/4/2023</b>		SeqNo: <b>3382874</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72456</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72456</b>		RunNo: <b>93717</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/4/2023</b>		SeqNo: <b>3382875</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Sample ID: <b>MB-72462</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72462</b>		RunNo: <b>93760</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3384333</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72462</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72462</b>		RunNo: <b>93760</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3384334</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Sample ID: <b>MB-72475</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72475</b>		RunNo: <b>93760</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3384365</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72475</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72475</b>		RunNo: <b>93760</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3384366</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	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 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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-72477</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72477</b>	RunNo: <b>93760</b>								
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/5/2023</b>	SeqNo: <b>3384397</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72477</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72477</b>	RunNo: <b>93760</b>								
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/5/2023</b>	SeqNo: <b>3384398</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	90	110			

Sample ID: <b>MB-72484</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72484</b>	RunNo: <b>93773</b>								
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>	SeqNo: <b>3385331</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72484</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72484</b>	RunNo: <b>93773</b>								
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>	SeqNo: <b>3385332</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Sample ID: <b>MB-72496</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72496</b>	RunNo: <b>93780</b>								
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/6/2023</b>	SeqNo: <b>3385530</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72496</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72496</b>	RunNo: <b>93780</b>								
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/6/2023</b>	SeqNo: <b>3385531</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	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 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

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

WO#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>2301065-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-54 0'</b>	Batch ID: <b>72455</b>	RunNo: <b>93740</b>								
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>	SeqNo: <b>3384566</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.25	0	95.1	36.1	154			
Surr: DNOP	6.3		5.025		126	21	129			

Sample ID: <b>2301065-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-54 0'</b>	Batch ID: <b>72455</b>	RunNo: <b>93740</b>								
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>	SeqNo: <b>3384567</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	14	47.62	0	93.8	36.1	154	6.75	33.9	
Surr: DNOP	5.8		4.762		122	21	129	0	0	

Sample ID: <b>2301065-021AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-52 4'</b>	Batch ID: <b>72457</b>	RunNo: <b>93740</b>								
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>	SeqNo: <b>3384588</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	15	49.02	0	102	36.1	154			
Surr: DNOP	6.5		4.902		133	21	129			S

Sample ID: <b>2301065-021AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-52 4'</b>	Batch ID: <b>72457</b>	RunNo: <b>93740</b>								
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>	SeqNo: <b>3384589</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	15	48.83	0	111	36.1	154	7.15	33.9	
Surr: DNOP	7.0		4.883		144	21	129	0	0	S

Sample ID: <b>LCS-72455</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72455</b>	RunNo: <b>93740</b>								
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>	SeqNo: <b>3384611</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	15	50.00	0	107	64.4	127			
Surr: DNOP	6.9		5.000		139	21	129			S

Sample ID: <b>LCS-72457</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72457</b>	RunNo: <b>93740</b>								
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>	SeqNo: <b>3384612</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#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-72457</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72457</b>		RunNo: <b>93740</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3384612</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	15	50.00	0	105	64.4	127			
Surr: DNOP	6.7		5.000		134	21	129			S

Sample ID: <b>MB-72455</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72455</b>		RunNo: <b>93740</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3384615</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		124	21	129			

Sample ID: <b>MB-72457</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72457</b>		RunNo: <b>93740</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3384616</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		128	21	129			

Sample ID: <b>2301065-041AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-58 2'</b>	Batch ID: <b>72463</b>		RunNo: <b>93809</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386471</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	14	46.47	0	98.3	36.1	154			
Surr: DNOP	5.4		4.647		117	21	129			

Sample ID: <b>2301065-041AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-58 2'</b>	Batch ID: <b>72463</b>		RunNo: <b>93809</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386472</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	14	48.22	0	112	36.1	154	16.9	33.9	
Surr: DNOP	5.9		4.822		123	21	129	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301065

16-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: 2301065-081AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: BH22-44 4'	Batch ID: 72476	RunNo: 93809
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386513 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	43	14 46.73 0 92.0 36.1 154
Surr: DNOP	5.5	4.673 117 21 129

Sample ID: 2301065-081AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: BH22-44 4'	Batch ID: 72476	RunNo: 93809
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386514 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	44	15 48.54 0 91.6 36.1 154 3.45 33.9
Surr: DNOP	5.5	4.854 114 21 129 0 0

Sample ID: LCS-72463	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 72463	RunNo: 93809
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386534 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	51	15 50.00 0 102 64.4 127
Surr: DNOP	6.0	5.000 120 21 129

Sample ID: LCS-72473	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 72473	RunNo: 93809
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386535 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	50	15 50.00 0 100 64.4 127
Surr: DNOP	6.0	5.000 121 21 129

Sample ID: LCS-72476	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 72476	RunNo: 93809
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386536 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	47	15 50.00 0 93.7 64.4 127
Surr: DNOP	5.9	5.000 118 21 129

Sample ID: MB-72463	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 72463	RunNo: 93809
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386537 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-72463</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72463</b>		RunNo: <b>93809</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386537</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		112	21	129			

Sample ID: <b>MB-72473</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72473</b>		RunNo: <b>93809</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386538</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	21	129			

Sample ID: <b>MB-72476</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72476</b>		RunNo: <b>93809</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386539</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.3	21	129			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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

WO#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>ics-72452</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72452</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383892</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	2300		1000		230	37.7	212			S

Sample ID: <b>mb-72452</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72452</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383893</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	1100		1000		107	37.7	212			

Sample ID: <b>2301065-021ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-52 4'</b>	Batch ID: <b>72452</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383895</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.61	0	114	70	130			
Surr: BFB	2400		984.3		244	37.7	212			S

Sample ID: <b>2301065-021amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-52 4'</b>	Batch ID: <b>72452</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383896</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.68	0	111	70	130	2.51	20	
Surr: BFB	2500		987.2		256	37.7	212	0	0	S

Sample ID: <b>ics-72458</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72458</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383916</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	94.7	72.3	137			
Surr: BFB	2200		1000		217	37.7	212			S

Sample ID: <b>mb-72458</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72458</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383917</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#: 2301065

16-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: mb-72458	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 72458	RunNo: 93748								
Prep Date: 1/4/2023	Analysis Date: 1/5/2023	SeqNo: 3383917 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		106	37.7	212			

Sample ID: 2301065-041ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH22-58 2'	Batch ID: 72458	RunNo: 93748								
Prep Date: 1/4/2023	Analysis Date: 1/5/2023	SeqNo: 3383919 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.63	0	110	70	130			
Surr: BFB	2500		985.2		250	37.7	212			S

Sample ID: 2301065-041amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH22-58 2'	Batch ID: 72458	RunNo: 93748								
Prep Date: 1/4/2023	Analysis Date: 1/5/2023	SeqNo: 3383920 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.90	0	102	70	130	6.93	20	
Surr: BFB	2300		996.0		235	37.7	212	0	0	S

Sample ID: lcs-72444	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 72444	RunNo: 93788								
Prep Date: 1/4/2023	Analysis Date: 1/6/2023	SeqNo: 3385739 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.2	72.3	137			
Surr: BFB	2200		1000		222	37.7	212			S

Sample ID: mb-72444	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 72444	RunNo: 93788								
Prep Date: 1/4/2023	Analysis Date: 1/6/2023	SeqNo: 3385740 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		111	37.7	212			

Sample ID: 2301065-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH22-54 0'	Batch ID: 72444	RunNo: 93788								
Prep Date: 1/4/2023	Analysis Date: 1/6/2023	SeqNo: 3385742 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		111	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#: 2301065

16-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: 2301065-001ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH22-54 0'	Batch ID: 72444		RunNo: 93788							
Prep Date: 1/4/2023	Analysis Date: 1/6/2023		SeqNo: 3385742		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.18	0	98.2	70	130			
Surr: BFB	2300		967.1		234	37.7	212			S

Sample ID: 2301065-001amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH22-54 0'	Batch ID: 72444		RunNo: 93788							
Prep Date: 1/4/2023	Analysis Date: 1/6/2023		SeqNo: 3385743		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.37	0	96.8	70	130	0.659	20	
Surr: BFB	2300		974.7		241	37.7	212	0	0	S

Sample ID: lcs-72461	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 72461		RunNo: 93788							
Prep Date: 1/5/2023	Analysis Date: 1/6/2023		SeqNo: 3385763		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.3	72.3	137			
Surr: BFB	2300		1000		228	37.7	212			S

Sample ID: mb-72461	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 72461		RunNo: 93788							
Prep Date: 1/5/2023	Analysis Date: 1/6/2023		SeqNo: 3385764		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		110	37.7	212			

Sample ID: 2301065-061ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH22-09 0'	Batch ID: 72461		RunNo: 93788							
Prep Date: 1/5/2023	Analysis Date: 1/6/2023		SeqNo: 3385766		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	47	24	24.27	19.24	115	70	130			
Surr: BFB	7800		4854		161	37.7	212			

Sample ID: 2301065-061amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH22-09 0'	Batch ID: 72461		RunNo: 93788							
Prep Date: 1/5/2023	Analysis Date: 1/6/2023		SeqNo: 3385767		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)										
Surr: BFB										

## Qualifiers:

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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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: 2301065-061amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-09 0'	Batch ID: 72461	RunNo: 93788
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3385767 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	43	24 24.37 19.24 99.4 70 130 7.99 20
Surr: BFB	7500	4873 154 37.7 212 0 0

Sample ID: lcs-72468	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: LCSS	Batch ID: 72468	RunNo: 93793
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386251 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	24	5.0 25.00 0 94.5 72.3 137
Surr: BFB	1800	1000 183 37.7 212

Sample ID: mb-72468	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range
Client ID: PBS	Batch ID: 72468	RunNo: 93793
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386253 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	ND	5.0
Surr: BFB	930	1000 93.3 37.7 212

Sample ID: 2301065-081ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-44 4'	Batch ID: 72468	RunNo: 93793
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386259 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	22	4.9 24.46 0 89.1 70 130
Surr: BFB	1800	978.5 185 37.7 212

Sample ID: 2301065-081amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BH22-44 4'	Batch ID: 72468	RunNo: 93793
Prep Date: 1/5/2023	Analysis Date: 1/6/2023	SeqNo: 3386260 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	24	4.9 24.39 0 96.6 70 130 7.76 20
Surr: BFB	1900	975.6 191 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 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#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>ics-72452</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72452</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383949</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	112	80	120			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	111	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		124	70	130			

Sample ID: <b>mb-72452</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72452</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383950</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	1.2		1.000		124	70	130			

Sample ID: <b>ics-72458</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72458</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383974</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	109	80	120			
Toluene	1.1	0.050	1.000	0	110	80	120			
Ethylbenzene	1.1	0.050	1.000	0	110	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		124	70	130			

Sample ID: <b>mb-72458</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72458</b>		RunNo: <b>93748</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/5/2023</b>		SeqNo: <b>3383975</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	1.2		1.000		124	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#: 2301065

16-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: <b>lcs-72444</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72444</b>		RunNo: <b>93788</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3385828</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	111	80	120			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	112	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		125	70	130			

Sample ID: <b>mb-72444</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72444</b>		RunNo: <b>93788</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3385829</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	1.2		1.000		125	70	130			

Sample ID: <b>2301065-002ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-54 2'</b>	Batch ID: <b>72444</b>		RunNo: <b>93788</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3385832</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9804	0	106	68.8	120			
Toluene	1.1	0.049	0.9804	0	108	73.6	124			
Ethylbenzene	1.1	0.049	0.9804	0	109	72.7	129			
Xylenes, Total	3.2	0.098	2.941	0	109	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9804		125	70	130			

Sample ID: <b>2301065-002amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-54 2'</b>	Batch ID: <b>72444</b>		RunNo: <b>93788</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3385833</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9690	0	103	68.8	120	4.21	20	
Toluene	1.0	0.048	0.9690	0	105	73.6	124	3.97	20	
Ethylbenzene	1.0	0.048	0.9690	0	106	72.7	129	4.57	20	
Xylenes, Total	3.1	0.097	2.907	0	106	75.7	126	4.35	20	
Surr: 4-Bromofluorobenzene	1.2		0.9690		125	70	130	0	0	

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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

WO#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>Ics-72461</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72461</b>		RunNo: <b>93788</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3385852</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		128	70	130			

Sample ID: <b>mb-72461</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72461</b>		RunNo: <b>93788</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3385853</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	1.3		1.000		129	70	130			

Sample ID: <b>2301065-082ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-45 0'</b>	Batch ID: <b>72468</b>		RunNo: <b>93793</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386311</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.024	0.9728	0	80.4	68.8	120			
Toluene	0.83	0.049	0.9728	0	84.9	73.6	124			
Ethylbenzene	0.84	0.049	0.9728	0	86.3	72.7	129			
Xylenes, Total	2.5	0.097	2.918	0	86.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.83		0.9728		85.2	70	130			

Sample ID: <b>2301065-082amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-45 0'</b>	Batch ID: <b>72468</b>		RunNo: <b>93793</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386312</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.024	0.9794	0	80.3	68.8	120	0.521	20	
Toluene	0.84	0.049	0.9794	0	85.5	73.6	124	1.43	20	
Ethylbenzene	0.86	0.049	0.9794	0	87.7	72.7	129	2.20	20	
Xylenes, Total	2.6	0.098	2.938	0	87.5	75.7	126	1.68	20	
Surr: 4-Bromofluorobenzene	0.84		0.9794		85.5	70	130	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301065

16-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: <b>mb-72468</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72468</b>		RunNo: <b>93793</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386355</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	0.86		1.000		85.7	70	130			

Sample ID: <b>2301065-022ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-53 0'</b>	Batch ID: <b>72452</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3386930</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9452	0	107	68.8	120			
Toluene	1.0	0.047	0.9452	0	109	73.6	124			
Ethylbenzene	1.0	0.047	0.9452	0	109	72.7	129			
Xylenes, Total	3.1	0.095	2.836	0	110	75.7	126			
Surr: 4-Bromofluorobenzene	1.1		0.9452		121	70	130			

Sample ID: <b>2301065-022amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-53 0'</b>	Batch ID: <b>72452</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3386931</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9434	0	99.0	68.8	120	7.67	20	
Toluene	0.98	0.047	0.9434	0	104	73.6	124	4.75	20	
Ethylbenzene	0.99	0.047	0.9434	0	105	72.7	129	4.29	20	
Xylenes, Total	3.0	0.094	2.830	0	105	75.7	126	4.43	20	
Surr: 4-Bromofluorobenzene	1.2		0.9434		122	70	130	0	0	

Sample ID: <b>2301065-042ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-58 4'</b>	Batch ID: <b>72458</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3386932</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.024	0.9709	0	101	68.8	120			
Toluene	1.0	0.049	0.9709	0	103	73.6	124			
Ethylbenzene	1.0	0.049	0.9709	0	103	72.7	129			
Xylenes, Total	3.0	0.097	2.913	0	104	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9709		124	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#: 2301065

16-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>2301065-042amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-58 4'</b>	Batch ID: <b>72458</b>	RunNo: <b>93823</b>								
Prep Date: <b>1/4/2023</b>	Analysis Date: <b>1/10/2023</b>	SeqNo: <b>3386933</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.024	0.9643	0	101	68.8	120	0.00428	20	
Toluene	1.0	0.048	0.9643	0	104	73.6	124	0.304	20	
Ethylbenzene	1.0	0.048	0.9643	0	104	72.7	129	0.172	20	
Xylenes, Total	3.0	0.096	2.893	0	104	75.7	126	0.445	20	
Surr: 4-Bromofluorobenzene	1.2		0.9643		124	70	130	0	0	

Sample ID: <b>2301065-062ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-09 2'</b>	Batch ID: <b>72461</b>	RunNo: <b>93823</b>								
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/10/2023</b>	SeqNo: <b>3386934</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9814	0	102	68.8	120			
Toluene	1.0	0.049	0.9814	0	104	73.6	124			
Ethylbenzene	1.0	0.049	0.9814	0	104	72.7	129			
Xylenes, Total	3.1	0.098	2.944	0	104	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9814		125	70	130			

Sample ID: <b>2301065-062amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BH22-09 2'</b>	Batch ID: <b>72461</b>	RunNo: <b>93823</b>								
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/10/2023</b>	SeqNo: <b>3386935</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9881	0	102	68.8	120	0.581	20	
Toluene	1.0	0.049	0.9881	0	104	73.6	124	0.829	20	
Ethylbenzene	1.0	0.049	0.9881	0	104	72.7	129	0.705	20	
Xylenes, Total	3.1	0.099	2.964	0	104	75.7	126	0.716	20	
Surr: 4-Bromofluorobenzene	1.2		0.9881		122	70	130	0	0	

Sample ID: <b>LCS-72468</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72468</b>	RunNo: <b>93875</b>								
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3388801</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.3	80	120			
Toluene	0.93	0.050	1.000	0	93.0	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.7	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	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

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

## Sample Log-In Check List

Client Name: Vertex Resources  
Services, Inc.

Work Order Number: 2301065

RcptNo: 1

Received By: Tracy Casarrubias 1/4/2023 7:15:00 AM

Completed By: Tracy Casarrubias 1/4/2023 8:16:55 AM

Reviewed By: *mcl/23*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH: \_\_\_\_\_  
(<2 or >12 unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: *SGC 1/4/23*

### 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	5.3	Good	Yes			



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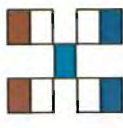
Tel. 505-345-3975 Fax 505-345-4107

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**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

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4901 Hawkins NE - Albuquerque, NM 87109

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

Turn-Around Time: ☒ Standard ☒ Rush 5 Day

Project Name: East Pecos Pipeline Spill

Project #: 22E-03982

Project Manager: Kent Stallings

Sampler: L. Pullman

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CP): 5.3 - 0 = 5.3 °C

HEAL No. 2301065

Container Type and # 1, 4oz jar

Preservative Type 037

Container Type and # 1, 4oz jar

Preservative Type 038

Container Type and # 1, 4oz jar

Preservative Type 039

Container Type and # 1, 4oz jar

Preservative Type 040

Container Type and # 1, 4oz jar

Preservative Type 041

Container Type and # 1, 4oz jar

Preservative Type 042

Container Type and # 1, 4oz jar

Preservative Type 043

Container Type and # 1, 4oz jar

Preservative Type 044

Container Type and # 1, 4oz jar

Preservative Type 045

Container Type and # 1, 4oz jar

Preservative Type 046

Container Type and # 1, 4oz jar

Preservative Type 047

Container Type and # 1, 4oz jar

Preservative Type 048

Date	Time	Matrix	Sample Name	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/31/22	9:25	Soil	BH22-57 0'	X					X			
12/31/22	9:30	Soil	BH22-57 2'	X					X			
12/31/22	9:35	Soil	BH22-57 4'	X					X			
12/31/22	9:10	Soil	BH22-58 0'	X					X			
12/31/22	9:15	Soil	BH22-58 2'	X					X			
12/31/22	9:20	Soil	BH22-58 4'	X					X			
12/31/22	8:55	Soil	BH22-59 0'	X					X			
12/31/22	9:00	Soil	BH22-59 2'	X					X			
12/31/22	9:05	Soil	BH22-59 4'	X					X			
12/31/22	8:40	Soil	BH22-60 0'	X					X			
12/31/22	8:45	Soil	BH22-60 2'	X					X			
12/31/22	8:50	Soil	BH22-60 4'	X					X			

Date: 1-3-2025 Time: 07:00 Relinquished by: Saban Pullman

Date: 1/3/23 Time: 7:15 Relinquished by: [Signature]

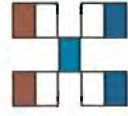
Date: 1/1/23 Time: 19:00 Relinquished by: [Signature]

Analysis Request

Remarks: Direct bill to Devon, Jim Raley  
cc. kstallings@vertex.ca and mpeppin@vertex.ca for Final Report

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





**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

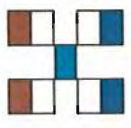
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4901 Hawkins NE - Albuquerque, NM 87109

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

<b>Vertex</b> (direct bill to Devon)		Turn-Around Time:				
Client:		<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>9 Nov</u>				
Mailing Address:		Project Name:				
Phone #:		East Pecos Pipeline Spill				
email or Fax#:		Project #:				
QA/QC Package:		22E-03982				
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Project Manager:				
Accreditation: <input type="checkbox"/> Az Compliance		Kent Stallings				
<input type="checkbox"/> NELAC <input type="checkbox"/> Other		<a href="mailto:kstallings@vertex.ca">kstallings@vertex.ca</a>				
<input type="checkbox"/> EDD (Type)		Sampler:    L. Pullman				
On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		# of Coolers: <u>1</u> <u>YOGI</u>				
Cooler Temp (including CP): <u>5.3-8 = 5.3</u>		HEAL No. <u>2361065</u>				
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
12/31/22	11:00	Soil	BH22-38 0'	1, 4oz jar		049
12/31/22	11:05	Soil	BH22-38 2'	1, 4oz jar		050
12/31/22	11:10	Soil	BH22-38 4'	1, 4oz jar		051
12/31/22	11:15	Soil	BH22-39 0'	1, 4oz jar		052
12/31/22	11:20	Soil	BH22-39 2'	1, 4oz jar		053
12/31/22	11:25	Soil	BH22-39 4'	1, 4oz jar		054
12/31/22	11:45	Soil	BH22-41 0'	1, 4oz jar		055
12/31/22	11:50	Soil	BH22-41 2'	1, 4oz jar		056
12/31/22	11:55	Soil	BH22-41 4'	1, 4oz jar		057
12/31/22	12:00	Soil	BH22-42 0'	1, 4oz jar		058
12/31/22	12:05	Soil	BH22-42 2'	1, 4oz jar		059
12/31/22	12:10	Soil	BH22-42 4'	1, 4oz jar		060
Date:	Time:	Relinquished by:		Via:	Date	Time
1-3-2023	07:00	Sahant Pullman			1/3/23	7:00
Date:	Time:	Relinquished by:		Via:	Date	Time
1/3/23	19:00	Sahant Pullman			1/4/23	7:15

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Turn-Around Time:

Standard ☒ Rush ☒ Yon

Project Name:

East Pecos Pipeline Spill

Project #:

22E-03982

Project Manager:

Kent Stallings

[kstallings@vertex.ca](mailto:kstallings@vertex.ca)

Sampler: L. Pullman

On Ice: ☒ Yes ☐ No

# of Coolers: 1 Yon

Cooler Temp (including CF): 5.3 - 6 = 5.3

Container Type and #

Preservative Type

HEAL No. 2301065

Date Time Matrix Sample Name

01/01/23 8:05 Soil BH22-09 0'

01/01/23 8:10 Soil BH22-09 2'

01/01/23 8:15 Soil BH22-09 4'

01/01/23 8:40 Soil BH22-11 0'

01/01/23 8:45 Soil BH22-11 2'

01/01/23 8:50 Soil BH22-11 4'

01/01/23 9:05 Soil BH22-13 0'

01/01/23 9:10 Soil BH22-13 2'

01/01/23 9:15 Soil BH22-13 4'

01/01/23 9:25 Soil BH22-14 0'

01/01/23 9:30 Soil BH22-14 2'

01/01/23 9:35 Soil BH22-14 4'

Date: 1-3-2023 Time: 07:50

Relinquished by: [Signature]

Date: 1/3/23 Time: 1900

Relinquished by: [Signature]

Received by: [Signature]

Date: 1/3/23 Time: 760

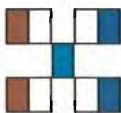
Received by: [Signature]

Date: 1/4/23 Time: 7:15

Remarks:

Direct bill to Devon, Jim Raley  
cc. [kstallings@vertex.ca](mailto:kstallings@vertex.ca) and [mpeppin@vertex.ca](mailto:mpeppin@vertex.ca) for Final Report

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# 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

Turn-Around Time:		<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>5 Day</u>	
Project Name:		East Pecos Pipeline Spill	
Project #:		22E-03982	
Project Manager:		Kent Stallings	
Sample:		L. Pullman	
On Ice:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
# of Coolers:		<u>1</u>	
Cooler Temp (including CFI):		<u>5.3 - 6 = 5.3</u>	
Container Type and #	Preservative Type	HEAL No.	
1, 4oz jar		<u>2301065</u>	
1, 4oz jar		<u>073</u>	
1, 4oz jar		<u>074</u>	
1, 4oz jar		<u>075</u>	
1, 4oz jar		<u>076</u>	
1, 4oz jar		<u>077</u>	
1, 4oz jar		<u>078</u>	
1, 4oz jar		<u>079</u>	
1, 4oz jar		<u>680</u>	
1, 4oz jar		<u>081</u>	
1, 4oz jar		<u>082</u>	
1, 4oz jar		<u>083</u>	
1, 4oz jar		<u>084</u>	
Received by:		Via: <u>Car</u> Date: <u>1/3/23</u> Time: <u>7:00</u>	
Received by:		Via: <u>Car</u> Date: <u>1/4/23</u> Time: <u>7:15</u>	

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

January 16, 2023

Monica Peppin

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: East Pecos Pipeline Spill

OrderNo.: 2301068

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 32 sample(s) on 1/4/2023 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 horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-01 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:00:00 AM

Lab ID: 2301068-001

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	5100	130		mg/Kg	10	1/6/2023 11:28:27 PM
Motor Oil Range Organics (MRO)	3700	440		mg/Kg	10	1/6/2023 11:28:27 PM
Surr: DNOP	0	21-129	S	%Rec	10	1/6/2023 11:28:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	1/6/2023 3:00:49 PM
Surr: BFB	89.2	37.7-212		%Rec	5	1/6/2023 3:00:49 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 3:00:49 PM
Toluene	ND	0.25		mg/Kg	5	1/6/2023 3:00:49 PM
Ethylbenzene	ND	0.25		mg/Kg	5	1/6/2023 3:00:49 PM
Xylenes, Total	ND	0.49		mg/Kg	5	1/6/2023 3:00:49 PM
Surr: 4-Bromofluorobenzene	82.0	70-130		%Rec	5	1/6/2023 3:00:49 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	63000	3000		mg/Kg	1000	1/9/2023 9:21:02 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	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.		

Page 1 of 39

## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-01 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:05:00 AM

Lab ID: 2301068-002

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/7/2023 12:00:06 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/7/2023 12:00:06 AM
Surr: DNOP	108	21-129		%Rec	1	1/7/2023 12:00:06 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 3:24:30 PM
Surr: BFB	91.3	37.7-212		%Rec	1	1/6/2023 3:24:30 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 3:24:30 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 3:24:30 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 3:24:30 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 3:24:30 PM
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	1/6/2023 3:24:30 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	69000	3000		mg/Kg	1000	1/9/2023 9:33:24 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-01 8'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:10:00 AM

Lab ID: 2301068-003

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/7/2023 12:10:43 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/7/2023 12:10:43 AM
Surr: DNOP	110	21-129		%Rec	1	1/7/2023 12:10:43 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 1:46:09 PM
Surr: BFB	101	37.7-212		%Rec	1	1/11/2023 1:46:09 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 1:46:09 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 1:46:09 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 1:46:09 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2023 1:46:09 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	1/11/2023 1:46:09 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	17000	1500		mg/Kg	500	1/9/2023 9:45:43 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-01 16'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:15:00 AM

Lab ID: 2301068-004

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/7/2023 12:21:21 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/7/2023 12:21:21 AM
Surr: DNOP	109	21-129		%Rec	1	1/7/2023 12:21:21 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 4:11:41 PM
Surr: BFB	89.4	37.7-212		%Rec	1	1/6/2023 4:11:41 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 4:11:41 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 4:11:41 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 4:11:41 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 4:11:41 PM
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	1/6/2023 4:11:41 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	17000	1500		mg/Kg	500	1/9/2023 9:58:04 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-02 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:30:00 AM

Lab ID: 2301068-005

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	1300	150		mg/Kg	10	1/7/2023 12:32:00 AM
Motor Oil Range Organics (MRO)	880	500		mg/Kg	10	1/7/2023 12:32:00 AM
Surr: DNOP	0	21-129	S	%Rec	10	1/7/2023 12:32:00 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 4:35:15 PM
Surr: BFB	97.3	37.7-212		%Rec	1	1/6/2023 4:35:15 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 4:35:15 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 4:35:15 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 4:35:15 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 4:35:15 PM
Surr: 4-Bromofluorobenzene	82.1	70-130		%Rec	1	1/6/2023 4:35:15 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	71000	3000		mg/Kg	1000	1/10/2023 1:12:37 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-02 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:35:00 AM

Lab ID: 2301068-006

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/7/2023 12:53:09 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/7/2023 12:53:09 AM
Surr: DNOP	112	21-129		%Rec	1	1/7/2023 12:53:09 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 4:58:47 PM
Surr: BFB	93.3	37.7-212		%Rec	1	1/6/2023 4:58:47 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 4:58:47 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 4:58:47 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 4:58:47 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 4:58:47 PM
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	1/6/2023 4:58:47 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	13000	600		mg/Kg	200	1/9/2023 10:47:27 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-02 8'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:40:00 AM

Lab ID: 2301068-007

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/7/2023 1:03:50 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/7/2023 1:03:50 AM
Surr: DNOP	113	21-129		%Rec	1	1/7/2023 1:03:50 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 5:45:55 PM
Surr: BFB	89.4	37.7-212		%Rec	1	1/6/2023 5:45:55 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 5:45:55 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 5:45:55 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 5:45:55 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2023 5:45:55 PM
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	1/6/2023 5:45:55 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	17000	600		mg/Kg	200	1/9/2023 10:59:48 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-02 16'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 10:45:00 AM

Lab ID: 2301068-008

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/7/2023 1:14:38 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/7/2023 1:14:38 AM
Surr: DNOP	110	21-129		%Rec	1	1/7/2023 1:14:38 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 2:09:48 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 2:09:48 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 2:09:48 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 2:09:48 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 2:09:48 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 2:09:48 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	1/11/2023 2:09:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	13000	600		mg/Kg	200	1/9/2023 11:12:09 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-03 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 11:00:00 AM

Lab ID: 2301068-009

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	3100	140		mg/Kg	10	1/7/2023 1:25:23 AM
Motor Oil Range Organics (MRO)	1700	470		mg/Kg	10	1/7/2023 1:25:23 AM
Surr: DNOP	0	21-129	S	%Rec	10	1/7/2023 1:25:23 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	1/6/2023 6:56:21 PM
Surr: BFB	86.8	37.7-212		%Rec	5	1/6/2023 6:56:21 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 6:56:21 PM
Toluene	ND	0.24		mg/Kg	5	1/6/2023 6:56:21 PM
Ethylbenzene	ND	0.24		mg/Kg	5	1/6/2023 6:56:21 PM
Xylenes, Total	ND	0.48		mg/Kg	5	1/6/2023 6:56:21 PM
Surr: 4-Bromofluorobenzene	81.3	70-130		%Rec	5	1/6/2023 6:56:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	48000	1500		mg/Kg	500	1/9/2023 11:24:29 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-03 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 11:05:00 AM

Lab ID: 2301068-010

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	86	9.6		mg/Kg	1	1/10/2023 5:26:26 PM
Motor Oil Range Organics (MRO)	54	48		mg/Kg	1	1/10/2023 5:26:26 PM
Surr: DNOP	123	21-129		%Rec	1	1/10/2023 5:26:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 7:19:52 PM
Surr: BFB	94.8	37.7-212		%Rec	1	1/6/2023 7:19:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 7:19:52 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 7:19:52 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 7:19:52 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 7:19:52 PM
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	1/6/2023 7:19:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	15000	600		mg/Kg	200	1/9/2023 11:36:49 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-03 8'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 11:10:00 AM

Lab ID: 2301068-011

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/7/2023 1:46:42 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/7/2023 1:46:42 AM
Surr: DNOP	118	21-129		%Rec	1	1/7/2023 1:46:42 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2023 7:43:28 PM
Surr: BFB	89.7	37.7-212		%Rec	1	1/6/2023 7:43:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/6/2023 7:43:28 PM
Toluene	ND	0.049		mg/Kg	1	1/6/2023 7:43:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2023 7:43:28 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/6/2023 7:43:28 PM
Surr: 4-Bromofluorobenzene	85.4	70-130		%Rec	1	1/6/2023 7:43:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	9500	600		mg/Kg	200	1/9/2023 11:49:10 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-03 16'

Project: East Pecos Pipeline Spill

Collection Date: 12/28/2022 11:15:00 AM

Lab ID: 2301068-012

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	13		mg/Kg	1	1/7/2023 1:57:18 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/7/2023 1:57:18 AM
Surr: DNOP	107	21-129		%Rec	1	1/7/2023 1:57:18 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/6/2023 8:06:56 PM
Surr: BFB	88.1	37.7-212		%Rec	1	1/6/2023 8:06:56 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/6/2023 8:06:56 PM
Toluene	ND	0.048		mg/Kg	1	1/6/2023 8:06:56 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/6/2023 8:06:56 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/6/2023 8:06:56 PM
Surr: 4-Bromofluorobenzene	83.2	70-130		%Rec	1	1/6/2023 8:06:56 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	9800	590		mg/Kg	200	1/10/2023 12:01:30 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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-04 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 9:00:00 AM

Lab ID: 2301068-013

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	31000	1900		mg/Kg	200	1/9/2023 12:24:49 PM
Motor Oil Range Organics (MRO)	17000	9400		mg/Kg	200	1/9/2023 12:24:49 PM
Surr: DNOP	0	21-129	S	%Rec	200	1/9/2023 12:24:49 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	1/6/2023 8:30:24 PM
Surr: BFB	94.8	37.7-212		%Rec	5	1/6/2023 8:30:24 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.12		mg/Kg	5	1/6/2023 8:30:24 PM
Toluene	ND	0.25		mg/Kg	5	1/6/2023 8:30:24 PM
Ethylbenzene	ND	0.25		mg/Kg	5	1/6/2023 8:30:24 PM
Xylenes, Total	ND	0.50		mg/Kg	5	1/6/2023 8:30:24 PM
Surr: 4-Bromofluorobenzene	81.9	70-130		%Rec	5	1/6/2023 8:30:24 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	48000	1500		mg/Kg	500	1/10/2023 12:13:51 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-04 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 9:05:00 AM

Lab ID: 2301068-014

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	15		mg/Kg	1	1/7/2023 2:38:58 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/7/2023 2:38:58 AM
Surr: DNOP	113	21-129		%Rec	1	1/7/2023 2:38:58 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 2:33:26 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 2:33:26 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 2:33:26 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 2:33:26 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 2:33:26 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 2:33:26 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	1/11/2023 2:33:26 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	13000	600		mg/Kg	200	1/10/2023 12:26:11 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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-04 8'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 9:10:00 AM

Lab ID: 2301068-015

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	14		mg/Kg	1	1/7/2023 2:49:27 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/7/2023 2:49:27 AM
Surr: DNOP	113	21-129		%Rec	1	1/7/2023 2:49:27 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 2:57:06 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 2:57:06 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 2:57:06 PM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 2:57:06 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 2:57:06 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/11/2023 2:57:06 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	1/11/2023 2:57:06 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	15000	600		mg/Kg	200	1/10/2023 12:38:31 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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-04 16'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 9:20:00 AM

Lab ID: 2301068-016

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	5900	150		mg/Kg	10	1/7/2023 2:59:57 AM
Motor Oil Range Organics (MRO)	1600	490		mg/Kg	10	1/7/2023 2:59:57 AM
Surr: DNOP	0	21-129	S	%Rec	10	1/7/2023 2:59:57 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	1100	24		mg/Kg	5	1/6/2023 9:40:49 PM
Surr: BFB	786	37.7-212	S	%Rec	5	1/6/2023 9:40:49 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	0.13	0.12		mg/Kg	5	1/6/2023 9:40:49 PM
Toluene	10	0.24		mg/Kg	5	1/6/2023 9:40:49 PM
Ethylbenzene	4.1	0.24		mg/Kg	5	1/6/2023 9:40:49 PM
Xylenes, Total	65	0.49		mg/Kg	5	1/6/2023 9:40:49 PM
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	5	1/6/2023 9:40:49 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	9000	300		mg/Kg	100	1/10/2023 1:15:33 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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-05 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 9:30:00 AM

Lab ID: 2301068-017

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	490	9.9		mg/Kg	1	1/9/2023 11:08:27 AM
Motor Oil Range Organics (MRO)	380	50		mg/Kg	1	1/9/2023 11:08:27 AM
Surr: DNOP	129	21-129		%Rec	1	1/9/2023 11:08:27 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/7/2023 12:24:26 AM
Surr: BFB	82.9	37.7-212		%Rec	1	1/7/2023 12:24:26 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.023		mg/Kg	1	1/9/2023 9:51:00 PM
Toluene	ND	0.047		mg/Kg	1	1/9/2023 9:51:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2023 9:51:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	1/9/2023 9:51:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/9/2023 9:51:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	17000	600		mg/Kg	200	1/10/2023 1:27:54 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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-05 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 9:35:00 AM

Lab ID: 2301068-018

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	9.0		mg/Kg	1	1/9/2023 1:28:36 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/9/2023 1:28:36 PM
Surr: DNOP	113	21-129		%Rec	1	1/9/2023 1:28:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/7/2023 1:34:22 AM
Surr: BFB	89.6	37.7-212		%Rec	1	1/7/2023 1:34:22 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.023		mg/Kg	1	1/9/2023 10:10:00 PM
Toluene	ND	0.046		mg/Kg	1	1/9/2023 10:10:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/9/2023 10:10:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	1/9/2023 10:10:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/9/2023 10:10:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	950	59		mg/Kg	20	1/9/2023 7:29:56 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-05 8'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 9:40:00 AM

Lab ID: 2301068-019

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	10		mg/Kg	1	1/9/2023 1:39:09 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/9/2023 1:39:09 PM
Surr: DNOP	110	21-129		%Rec	1	1/9/2023 1:39:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/7/2023 2:44:03 AM
Surr: BFB	87.5	37.7-212		%Rec	1	1/7/2023 2:44:03 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 11:09:00 PM
Toluene	ND	0.047		mg/Kg	1	1/9/2023 11:09:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2023 11:09:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/9/2023 11:09:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/9/2023 11:09:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	17000	590		mg/Kg	200	1/10/2023 1:24:58 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-06 0'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 10:00:00 AM

Lab ID: 2301068-020

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	16000	200		mg/Kg	20	1/9/2023 1:49:43 PM
Motor Oil Range Organics (MRO)	10000	1000		mg/Kg	20	1/9/2023 1:49:43 PM
Surr: DNOP	0	21-129	S	%Rec	20	1/9/2023 1:49:43 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/7/2023 3:07:17 AM
Surr: BFB	87.1	37.7-212		%Rec	1	1/7/2023 3:07:17 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	0.22	0.023		mg/Kg	1	1/9/2023 11:29:00 PM
Toluene	0.51	0.047		mg/Kg	1	1/9/2023 11:29:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2023 11:29:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	1/9/2023 11:29:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/9/2023 11:29:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	56000	3000		mg/Kg	1000	1/10/2023 1:37:19 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-06 4'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 10:05:00 AM

Lab ID: 2301068-021

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	25	9.4		mg/Kg	1	1/9/2023 2:10:51 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2023 2:10:51 PM
Surr: DNOP	117	21-129		%Rec	1	1/9/2023 2:10:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/7/2023 3:30:27 AM
Surr: BFB	89.9	37.7-212		%Rec	1	1/7/2023 3:30:27 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 11:49:00 PM
Toluene	ND	0.047		mg/Kg	1	1/9/2023 11:49:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2023 11:49:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/9/2023 11:49:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/9/2023 11:49:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	19000	1500		mg/Kg	500	1/10/2023 1:49:39 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-06 8'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 10:10:00 AM

Lab ID: 2301068-022

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	8.5		mg/Kg	1	1/9/2023 2:32:02 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/9/2023 2:32:02 PM
Surr: DNOP	127	21-129		%Rec	1	1/9/2023 2:32:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 3:53:39 AM
Surr: BFB	87.1	37.7-212		%Rec	1	1/7/2023 3:53:39 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 12:08:00 AM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 12:08:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 12:08:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/10/2023 12:08:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/10/2023 12:08:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9400	600		mg/Kg	200	1/10/2023 2:02:00 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-06 16'

Project: East Pecos Pipeline Spill

Collection Date: 12/30/2022 10:20:00 AM

Lab ID: 2301068-023

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	10		mg/Kg	1	1/9/2023 2:42:41 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/9/2023 2:42:41 PM
Surr: DNOP	106	21-129		%Rec	1	1/9/2023 2:42:41 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/7/2023 4:16:48 AM
Surr: BFB	88.3	37.7-212		%Rec	1	1/7/2023 4:16:48 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 12:28:00 AM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 12:28:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 12:28:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 12:28:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/10/2023 12:28:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	6800	300		mg/Kg	100	1/10/2023 2:14:20 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-08 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 7:50:00 AM

Lab ID: 2301068-024

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	1800	95		mg/Kg	10	1/9/2023 2:53:20 PM
Motor Oil Range Organics (MRO)	840	470		mg/Kg	10	1/9/2023 2:53:20 PM
Surr: DNOP	0	21-129	S	%Rec	10	1/9/2023 2:53:20 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 4:39:59 AM
Surr: BFB	115	37.7-212		%Rec	1	1/7/2023 4:39:59 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 12:48:00 AM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 12:48:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 12:48:00 AM
Xylenes, Total	0.17	0.097		mg/Kg	1	1/10/2023 12:48:00 AM
Surr: 4-Bromofluorobenzene	132	70-130	S	%Rec	1	1/10/2023 12:48:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	610		mg/Kg	200	1/10/2023 2:26:41 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-08 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 7:55:00 AM

Lab ID: 2301068-025

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	1/9/2023 3:03:59 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/9/2023 3:03:59 PM
Surr: DNOP	119	21-129		%Rec	1	1/9/2023 3:03:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/7/2023 5:03:07 AM
Surr: BFB	90.1	37.7-212		%Rec	1	1/7/2023 5:03:07 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 1:07:00 AM
Toluene	ND	0.047		mg/Kg	1	1/10/2023 1:07:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/10/2023 1:07:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	1/10/2023 1:07:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/10/2023 1:07:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	12000	600		mg/Kg	200	1/10/2023 2:39:02 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-08 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:00:00 AM

Lab ID: 2301068-026

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	8.6		mg/Kg	1	1/9/2023 3:14:38 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/9/2023 3:14:38 PM
Surr: DNOP	112	21-129		%Rec	1	1/9/2023 3:14:38 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 5:26:17 AM
Surr: BFB	86.0	37.7-212		%Rec	1	1/7/2023 5:26:17 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 1:27:00 AM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 1:27:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 1:27:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 1:27:00 AM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/10/2023 1:27:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	9700	600		mg/Kg	200	1/10/2023 2:51:23 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-10 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:25:00 AM

Lab ID: 2301068-027

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	17000	170		mg/Kg	20	1/9/2023 3:25:17 PM
Motor Oil Range Organics (MRO)	8600	850		mg/Kg	20	1/9/2023 3:25:17 PM
Surr: DNOP	0	21-129	S	%Rec	20	1/9/2023 3:25:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	37	4.8		mg/Kg	1	1/7/2023 6:12:30 AM
Surr: BFB	461	37.7-212	S	%Rec	1	1/7/2023 6:12:30 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 2:06:00 AM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 2:06:00 AM
Ethylbenzene	0.084	0.048		mg/Kg	1	1/10/2023 2:06:00 AM
Xylenes, Total	0.45	0.096		mg/Kg	1	1/10/2023 2:06:00 AM
Surr: 4-Bromofluorobenzene	152	70-130	S	%Rec	1	1/10/2023 2:06:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	6400	300		mg/Kg	100	1/10/2023 3:03:43 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	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.		

CLIENT: Devon Energy

Client Sample ID: BH22-10 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:30:00 AM

Lab ID: 2301068-028

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	1/9/2023 4:14:50 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/9/2023 4:14:50 PM
Surr: DNOP	116	21-129		%Rec	1	1/9/2023 4:14:50 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/7/2023 6:35:38 AM
Surr: BFB	85.9	37.7-212		%Rec	1	1/7/2023 6:35:38 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	1/10/2023 2:26:00 AM
Toluene	ND	0.046		mg/Kg	1	1/10/2023 2:26:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	1/10/2023 2:26:00 AM
Xylenes, Total	ND	0.093		mg/Kg	1	1/10/2023 2:26:00 AM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	1/10/2023 2:26:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	13000	600		mg/Kg	200	1/10/2023 3:40:46 PM

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

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

## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-10 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 8:35:00 AM

Lab ID: 2301068-029

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	1/9/2023 4:25:27 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2023 4:25:27 PM
Surr: DNOP	120	21-129		%Rec	1	1/9/2023 4:25:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/7/2023 6:58:48 AM
Surr: BFB	88.0	37.7-212		%Rec	1	1/7/2023 6:58:48 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 2:45:00 AM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 2:45:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 2:45:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 2:45:00 AM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/10/2023 2:45:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	11000	600		mg/Kg	200	1/10/2023 3:53:07 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-15 0'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 10:05:00 AM

Lab ID: 2301068-030

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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)	810	98		mg/Kg	10	1/9/2023 4:36:05 PM
Motor Oil Range Organics (MRO)	650	490		mg/Kg	10	1/9/2023 4:36:05 PM
Surr: DNOP	0	21-129	S	%Rec	10	1/9/2023 4:36:05 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/7/2023 7:21:56 AM
Surr: BFB	91.7	37.7-212		%Rec	1	1/7/2023 7:21:56 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/10/2023 3:05:00 AM
Toluene	ND	0.050		mg/Kg	1	1/10/2023 3:05:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/10/2023 3:05:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/10/2023 3:05:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/10/2023 3:05:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	5900	300		mg/Kg	100	1/10/2023 4:05:28 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	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 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-15 2'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 10:10:00 AM

Lab ID: 2301068-031

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	9.3		mg/Kg	1	1/9/2023 4:46:45 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/9/2023 4:46:45 PM
Surr: DNOP	118	21-129		%Rec	1	1/9/2023 4:46:45 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/7/2023 7:45:00 AM
Surr: BFB	87.0	37.7-212		%Rec	1	1/7/2023 7:45:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.023		mg/Kg	1	1/10/2023 3:24:00 AM
Toluene	ND	0.046		mg/Kg	1	1/10/2023 3:24:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	1/10/2023 3:24:00 AM
Xylenes, Total	ND	0.092		mg/Kg	1	1/10/2023 3:24:00 AM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	1/10/2023 3:24:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	18000	600		mg/Kg	200	1/10/2023 4:17:49 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	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.		

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## Analytical Report

Lab Order 2301068

Date Reported: 1/16/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-15 4'

Project: East Pecos Pipeline Spill

Collection Date: 1/1/2023 10:15:00 AM

Lab ID: 2301068-032

Matrix: SOIL

Received Date: 1/4/2023 7:15:00 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	9.8		mg/Kg	1	1/9/2023 4:57:25 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 4:57:25 PM
Surr: DNOP	115	21-129		%Rec	1	1/9/2023 4:57:25 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 8:08:07 AM
Surr: BFB	85.9	37.7-212		%Rec	1	1/7/2023 8:08:07 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 3:44:00 AM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 3:44:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 3:44:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 3:44:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/10/2023 3:44:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	17000	600		mg/Kg	200	1/10/2023 4:30:10 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	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.		

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2301068  
16-Jan-23

Client: Devon Energy  
Project: East Pecos Pipeline Spill

Sample ID: MB-72496	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 72496	RunNo: 93780
Prep Date: 1/6/2023	Analysis Date: 1/6/2023	SeqNo: 3385530 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-72496	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 72496	RunNo: 93780
Prep Date: 1/6/2023	Analysis Date: 1/6/2023	SeqNo: 3385531 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.8 90 110

Sample ID: MB-72522	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 72522	RunNo: 93832
Prep Date: 1/9/2023	Analysis Date: 1/9/2023	SeqNo: 3387237 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-72522	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 72522	RunNo: 93832
Prep Date: 1/9/2023	Analysis Date: 1/9/2023	SeqNo: 3387238 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 94.2 90 110

Sample ID: MB-72511	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 72511	RunNo: 93837
Prep Date: 1/9/2023	Analysis Date: 1/9/2023	SeqNo: 3387327 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-72511	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 72511	RunNo: 93837
Prep Date: 1/9/2023	Analysis Date: 1/9/2023	SeqNo: 3387328 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.3 90 110

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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

Page 33 of 39

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

WO#: 2301068

16-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-72476</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72476</b>			RunNo: <b>93809</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>			SeqNo: <b>3386536</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	50.00	0	93.7	64.4	127			
Surr: DNOP	5.9		5.000		118	21	129			

Sample ID: <b>MB-72476</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>72476</b>			RunNo: <b>93809</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>			SeqNo: <b>3386539</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	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.3	21	129			

Sample ID: <b>2301068-017AMS</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>BH22-05 0'</b>	Batch ID: <b>72492</b>			RunNo: <b>93818</b>						
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/9/2023</b>			SeqNo: <b>3386728</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	530	9.9	49.60	493.7	77.1	36.1	154			
Surr: DNOP	5.6		4.960		114	21	129			

Sample ID: <b>2301068-017AMSD</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>BH22-05 0'</b>	Batch ID: <b>72492</b>			RunNo: <b>93818</b>						
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/9/2023</b>			SeqNo: <b>3386729</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	490	9.0	44.76	493.7	-11.4	36.1	154	8.50	33.9	S
Surr: DNOP	4.7		4.476		106	21	129	0	0	

Sample ID: <b>LCS-72492</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72492</b>			RunNo: <b>93818</b>						
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/9/2023</b>			SeqNo: <b>3386797</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	10	50.00	0	84.1	64.4	127			
Surr: DNOP	5.6		5.000		111	21	129			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301068

16-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: MB-72492	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 72492	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386800 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	21	129			

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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#: 2301068

16-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: <b>lcs-72468</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72468</b>			RunNo: <b>93793</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>			SeqNo: <b>3386251</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	94.5	72.3	137			
Surr: BFB	1800		1000		183	37.7	212			

Sample ID: <b>lcs-72481</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72481</b>			RunNo: <b>93793</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>			SeqNo: <b>3386252</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	90.0	72.3	137			
Surr: BFB	1800		1000		180	37.7	212			

Sample ID: <b>mb-72468</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>72468</b>			RunNo: <b>93793</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>			SeqNo: <b>3386253</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	930		1000		93.3	37.7	212			

Sample ID: <b>mb-72481</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>72481</b>			RunNo: <b>93793</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/7/2023</b>			SeqNo: <b>3386254</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	900		1000		90.1	37.7	212			

Sample ID: <b>2301068-017ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>BH22-05 0'</b>	Batch ID: <b>72481</b>			RunNo: <b>93793</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/7/2023</b>			SeqNo: <b>3386271</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	4.6	23.13	0	99.8	70	130			
Surr: BFB	1800		925.1		190	37.7	212			

Sample ID: <b>2301068-017amsd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>BH22-05 0'</b>	Batch ID: <b>72481</b>			RunNo: <b>93793</b>						
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/7/2023</b>			SeqNo: <b>3386272</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#: 2301068

16-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: 2301068-017amsd	SampType: MSD				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-05 0'	Batch ID: 72481				RunNo: 93793					
Prep Date: 1/5/2023	Analysis Date: 1/7/2023				SeqNo: 3386272		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.43	0	105	70	130	6.23	20	
Surr: BFB	1800		937.2		194	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 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#: 2301068

16-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline Spill

Sample ID: <b>mb-72468</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72468</b>		RunNo: <b>93793</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386355</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	0.86		1.000		85.7	70	130			

Sample ID: <b>lcs-72481</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72481</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3386906</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		127	70	130			

Sample ID: <b>mb-72481</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72481</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3386907</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	1.2		1.000		124	70	130			

Sample ID: <b>2301068-018ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-05 4'</b>	Batch ID: <b>72481</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3386910</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.023	0.9363	0	102	68.8	120			
Toluene	0.98	0.047	0.9363	0	105	73.6	124			
Ethylbenzene	0.99	0.047	0.9363	0	105	72.7	129			
Xylenes, Total	3.0	0.094	2.809	0	106	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9363		123	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#: 2301068

16-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline Spill

Sample ID: 2301068-018amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: BH22-05 4'	Batch ID: 72481			RunNo: 93823						
Prep Date: 1/5/2023	Analysis Date: 1/9/2023			SeqNo: 3386911		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.023	0.9183	0	105	68.8	120	0.880	20	
Toluene	0.99	0.046	0.9183	0	108	73.6	124	1.27	20	
Ethylbenzene	1.0	0.046	0.9183	0	110	72.7	129	2.03	20	
Xylenes, Total	3.0	0.092	2.755	0	110	75.7	126	1.64	20	
Surr: 4-Bromofluorobenzene	1.2		0.9183		127	70	130	0	0	

Sample ID: LCS-72468		SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS		Batch ID: 72468			RunNo: 93875					
Prep Date: 1/5/2023		Analysis Date: 1/11/2023			SeqNo: 3388801		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.3	80	120			
Toluene	0.93	0.050	1.000	0	93.0	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.7	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	70	130			

### Qualifiers:

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



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: 2301068

RcptNo: 1

Received By: Tracy Casarrubias 1/4/2023 7:15:00 AM

Completed By: Sean Livingston 1/4/2023 8:22:14 AM

Reviewed By: *jm 1/4/23*

*Sm Lopez*

### 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? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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? Yes ☒ No ☐

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: *SM 1/4/23*

### 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good				





## Chain-of-Custody Record

Client: Dura/WPXMailing Address: Jim Raley

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Date	Time	Matrix	Sample Name
12/30	9:00	Soil	BH22-04 0'
	9:05		BH22-04 4'
	9:10		BH22-04 8'
	9:20		BH22-04 16'
	9:30		BH22-05 0'
	9:35		BH22-05 4'
	9:40		BH22-05 8'
	10:00		BH22-06 0'
	10:05		BH22-06 4'
	10:10		BH22-06 8'
	10:20		BH22-06 16'
1/6/25	7:50		BH22-08 0'

Relinquished by: [Signature]

Date: 1/6/25 Time: 1400

Relinquished by: [Signature]

Date: 1/6/25 Time: 1400

Turn-Around Time:

☒ Standard ☒ Rush 5 Day

Project Name:

East Pecos Pipeline Spill

Project #:

22E-03892

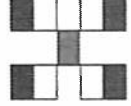
Project Manager:

Monica PappinSampler: MSPOn Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp (Including CF): (°C)

Container Type and #	Preservative Type	HEAL No.
462	10	013
		014
		015
		016
		017
		018
		019
		020
		021
		022
		023
		024

Received by: [Signature]Via: 1/7/25Date: 930Received by: [Signature]Via: 1/7/25Date: 930
**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

<input checked="" type="checkbox"/> BTEX / MTBE / TMB's (8021)	<input checked="" type="checkbox"/> TPH:8015D(GRO / DRO / MRO)	<input type="checkbox"/> 8081 Pesticides/8082 PCB's	<input type="checkbox"/> EDB (Method 504.1)	<input type="checkbox"/> PAHs by 8310 or 8270SIMS	<input type="checkbox"/> RCRA 8 Metals	<input checked="" type="checkbox"/> Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	<input type="checkbox"/> 8260 (VOA)	<input type="checkbox"/> 8270 (Semi-VOA)	<input type="checkbox"/> Total Coliform (Present/Absent)
--	--	---	---	---	--	--	-------------------------------------	--	--

Remarks:





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)

January 17, 2023

Monica Peppin

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: East Pecos Pipeline

OrderNo.: 2301135

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 50 sample(s) on 1/5/2023 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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-73 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 10:30:00 AM

Lab ID: 2301135-001

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.3		mg/Kg	1	1/9/2023 5:08:14 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2023 5:08:14 PM
Surr: DNOP	114	21-129		%Rec	1	1/9/2023 5:08:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2023 8:31:13 AM
Surr: BFB	86.7	37.7-212		%Rec	1	1/7/2023 8:31:13 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 4:03:00 AM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 4:03:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 4:03:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 4:03:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/10/2023 4:03:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	70	60		mg/Kg	20	1/9/2023 6:51:02 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-73 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 10:35:00 AM

Lab ID: 2301135-002

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	10		mg/Kg	1	1/9/2023 5:19:02 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/9/2023 5:19:02 PM
Surr: DNOP	110	21-129		%Rec	1	1/9/2023 5:19:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/7/2023 8:54:22 AM
Surr: BFB	85.5	37.7-212		%Rec	1	1/7/2023 8:54:22 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 4:23:00 AM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 4:23:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 4:23:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	1/10/2023 4:23:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/10/2023 4:23:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	190	61		mg/Kg	20	1/9/2023 7:03:27 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	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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-73 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 10:40:00 AM

Lab ID: 2301135-003

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/9/2023 5:29:48 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 5:29:48 PM
Surr: DNOP	113	21-129		%Rec	1	1/9/2023 5:29:48 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/7/2023 9:17:28 AM
Surr: BFB	85.2	37.7-212		%Rec	1	1/7/2023 9:17:28 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 4:43:00 AM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 4:43:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 4:43:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	1/10/2023 4:43:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/10/2023 4:43:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	560	60		mg/Kg	20	1/9/2023 7:15:52 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-74 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 10:45:00 AM

Lab ID: 2301135-004

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/9/2023 5:40:33 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 5:40:33 PM
Surr: DNOP	118	21-129		%Rec	1	1/9/2023 5:40:33 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/7/2023 9:40:37 AM
Surr: BFB	85.0	37.7-212		%Rec	1	1/7/2023 9:40:37 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.023		mg/Kg	1	1/10/2023 5:02:00 AM
Toluene	ND	0.046		mg/Kg	1	1/10/2023 5:02:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	1/10/2023 5:02:00 AM
Xylenes, Total	ND	0.093		mg/Kg	1	1/10/2023 5:02:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/10/2023 5:02:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	1/9/2023 7:28:16 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	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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-74 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 10:50:00 AM

Lab ID: 2301135-005

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/9/2023 6:54:58 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/9/2023 6:54:58 PM
Surr: DNOP	119	21-129		%Rec	1	1/9/2023 6:54:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 3:53:00 PM
Surr: BFB	101	37.7-212		%Rec	1	1/10/2023 3:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/10/2023 3:53:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 3:53:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 3:53:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/10/2023 3:53:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/10/2023 3:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	1/9/2023 7:40:40 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-74 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 10:55:00 AM

Lab ID: 2301135-006

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.3		mg/Kg	1	1/9/2023 7:26:48 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2023 7:26:48 PM
Surr: DNOP	109	21-129		%Rec	1	1/9/2023 7:26:48 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 4:52:00 PM
Surr: BFB	103	37.7-212		%Rec	1	1/10/2023 4:52:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 4:52:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 4:52:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 4:52:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 4:52:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/10/2023 4:52:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	1/9/2023 7:53:05 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-75 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:00:00 AM

Lab ID: 2301135-007

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.3		mg/Kg	1	1/9/2023 7:37:22 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/9/2023 7:37:22 PM
Surr: DNOP	112	21-129		%Rec	1	1/9/2023 7:37:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 5:51:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/10/2023 5:51:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 5:51:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 5:51:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 5:51:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 5:51:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/10/2023 5:51:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	680	60		mg/Kg	20	1/9/2023 8:30:19 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-75 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:05:00 AM

Lab ID: 2301135-008

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.8		mg/Kg	1	1/9/2023 7:47:55 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 7:47:55 PM
Surr: DNOP	111	21-129		%Rec	1	1/9/2023 7:47:55 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 6:11:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/10/2023 6:11:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/10/2023 6:11:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 6:11:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 6:11:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/10/2023 6:11:00 PM
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	1/10/2023 6:11:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	300	61		mg/Kg	20	1/9/2023 8:42:43 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-75 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:10:00 AM

Lab ID: 2301135-009

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/9/2023 7:58:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/9/2023 7:58:27 PM
Surr: DNOP	111	21-129		%Rec	1	1/9/2023 7:58:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2023 6:31:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/10/2023 6:31:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 6:31:00 PM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 6:31:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 6:31:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 6:31:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/10/2023 6:31:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	85	60		mg/Kg	20	1/9/2023 8:55:08 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-76 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:15:00 AM

Lab ID: 2301135-010

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.0		mg/Kg	1	1/9/2023 8:08:59 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/9/2023 8:08:59 PM
Surr: DNOP	117	21-129		%Rec	1	1/9/2023 8:08:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 6:50:00 PM
Surr: BFB	103	37.7-212		%Rec	1	1/10/2023 6:50:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/10/2023 6:50:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 6:50:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 6:50:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/10/2023 6:50:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/10/2023 6:50:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	2600	150		mg/Kg	50	1/10/2023 4:42:31 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	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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-76 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:20:00 AM

Lab ID: 2301135-011

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/9/2023 8:19:35 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 8:19:35 PM
Surr: DNOP	112	21-129		%Rec	1	1/9/2023 8:19:35 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2023 7:10:00 PM
Surr: BFB	102	37.7-212		%Rec	1	1/10/2023 7:10:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 7:10:00 PM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 7:10:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 7:10:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 7:10:00 PM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/10/2023 7:10:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	1200	60		mg/Kg	20	1/9/2023 9:19:57 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	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.		

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CLIENT: Devon Energy

Client Sample ID: BH22-76 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:25:00 AM

Lab ID: 2301135-012

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	1/9/2023 8:30:14 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/9/2023 8:30:14 PM
Surr: DNOP	115	21-129		%Rec	1	1/9/2023 8:30:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 7:30:00 PM
Surr: BFB	100	37.7-212		%Rec	1	1/10/2023 7:30:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	1/10/2023 7:30:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 7:30:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 7:30:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/10/2023 7:30:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/10/2023 7:30:00 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	340	60		mg/Kg	20	1/9/2023 9:32:22 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 12 of 60
	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.			

CLIENT: Devon Energy  
Project: East Pecos Pipeline  
Lab ID: 2301135-013

Matrix: SOIL

Client Sample ID: BH22-77 0'  
Collection Date: 1/3/2023 11:30:00 AM  
Received Date: 1/5/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	1/9/2023 8:51:28 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/9/2023 8:51:28 PM
Surr: DNOP	115	21-129		%Rec	1	1/9/2023 8:51:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 7:49:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/10/2023 7:49:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	1/10/2023 7:49:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 7:49:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 7:49:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 7:49:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/10/2023 7:49:00 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	1/9/2023 10:09:34 PM

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

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

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-77 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:35:00 AM

Lab ID: 2301135-014

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/9/2023 9:02:08 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/9/2023 9:02:08 PM
Surr: DNOP	112	21-129		%Rec	1	1/9/2023 9:02:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2023 8:29:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/10/2023 8:29:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 8:29:00 PM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 8:29:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 8:29:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/10/2023 8:29:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/10/2023 8:29:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	1/9/2023 11:11:37 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	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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-77 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:40:00 AM

Lab ID: 2301135-015

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/9/2023 9:12:45 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/9/2023 9:12:45 PM
Surr: DNOP	114	21-129		%Rec	1	1/9/2023 9:12:45 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2023 8:48:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/10/2023 8:48:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 8:48:00 PM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 8:48:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 8:48:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/10/2023 8:48:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/10/2023 8:48:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	1/9/2023 11:48:50 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	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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-78 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:45:00 AM

Lab ID: 2301135-016

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	8.7		mg/Kg	1	1/9/2023 9:23:22 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/9/2023 9:23:22 PM
Surr: DNOP	133	21-129	S	%Rec	1	1/9/2023 9:23:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2023 9:08:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/10/2023 9:08:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 9:08:00 PM
Toluene	ND	0.049		mg/Kg	1	1/10/2023 9:08:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2023 9:08:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/10/2023 9:08:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/10/2023 9:08:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	1/10/2023 12:01:14 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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-78 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:50:00 AM

Lab ID: 2301135-017

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.2		mg/Kg	1	1/9/2023 9:33:59 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/9/2023 9:33:59 PM
Surr: DNOP	143	21-129	S	%Rec	1	1/9/2023 9:33:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/10/2023 9:28:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/10/2023 9:28:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/10/2023 9:28:00 PM
Toluene	ND	0.050		mg/Kg	1	1/10/2023 9:28:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/10/2023 9:28:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/10/2023 9:28:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/10/2023 9:28:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 12:13:38 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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-98 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:35:00 PM

Lab ID: 2301135-018

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.8		mg/Kg	1	1/9/2023 9:44:33 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 9:44:33 PM
Surr: DNOP	119	21-129		%Rec	1	1/9/2023 9:44:33 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2023 9:47:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/10/2023 9:47:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 9:47:00 PM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 9:47:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 9:47:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/10/2023 9:47:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/10/2023 9:47:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 12:26:03 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.		

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CLIENT: Devon Energy

Project: East Pecos Pipeline

Lab ID: 2301135-019

Client Sample ID: BH22-99 0'

Collection Date: 1/3/2023 12:40:00 PM

Received Date: 1/5/2023 7:40:00 AM

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	1/9/2023 9:55:09 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/9/2023 9:55:09 PM
Surr: DNOP	118	21-129		%Rec	1	1/9/2023 9:55:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2023 10:07:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/10/2023 10:07:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	1/10/2023 10:07:00 PM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 10:07:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 10:07:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 10:07:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/10/2023 10:07:00 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	150	60		mg/Kg	20	1/10/2023 12:38:27 AM

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

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

CLIENT: Devon Energy  
Project: East Pecos Pipeline  
Lab ID: 2301135-020

Matrix: SOIL

Client Sample ID: BH22-99 2'  
Collection Date: 1/3/2023 12:45:00 PM  
Received Date: 1/5/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/9/2023 10:05:42 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 10:05:42 PM
Surr: DNOP	117	21-129		%Rec	1	1/9/2023 10:05:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/10/2023 10:27:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/10/2023 10:27:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	1/10/2023 10:27:00 PM
Toluene	ND	0.050		mg/Kg	1	1/10/2023 10:27:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/10/2023 10:27:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/10/2023 10:27:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/10/2023 10:27:00 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	780	60		mg/Kg	20	1/10/2023 1:15:40 AM

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

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

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-99 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:50:00 PM

Lab ID: 2301135-021

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/9/2023 10:16:17 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/9/2023 10:16:17 PM
Surr: DNOP	115	21-129		%Rec	1	1/9/2023 10:16:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2023 10:46:00 PM
Surr: BFB	102	37.7-212		%Rec	1	1/10/2023 10:46:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/10/2023 10:46:00 PM
Toluene	ND	0.048		mg/Kg	1	1/10/2023 10:46:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2023 10:46:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2023 10:46:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/10/2023 10:46:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	59	59		mg/Kg	20	1/10/2023 1:28:05 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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-100 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:55:00 PM

Lab ID: 2301135-022

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/9/2023 10:26:54 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2023 10:26:54 PM
Surr: DNOP	119	21-129		%Rec	1	1/9/2023 10:26:54 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/10/2023 11:06:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/10/2023 11:06:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/10/2023 11:06:00 PM
Toluene	ND	0.050		mg/Kg	1	1/10/2023 11:06:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/10/2023 11:06:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/10/2023 11:06:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/10/2023 11:06:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	460	60		mg/Kg	20	1/10/2023 1:40:30 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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-100 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:00:00 AM

Lab ID: 2301135-023

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.0		mg/Kg	1	1/9/2023 10:37:28 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/9/2023 10:37:28 PM
Surr: DNOP	109	21-129		%Rec	1	1/9/2023 10:37:28 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 12:05:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/11/2023 12:05:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 12:05:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 12:05:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 12:05:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 12:05:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/11/2023 12:05:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	960	60		mg/Kg	20	1/10/2023 1:52:54 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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-100 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:05:00 PM

Lab ID: 2301135-024

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	8.5		mg/Kg	1	1/9/2023 10:48:02 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/9/2023 10:48:02 PM
Surr: DNOP	108	21-129		%Rec	1	1/9/2023 10:48:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 12:25:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/11/2023 12:25:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 12:25:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 12:25:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 12:25:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2023 12:25:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/11/2023 12:25:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	470	60		mg/Kg	20	1/10/2023 2:05:19 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 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-101 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:10:00 PM

Lab ID: 2301135-025

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/9/2023 11:30:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/9/2023 11:30:09 PM
Surr: DNOP	108	21-129		%Rec	1	1/9/2023 11:30:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 2:57:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/9/2023 2:57:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 2:57:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 2:57:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 2:57:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2023 2:57:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/9/2023 2:57:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	440	59		mg/Kg	20	1/10/2023 2:17:43 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.		

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CLIENT: Devon Energy  
Project: East Pecos Pipeline  
Lab ID: 2301135-026

Matrix: SOIL

Client Sample ID: BH22-101 2'  
Collection Date: 1/3/2023 1:15:00 PM  
Received Date: 1/5/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/10/2023 12:01:54 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2023 12:01:54 AM
Surr: DNOP	108	21-129		%Rec	1	1/10/2023 12:01:54 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/9/2023 3:17:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/9/2023 3:17:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	1/9/2023 3:17:00 PM
Toluene	ND	0.050		mg/Kg	1	1/9/2023 3:17:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/9/2023 3:17:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/9/2023 3:17:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/9/2023 3:17:00 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	990	60		mg/Kg	20	1/10/2023 2:30:07 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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-101 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:20:00 PM

Lab ID: 2301135-027

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/10/2023 12:12:31 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/10/2023 12:12:31 AM
Surr: DNOP	109	21-129		%Rec	1	1/10/2023 12:12:31 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 3:37:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/9/2023 3:37:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/9/2023 3:37:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 3:37:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 3:37:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2023 3:37:00 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	1/9/2023 3:37:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	1100	59		mg/Kg	20	1/10/2023 2:42:31 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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-102 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:25:00 PM

Lab ID: 2301135-028

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/10/2023 12:23:10 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/10/2023 12:23:10 AM
Surr: DNOP	108	21-129		%Rec	1	1/10/2023 12:23:10 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 3:56:00 PM
Surr: BFB	109	37.7-212		%Rec	1	1/9/2023 3:56:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 3:56:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 3:56:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 3:56:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/9/2023 3:56:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/9/2023 3:56:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	320	60		mg/Kg	20	1/10/2023 2:54:56 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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-102 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:30:00 PM

Lab ID: 2301135-029

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/10/2023 12:33:49 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/10/2023 12:33:49 AM
Surr: DNOP	109	21-129		%Rec	1	1/10/2023 12:33:49 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 4:16:00 PM
Surr: BFB	107	37.7-212		%Rec	1	1/9/2023 4:16:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/9/2023 4:16:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 4:16:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 4:16:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/9/2023 4:16:00 PM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	1/9/2023 4:16:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	760	60		mg/Kg	20	1/10/2023 3:07:20 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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-102 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:35:00 PM

Lab ID: 2301135-030

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.5		mg/Kg	1	1/10/2023 12:44:27 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/10/2023 12:44:27 AM
Surr: DNOP	133	21-129	S	%Rec	1	1/10/2023 12:44:27 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/9/2023 4:36:00 PM
Surr: BFB	110	37.7-212		%Rec	1	1/9/2023 4:36:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/9/2023 4:36:00 PM
Toluene	ND	0.050		mg/Kg	1	1/9/2023 4:36:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/9/2023 4:36:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/9/2023 4:36:00 PM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	1/9/2023 4:36:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	74	61		mg/Kg	20	1/10/2023 4:54:53 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-103 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:40:00 PM

Lab ID: 2301135-031

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.8		mg/Kg	1	1/10/2023 12:55:09 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2023 12:55:09 AM
Surr: DNOP	113	21-129		%Rec	1	1/10/2023 12:55:09 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/9/2023 5:15:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/9/2023 5:15:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 5:15:00 PM
Toluene	ND	0.048		mg/Kg	1	1/9/2023 5:15:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/9/2023 5:15:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/9/2023 5:15:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/9/2023 5:15:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	86	60		mg/Kg	20	1/10/2023 5:07:14 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-103 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:45:00 PM

Lab ID: 2301135-032

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.3		mg/Kg	1	1/10/2023 1:05:49 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/10/2023 1:05:49 AM
Surr: DNOP	112	21-129		%Rec	1	1/10/2023 1:05:49 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 5:35:00 PM
Surr: BFB	100	37.7-212		%Rec	1	1/9/2023 5:35:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/9/2023 5:35:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 5:35:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 5:35:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2023 5:35:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/9/2023 5:35:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	780	60		mg/Kg	20	1/10/2023 5:19:35 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-103 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:50:00 PM

Lab ID: 2301135-033

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/10/2023 1:26:51 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/10/2023 1:26:51 AM
Surr: DNOP	111	21-129		%Rec	1	1/10/2023 1:26:51 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 5:54:00 PM
Surr: BFB	101	37.7-212		%Rec	1	1/9/2023 5:54:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/9/2023 5:54:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 5:54:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 5:54:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/9/2023 5:54:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/9/2023 5:54:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 11:39:51 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-78 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 11:55:00 AM

Lab ID: 2301135-034

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.2		mg/Kg	1	1/10/2023 1:37:25 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/10/2023 1:37:25 AM
Surr: DNOP	122	21-129		%Rec	1	1/10/2023 1:37:25 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 6:14:00 PM
Surr: BFB	99.6	37.7-212		%Rec	1	1/9/2023 6:14:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 6:14:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 6:14:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 6:14:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2023 6:14:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/9/2023 6:14:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 12:17:04 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-79 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:00:00 PM

Lab ID: 2301135-035

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.8		mg/Kg	1	1/10/2023 1:48:09 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2023 1:48:09 AM
Surr: DNOP	119	21-129		%Rec	1	1/10/2023 1:48:09 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/9/2023 6:34:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/9/2023 6:34:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 6:34:00 PM
Toluene	ND	0.048		mg/Kg	1	1/9/2023 6:34:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/9/2023 6:34:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/9/2023 6:34:00 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/9/2023 6:34:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 12:54:19 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-79 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:05:00 PM

Lab ID: 2301135-036

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.0		mg/Kg	1	1/10/2023 1:58:51 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/10/2023 1:58:51 AM
Surr: DNOP	115	21-129		%Rec	1	1/10/2023 1:58:51 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/9/2023 6:53:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/9/2023 6:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/9/2023 6:53:00 PM
Toluene	ND	0.050		mg/Kg	1	1/9/2023 6:53:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/9/2023 6:53:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/9/2023 6:53:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/9/2023 6:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 1:31:33 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-79 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:10:00 PM

Lab ID: 2301135-037

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	8.4		mg/Kg	1	1/10/2023 2:09:30 AM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	1/10/2023 2:09:30 AM
Surr: DNOP	113	21-129		%Rec	1	1/10/2023 2:09:30 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 7:13:00 PM
Surr: BFB	121	37.7-212		%Rec	1	1/9/2023 7:13:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 7:13:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 7:13:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 7:13:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2023 7:13:00 PM
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	1/9/2023 7:13:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 1:43:58 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	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.		

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CLIENT: Devon Energy

Client Sample ID: BH22-94 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 1:55:00 PM

Lab ID: 2301135-038

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/10/2023 2:20:09 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/10/2023 2:20:09 AM
Surr: DNOP	106	21-129		%Rec	1	1/10/2023 2:20:09 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/9/2023 7:33:00 PM
Surr: BFB	112	37.7-212		%Rec	1	1/9/2023 7:33:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	1/9/2023 7:33:00 PM
Toluene	ND	0.050		mg/Kg	1	1/9/2023 7:33:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/9/2023 7:33:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/9/2023 7:33:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/9/2023 7:33:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	1/10/2023 1:56:22 PM

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

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

## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-94 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 2:00:00 PM

Lab ID: 2301135-039

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	8.5		mg/Kg	1	1/10/2023 2:30:46 AM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	1/10/2023 2:30:46 AM
Surr: DNOP	105	21-129		%Rec	1	1/10/2023 2:30:46 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 7:53:00 PM
Surr: BFB	108	37.7-212		%Rec	1	1/9/2023 7:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/9/2023 7:53:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 7:53:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 7:53:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2023 7:53:00 PM
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	1/9/2023 7:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	210	60		mg/Kg	20	1/10/2023 2:08:46 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-94 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 2:05:00 PM

Lab ID: 2301135-040

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.8		mg/Kg	1	1/10/2023 2:41:20 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2023 2:41:20 AM
Surr: DNOP	104	21-129		%Rec	1	1/10/2023 2:41:20 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2023 8:12:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/9/2023 8:12:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/9/2023 8:12:00 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2023 8:12:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2023 8:12:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2023 8:12:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/9/2023 8:12:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	380	60		mg/Kg	20	1/10/2023 2:21:11 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	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.		

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CLIENT: Devon Energy

Client Sample ID: BH22-95 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 2:10:00 PM

Lab ID: 2301135-041

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/10/2023 11:11:50 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/10/2023 11:11:50 AM
Surr: DNOP	119	21-129		%Rec	1	1/10/2023 11:11:50 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 1:44:00 AM
Surr: BFB	101	37.7-212		%Rec	1	1/11/2023 1:44:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	1/11/2023 1:44:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 1:44:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 1:44:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 1:44:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/11/2023 1:44:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	1100	60		mg/Kg	20	1/10/2023 2:33:35 PM

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

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

## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-95 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 2:15:00 PM

Lab ID: 2301135-042

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/10/2023 12:26:31 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2023 12:26:31 PM
Surr: DNOP	114	21-129		%Rec	1	1/10/2023 12:26:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 2:43:00 AM
Surr: BFB	100	37.7-212		%Rec	1	1/11/2023 2:43:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 2:43:00 AM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 2:43:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 2:43:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2023 2:43:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/11/2023 2:43:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 2:45:59 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-95 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 2:20:00 PM

Lab ID: 2301135-043

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.2		mg/Kg	1	1/10/2023 12:37:02 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/10/2023 12:37:02 PM
Surr: DNOP	119	21-129		%Rec	1	1/10/2023 12:37:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 3:42:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/11/2023 3:42:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 3:42:00 AM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 3:42:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 3:42:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 3:42:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/11/2023 3:42:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	120	60		mg/Kg	20	1/10/2023 2:58:23 PM

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

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

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-96 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 2:30:00 PM

Lab ID: 2301135-044

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.5		mg/Kg	1	1/10/2023 12:47:36 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/10/2023 12:47:36 PM
Surr: DNOP	80.3	21-129		%Rec	1	1/10/2023 12:47:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 4:02:00 AM
Surr: BFB	111	37.7-212		%Rec	1	1/11/2023 4:02:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 4:02:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 4:02:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 4:02:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 4:02:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/11/2023 4:02:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	100	60		mg/Kg	20	1/10/2023 3:10:49 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-96 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 2:35:00 PM

Lab ID: 2301135-045

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/10/2023 12:58:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/10/2023 12:58:10 PM
Surr: DNOP	86.5	21-129		%Rec	1	1/10/2023 12:58:10 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 4:21:00 AM
Surr: BFB	106	37.7-212		%Rec	1	1/11/2023 4:21:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 4:21:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 4:21:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 4:21:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 4:21:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/11/2023 4:21:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	230	61		mg/Kg	20	1/10/2023 3:23:13 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-97 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:15:00 PM

Lab ID: 2301135-046

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/10/2023 1:08:45 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/10/2023 1:08:45 PM
Surr: DNOP	127	21-129		%Rec	1	1/10/2023 1:08:45 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 4:41:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/11/2023 4:41:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 4:41:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 4:41:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 4:41:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 4:41:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/11/2023 4:41:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	320	60		mg/Kg	20	1/10/2023 4:00:27 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-97 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:20:00 PM

Lab ID: 2301135-047

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/10/2023 1:29:51 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/10/2023 1:29:51 PM
Surr: DNOP	111	21-129		%Rec	1	1/10/2023 1:29:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 5:01:00 AM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 5:01:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 5:01:00 AM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 5:01:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 5:01:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 5:01:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/11/2023 5:01:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	61		mg/Kg	20	1/10/2023 4:12:52 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-97 4'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:25:00 PM

Lab ID: 2301135-048

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.7		mg/Kg	1	1/10/2023 1:40:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/10/2023 1:40:27 PM
Surr: DNOP	95.9	21-129		%Rec	1	1/10/2023 1:40:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 5:20:00 AM
Surr: BFB	105	37.7-212		%Rec	1	1/11/2023 5:20:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 5:20:00 AM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 5:20:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 5:20:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2023 5:20:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/11/2023 5:20:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 4:25:16 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-98 0'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:30:00 PM

Lab ID: 2301135-049

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	1/10/2023 3:50:26 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/10/2023 3:50:26 PM
Surr: DNOP	116	21-129		%Rec	1	1/10/2023 3:50:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 6:00:00 AM
Surr: BFB	105	37.7-212		%Rec	1	1/11/2023 6:00:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 6:00:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 6:00:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 6:00:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 6:00:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/11/2023 6:00:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	1/10/2023 4:37:41 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	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.		

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## Analytical Report

Lab Order 2301135

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-98 2'

Project: East Pecos Pipeline

Collection Date: 1/3/2023 12:30:00 PM

Lab ID: 2301135-050

Matrix: SOIL

Received Date: 1/5/2023 7:40:00 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	9.8		mg/Kg	1	1/10/2023 5:58:03 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2023 5:58:03 PM
Surr: DNOP	110	21-129		%Rec	1	1/10/2023 5:58:03 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 6:19:00 AM
Surr: BFB	105	37.7-212		%Rec	1	1/11/2023 6:19:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 6:19:00 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 6:19:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 6:19:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 6:19:00 AM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/11/2023 6:19:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	68	60		mg/Kg	20	1/10/2023 4:50:07 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	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#: 2301135

17-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline

Sample ID: <b>MB-72522</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72522</b>		RunNo: <b>93832</b>							
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3387237</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72522</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72522</b>		RunNo: <b>93832</b>							
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3387238</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Sample ID: <b>MB-72523</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72523</b>		RunNo: <b>93832</b>							
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3387267</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72523</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72523</b>		RunNo: <b>93832</b>							
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3387268</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Sample ID: <b>MB-72544</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72544</b>		RunNo: <b>93840</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3388410</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72544</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72544</b>		RunNo: <b>93840</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3388411</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	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 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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301135

17-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline

Sample ID: 2301135-005AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-74 2'	Batch ID: 72495	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386751 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.7	48.40	0	88.9	36.1	154			
Surr: DNOP	5.8		4.840		119	21	129			

Sample ID: 2301135-005AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-74 2'	Batch ID: 72495	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386752 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.3	46.55	0	86.3	36.1	154	6.89	33.9	
Surr: DNOP	5.4		4.655		117	21	129	0	0	

Sample ID: 2301135-025AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-101 0'	Batch ID: 72502	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386773 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.7	48.59	0	108	36.1	154			
Surr: DNOP	6.9		4.859		142	21	129			S

Sample ID: 2301135-025AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-101 0'	Batch ID: 72502	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386774 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.10	0	85.4	36.1	154	20.0	33.9	
Surr: DNOP	5.8		5.010		115	21	129	0	0	

Sample ID: LCS-72492	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 72492	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386797 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.1	64.4	127			
Surr: DNOP	5.6		5.000		111	21	129			

Sample ID: LCS-72495	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 72495	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386798 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.1	64.4	127			
Surr: DNOP	5.6		5.000		111	21	129			

### Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: 2301135

17-Jan-23

Client: Devon Energy  
Project: East Pecos Pipeline

Sample ID: LCS-72495	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 72495	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386798		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	81.0	64.4	127			
Surr: DNOP	5.7		5.000		114	21	129			

Sample ID: LCS-72502	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 72502	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386799		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.4	64.4	127			
Surr: DNOP	5.5		5.000		111	21	129			

Sample ID: MB-72492	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 72492	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386800		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	21	129			

Sample ID: MB-72495	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 72495	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386801		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	21	129			

Sample ID: MB-72502	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 72502	RunNo: 93818								
Prep Date: 1/6/2023	Analysis Date: 1/9/2023	SeqNo: 3386803		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		112	21	129			

Qualifiers:

\*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical 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#: 2301135

17-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline

Sample ID: <b>2301135-041AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-95 0'</b>	Batch ID: <b>72510</b>	RunNo: <b>93847</b>								
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/10/2023</b>	SeqNo: <b>3387673</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	31	9.6	48.08	0	63.6	36.1	154			
Surr: DNOP	4.1		4.808		84.6	21	129			

Sample ID: <b>2301135-041AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-95 0'</b>	Batch ID: <b>72510</b>	RunNo: <b>93847</b>								
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/10/2023</b>	SeqNo: <b>3387674</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	9.4	47.21	0	77.9	36.1	154	18.4	33.9	
Surr: DNOP	4.6		4.721		97.8	21	129	0	0	

Sample ID: <b>LCS-72510</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72510</b>	RunNo: <b>93847</b>								
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/10/2023</b>	SeqNo: <b>3387686</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	64.4	127			
Surr: DNOP	6.4		5.000		127	21	129			

Sample ID: <b>MB-72510</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72510</b>	RunNo: <b>93847</b>								
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/10/2023</b>	SeqNo: <b>3387688</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		111	21	129			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301135

17-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline

Sample ID: <b>ics-72481</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72481</b>		RunNo: <b>93793</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/6/2023</b>		SeqNo: <b>3386252</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	90.0	72.3	137			
Surr: BFB	1800		1000		180	37.7	212			

Sample ID: <b>mb-72481</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72481</b>		RunNo: <b>93793</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/7/2023</b>		SeqNo: <b>3386254</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	900		1000		90.1	37.7	212			

Sample ID: <b>ics-72494</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72494</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3386844</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	5.0	25.00	0	102	72.3	137			
Surr: BFB	2300		1000		230	37.7	212			S

Sample ID: <b>mb-72494</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72494</b>		RunNo: <b>93823</b>							
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/9/2023</b>		SeqNo: <b>3386845</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	1100		1000		108	37.7	212			

Sample ID: <b>ics-72486</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72486</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3388194</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	95.4	72.3	137			
Surr: BFB	2300		1000		225	37.7	212			S

Sample ID: <b>mb-72486</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72486</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3388195</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#: 2301135

17-Jan-23

**Client:** Devon Energy  
**Project:** East Pecos Pipeline

Sample ID: <b>mb-72486</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72486</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3388195</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	1100		1000		105	37.7	212			

Sample ID: <b>2301135-005ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-74 2'</b>	Batch ID: <b>72486</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3388197</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.46	0	91.0	70	130			
Surr: BFB	2100		978.5		214	37.7	212			S

Sample ID: <b>2301135-005amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-74 2'</b>	Batch ID: <b>72486</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/5/2023</b>	Analysis Date: <b>1/10/2023</b>		SeqNo: <b>3388198</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	4.9	24.53	0	92.5	70	130	1.91	20	
Surr: BFB	2000		981.4		208	37.7	212	0	0	

Sample ID: <b>lcs-72500</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72500</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3388218</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	95.0	72.3	137			
Surr: BFB	2300		1000		225	37.7	212			S

Sample ID: <b>mb-72500</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72500</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3388219</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	1100		1000		107	37.7	212			

Sample ID: <b>2301135-041ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-95 0'</b>	Batch ID: <b>72500</b>		RunNo: <b>93846</b>							
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3388221</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#: 2301135

17-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline

Sample ID: 2301135-041ams		SampType: MS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-95 0'		Batch ID: 72500			RunNo: 93846					
Prep Date: 1/6/2023		Analysis Date: 1/11/2023			SeqNo: 3388221		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.51	0	86.4	70	130			
Surr: BFB	2200		980.4		227	37.7	212			S

Sample ID: 2301135-041amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-95 0'		Batch ID: 72500			RunNo: 93846					
Prep Date: 1/6/2023		Analysis Date: 1/11/2023			SeqNo: 3388222		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	24.78	0	81.2	70	130	5.03	20	
Surr: BFB	2200		991.1		219	37.7	212	0	0	S

Qualifiers:

\*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical 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#: 2301135

17-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline

Sample ID: Ics-72494	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 72494		RunNo: 93823							
Prep Date: 1/6/2023	Analysis Date: 1/9/2023		SeqNo: 3386882		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	109	80	120			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	113	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		128	70	130			

Sample ID: mb-72494	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 72494		RunNo: 93823							
Prep Date: 1/6/2023	Analysis Date: 1/9/2023		SeqNo: 3386883		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.3		1.000		128	70	130			

Sample ID: Ics-72481	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 72481		RunNo: 93823							
Prep Date: 1/5/2023	Analysis Date: 1/9/2023		SeqNo: 3386906		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		127	70	130			

Sample ID: mb-72481	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 72481		RunNo: 93823							
Prep Date: 1/5/2023	Analysis Date: 1/9/2023		SeqNo: 3386907		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		124	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#: 2301135  
17-Jan-23

Client: Devon Energy  
Project: East Pecos Pipeline

Sample ID: Ics-72486	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 72486		RunNo: 93846							
Prep Date: 1/5/2023	Analysis Date: 1/10/2023		SeqNo: 3388239		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	108	80	120			
Toluene	1.1	0.050	1.000	0	112	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	113	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		122	70	130			

Sample ID: mb-72486	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 72486		RunNo: 93846							
Prep Date: 1/5/2023	Analysis Date: 1/10/2023		SeqNo: 3388240		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		120	70	130			

Sample ID: 2301135-006ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH22-74 4'	Batch ID: 72486		RunNo: 93846							
Prep Date: 1/5/2023	Analysis Date: 1/10/2023		SeqNo: 3388243		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9785	0	104	68.8	120			
Toluene	1.1	0.049	0.9785	0	109	73.6	124			
Ethylbenzene	1.1	0.049	0.9785	0	110	72.7	129			
Xylenes, Total	3.2	0.098	2.935	0	110	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9785		123	70	130			

Sample ID: 2301135-006amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH22-74 4'	Batch ID: 72486		RunNo: 93846							
Prep Date: 1/5/2023	Analysis Date: 1/10/2023		SeqNo: 3388244		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	0.9814	0	101	68.8	120	2.73	20	
Toluene	1.0	0.049	0.9814	0	105	73.6	124	3.22	20	
Ethylbenzene	1.0	0.049	0.9814	0	106	72.7	129	3.03	20	
Xylenes, Total	3.1	0.098	2.944	0	106	75.7	126	3.24	20	
Surr: 4-Bromofluorobenzene	1.2		0.9814		125	70	130	0	0	

Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301135

17-Jan-23

Client: Devon Energy

Project: East Pecos Pipeline

Sample ID: Ics-72500	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 72500		RunNo: 93846							
Prep Date: 1/6/2023	Analysis Date: 1/11/2023		SeqNo: 3388263		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	110	80	120			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	114	80	120			
Xylenes, Total	3.4	0.10	3.000	0	115	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		123	70	130			

Sample ID: mb-72500	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 72500		RunNo: 93846							
Prep Date: 1/6/2023	Analysis Date: 1/11/2023		SeqNo: 3388264		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		123	70	130			

Sample ID: 2301135-042ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH22-95 2'	Batch ID: 72500		RunNo: 93846							
Prep Date: 1/6/2023	Analysis Date: 1/11/2023		SeqNo: 3388267		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9930	0	105	68.8	120			
Toluene	1.1	0.050	0.9930	0	112	73.6	124			
Ethylbenzene	1.1	0.050	0.9930	0	114	72.7	129			
Xylenes, Total	3.4	0.099	2.979	0	115	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9930		121	70	130			

Sample ID: 2301135-042amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH22-95 2'	Batch ID: 72500		RunNo: 93846							
Prep Date: 1/6/2023	Analysis Date: 1/11/2023		SeqNo: 3388268		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9960	0	103	68.8	120	2.01	20	
Toluene	1.1	0.050	0.9960	0	112	73.6	124	0.454	20	
Ethylbenzene	1.1	0.050	0.9960	0	114	72.7	129	0.249	20	
Xylenes, Total	3.4	0.10	2.988	0	114	75.7	126	0.108	20	
Surr: 4-Bromofluorobenzene	1.2		0.9960		123	70	130	0	0	

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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: 2301135

RcptNo: 1

Received By: Tracy Casarrubias 1/5/2023 7:40:00 AM

Completed By: Tracy Casarrubias 1/5/2023 7:55:48 AM

Reviewed By: *SC 1/5/23*

### 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: *JW 1/5/23*

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: Mailing Address, phone number and email were left out on COC. - TMC 1/5/23

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.9	Good	Yes			

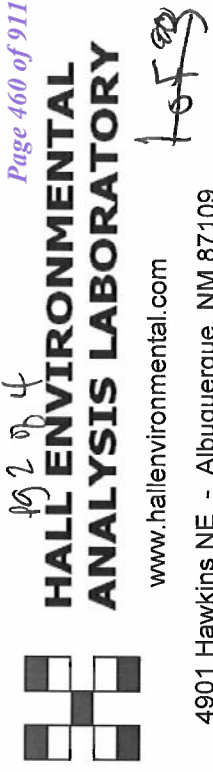




Client: Duron WPK Turn-Around Time: Standard ☒ Rush 5 Day

Project Name: East Pecos Pipeline

Project #: 22E-03982



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Project Manager: Monica Peppin

Sampler: MSP/mw/HK

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CP): 5.8 to 10.1 = 5.9

Container Type and # 402 Preservative Type 1 HEAL No. 2301135

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl <sub>2</sub> , F <sub>2</sub> , Br <sub>2</sub> , NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1.3.23	12:39		BH22-98 4'	402	1	018									
1.3.23	12:40		BH22-99 0'			019									
1.3.23	12:46		BH22-99 2'			020									
1.3.23	12:50		BH22-99 4'			021									
1.3.23	12:55		BH22-100 0'			022									
1.3.23	1:00		BH22-100 2'			023									
1.3.23	1:05		BH22-100 4'			024									
1.3.23	1:10		BH22-101 0'			025									
1.3.23	1:15		BH22-101 2'			026									
1.3.23	1:20		BH22-101 4'			027									
1.3.23	1:25		BH22-102 0'			028									
1.3.23	1:30		BH22-102 2'			029									
1.3.23	1:35		BH22-102 4'			030									
1.3.23	1:40		BH22-103 0'			031									
1.3.23	1:45		BH22-103 2'			032									
1.3.23	1:50		BH22-103 4'			033									





**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Turn-Around Time: ☐ Standard ☒ Rush 5 Day

Project Name: East Pecos Pipeline

Project #: 22E-03982

Client: Devon/WPTX

Mailing Address: Simsbury

Phone #: \_\_\_\_\_

email or Fax#: \_\_\_\_\_

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

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Project Manager: Monica Peppin

Sampler: MJP/MW/HK

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 5.0 + 0.1 = 5.1 C

Container Type and #

Preservative Type

HEAL No. 2301135

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Ch, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Analysis Request

Released to Imaging: 1/28/2025 11:01:31 AM

pg 3 of 4





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)

January 17, 2023

Monica Peppin

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: East Pecos Spill

OrderNo.: 2301226

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 31 sample(s) on 1/6/2023 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-80 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:00:00 AM

Lab ID: 2301226-001

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.7		mg/Kg	1	1/11/2023 5:18:17 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/11/2023 5:18:17 PM
Surr: DNOP	121	21-129		%Rec	1	1/11/2023 5:18:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 11:15:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/11/2023 11:15:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 11:15:00 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 11:15:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 11:15:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 11:15:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/11/2023 11:15:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 9:04:59 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-80 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:05:00 AM

Lab ID: 2301226-002

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.5		mg/Kg	1	1/11/2023 5:39:45 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/11/2023 5:39:45 PM
Surr: DNOP	136	21-129	S	%Rec	1	1/11/2023 5:39:45 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 11:54:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/11/2023 11:54:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 11:54:00 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 11:54:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 11:54:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2023 11:54:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	1/11/2023 11:54:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 9:42:02 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-80 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:10:00 AM

Lab ID: 2301226-003

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.9		mg/Kg	1	1/11/2023 5:50:31 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/11/2023 5:50:31 PM
Surr: DNOP	143	21-129	S	%Rec	1	1/11/2023 5:50:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2023 12:13:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/12/2023 12:13:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 12:13:00 AM
Toluene	ND	0.049		mg/Kg	1	1/12/2023 12:13:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2023 12:13:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/12/2023 12:13:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/12/2023 12:13:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 10:43:44 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.		

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## Analytical Report

Lab Order 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-81 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:15:00 AM

Lab ID: 2301226-004

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.8		mg/Kg	1	1/11/2023 6:01:14 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/11/2023 6:01:14 PM
Surr: DNOP	96.5	21-129		%Rec	1	1/11/2023 6:01:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 12:33:00 AM
Surr: BFB	105	37.7-212		%Rec	1	1/12/2023 12:33:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 12:33:00 AM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 12:33:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 12:33:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2023 12:33:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/12/2023 12:33:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 10:56:05 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-81 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:20:00 AM

Lab ID: 2301226-005

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/11/2023 6:11:54 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/11/2023 6:11:54 PM
Surr: DNOP	124	21-129		%Rec	1	1/11/2023 6:11:54 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2023 12:52:00 AM
Surr: BFB	99.4	37.7-212		%Rec	1	1/12/2023 12:52:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 12:52:00 AM
Toluene	ND	0.049		mg/Kg	1	1/12/2023 12:52:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2023 12:52:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2023 12:52:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/12/2023 12:52:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 11:08:26 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-81 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:25:00 AM

Lab ID: 2301226-006

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/11/2023 6:22:31 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/11/2023 6:22:31 PM
Surr: DNOP	120	21-129		%Rec	1	1/11/2023 6:22:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 1:12:00 AM
Surr: BFB	102	37.7-212		%Rec	1	1/12/2023 1:12:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 1:12:00 AM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 1:12:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 1:12:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2023 1:12:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/12/2023 1:12:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 11:20:45 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.		

## Analytical Report

Lab Order 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-82 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:30:00 AM

Lab ID: 2301226-007

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.5		mg/Kg	1	1/11/2023 6:33:07 PM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	1/11/2023 6:33:07 PM
Surr: DNOP	146	21-129	S	%Rec	1	1/11/2023 6:33:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2023 1:31:00 AM
Surr: BFB	102	37.7-212		%Rec	1	1/12/2023 1:31:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 1:31:00 AM
Toluene	ND	0.049		mg/Kg	1	1/12/2023 1:31:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2023 1:31:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2023 1:31:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/12/2023 1:31:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 11:33:06 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-82 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:35:00 AM

Lab ID: 2301226-008

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.7		mg/Kg	1	1/11/2023 6:43:41 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/11/2023 6:43:41 PM
Surr: DNOP	127	21-129		%Rec	1	1/11/2023 6:43:41 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2023 1:51:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/12/2023 1:51:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 1:51:00 AM
Toluene	ND	0.049		mg/Kg	1	1/12/2023 1:51:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2023 1:51:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/12/2023 1:51:00 AM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/12/2023 1:51:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 11:45:26 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-82 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:40:00 AM

Lab ID: 2301226-009

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.9		mg/Kg	1	1/11/2023 6:54:14 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/11/2023 6:54:14 PM
Surr: DNOP	131	21-129	S	%Rec	1	1/11/2023 6:54:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 2:11:00 AM
Surr: BFB	100	37.7-212		%Rec	1	1/12/2023 2:11:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 2:11:00 AM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 2:11:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 2:11:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2023 2:11:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/12/2023 2:11:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 11:57:46 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-83 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:45:00 AM

Lab ID: 2301226-010

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/11/2023 7:04:45 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/11/2023 7:04:45 PM
Surr: DNOP	148	21-129	S	%Rec	1	1/11/2023 7:04:45 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2023 2:30:00 AM
Surr: BFB	101	37.7-212		%Rec	1	1/12/2023 2:30:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2023 2:30:00 AM
Toluene	ND	0.049		mg/Kg	1	1/12/2023 2:30:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2023 2:30:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/12/2023 2:30:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/12/2023 2:30:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 12:10:07 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-83 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:50:00 AM

Lab ID: 2301226-011

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/11/2023 7:15:16 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/11/2023 7:15:16 PM
Surr: DNOP	150	21-129	S	%Rec	1	1/11/2023 7:15:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 2:50:00 AM
Surr: BFB	103	37.7-212		%Rec	1	1/12/2023 2:50:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 2:50:00 AM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 2:50:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 2:50:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2023 2:50:00 AM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/12/2023 2:50:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 12:22:28 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-83 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 10:55:00 AM

Lab ID: 2301226-012

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.0		mg/Kg	1	1/11/2023 7:25:44 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/11/2023 7:25:44 PM
Surr: DNOP	134	21-129	S	%Rec	1	1/11/2023 7:25:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 3:48:00 AM
Surr: BFB	101	37.7-212		%Rec	1	1/12/2023 3:48:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 3:48:00 AM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 3:48:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 3:48:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2023 3:48:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/12/2023 3:48:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 12:34:48 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-84 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 11:00:00 AM

Lab ID: 2301226-013

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/12/2023 11:14:10 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2023 11:14:10 AM
Surr: DNOP	131	69-147		%Rec	1	1/12/2023 11:14:10 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 1:11:50 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 3:25:54 AM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 3:25:54 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 3:25:54 AM
Xylenes, Total	ND	0.096		mg/Kg	1	1/11/2023 3:25:54 AM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%Rec	1	1/11/2023 3:25:54 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	1/11/2023 3:25:54 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	1/11/2023 3:25:54 AM
Surr: Toluene-d8	90.1	70-130		%Rec	1	1/11/2023 3:25:54 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 3:25:54 AM
Surr: BFB	98.9	70-130		%Rec	1	1/11/2023 3:25:54 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-84 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 11:05:00 AM

Lab ID: 2301226-014

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.8		mg/Kg	1	1/12/2023 11:24:45 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2023 11:24:45 AM
Surr: DNOP	84.3	69-147		%Rec	1	1/12/2023 11:24:45 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 1:24:11 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 3:52:56 AM
Toluene	ND	0.046		mg/Kg	1	1/11/2023 3:52:56 AM
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2023 3:52:56 AM
Xylenes, Total	ND	0.092		mg/Kg	1	1/11/2023 3:52:56 AM
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	1/11/2023 3:52:56 AM
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	1/11/2023 3:52:56 AM
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	1/11/2023 3:52:56 AM
Surr: Toluene-d8	92.4	70-130		%Rec	1	1/11/2023 3:52:56 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2023 3:52:56 AM
Surr: BFB	96.3	70-130		%Rec	1	1/11/2023 3:52:56 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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-84 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 11:10:00 AM

Lab ID: 2301226-015

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.3		mg/Kg	1	1/12/2023 11:35:18 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/12/2023 11:35:18 AM
Surr: DNOP	137	69-147		%Rec	1	1/12/2023 11:35:18 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 1:36:32 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 4:02:42 PM
Toluene	ND	0.046		mg/Kg	1	1/11/2023 4:02:42 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2023 4:02:42 PM
Xylenes, Total	ND	0.091		mg/Kg	1	1/11/2023 4:02:42 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%Rec	1	1/11/2023 4:02:42 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/11/2023 4:02:42 PM
Surr: Dibromofluoromethane	95.7	70-130		%Rec	1	1/11/2023 4:02:42 PM
Surr: Toluene-d8	92.6	70-130		%Rec	1	1/11/2023 4:02:42 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2023 4:02:42 PM
Surr: BFB	101	70-130		%Rec	1	1/11/2023 4:02:42 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-85 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 11:15:00 AM

Lab ID: 2301226-016

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.6		mg/Kg	1	1/12/2023 11:45:52 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/12/2023 11:45:52 AM
Surr: DNOP	110	69-147		%Rec	1	1/12/2023 11:45:52 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 1:48:53 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 4:29:50 PM
Toluene	ND	0.046		mg/Kg	1	1/11/2023 4:29:50 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2023 4:29:50 PM
Xylenes, Total	ND	0.091		mg/Kg	1	1/11/2023 4:29:50 PM
Surr: 1,2-Dichloroethane-d4	87.4	70-130		%Rec	1	1/11/2023 4:29:50 PM
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	1/11/2023 4:29:50 PM
Surr: Dibromofluoromethane	95.2	70-130		%Rec	1	1/11/2023 4:29:50 PM
Surr: Toluene-d8	92.9	70-130		%Rec	1	1/11/2023 4:29:50 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2023 4:29:50 PM
Surr: BFB	94.1	70-130		%Rec	1	1/11/2023 4:29:50 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-85 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 11:20:00 AM

Lab ID: 2301226-017

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/12/2023 11:56:28 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2023 11:56:28 AM
Surr: DNOP	107	69-147		%Rec	1	1/12/2023 11:56:28 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 2:01:12 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 4:57:00 PM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 4:57:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 4:57:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2023 4:57:00 PM
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%Rec	1	1/11/2023 4:57:00 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	1/11/2023 4:57:00 PM
Surr: Dibromofluoromethane	98.9	70-130		%Rec	1	1/11/2023 4:57:00 PM
Surr: Toluene-d8	88.7	70-130		%Rec	1	1/11/2023 4:57:00 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 4:57:00 PM
Surr: BFB	101	70-130		%Rec	1	1/11/2023 4:57:00 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-85 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 11:25:00 AM

Lab ID: 2301226-018

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/12/2023 12:29:55 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2023 12:29:55 PM
Surr: DNOP	134	69-147		%Rec	1	1/12/2023 12:29:55 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	1600	60		mg/Kg	20	1/11/2023 2:13:33 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 5:24:05 PM
Toluene	ND	0.046		mg/Kg	1	1/11/2023 5:24:05 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2023 5:24:05 PM
Xylenes, Total	ND	0.093		mg/Kg	1	1/11/2023 5:24:05 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	1/11/2023 5:24:05 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	1/11/2023 5:24:05 PM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	1/11/2023 5:24:05 PM
Surr: Toluene-d8	87.1	70-130		%Rec	1	1/11/2023 5:24:05 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2023 5:24:05 PM
Surr: BFB	92.9	70-130		%Rec	1	1/11/2023 5:24:05 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	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.		

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## Analytical Report

Lab Order 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-104 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:00:00 PM

Lab ID: 2301226-019

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	1/12/2023 12:40:29 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2023 12:40:29 PM
Surr: DNOP	130	69-147		%Rec	1	1/12/2023 12:40:29 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	380	60		mg/Kg	20	1/11/2023 2:25:54 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 5:51:09 PM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 5:51:09 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 5:51:09 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/11/2023 5:51:09 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	1/11/2023 5:51:09 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	1/11/2023 5:51:09 PM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	1/11/2023 5:51:09 PM
Surr: Toluene-d8	93.1	70-130		%Rec	1	1/11/2023 5:51:09 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 5:51:09 PM
Surr: BFB	99.9	70-130		%Rec	1	1/11/2023 5:51:09 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	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.		

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## Analytical Report

Lab Order 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-104 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:05:00 PM

Lab ID: 2301226-020

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.8		mg/Kg	1	1/12/2023 12:51:07 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/12/2023 12:51:07 PM
Surr: DNOP	118	69-147		%Rec	1	1/12/2023 12:51:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	250	60		mg/Kg	20	1/11/2023 2:38:14 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 6:18:16 PM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 6:18:16 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 6:18:16 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/11/2023 6:18:16 PM
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	1/11/2023 6:18:16 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	1/11/2023 6:18:16 PM
Surr: Dibromofluoromethane	94.7	70-130		%Rec	1	1/11/2023 6:18:16 PM
Surr: Toluene-d8	89.4	70-130		%Rec	1	1/11/2023 6:18:16 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 6:18:16 PM
Surr: BFB	98.1	70-130		%Rec	1	1/11/2023 6:18:16 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-104 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:10:00 PM

Lab ID: 2301226-021

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.0		mg/Kg	1	1/12/2023 1:22:58 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/12/2023 1:22:58 PM
Surr: DNOP	126	69-147		%Rec	1	1/12/2023 1:22:58 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 2:50:35 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 6:45:22 PM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 6:45:22 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 6:45:22 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/11/2023 6:45:22 PM
Surr: 1,2-Dichloroethane-d4	77.0	70-130		%Rec	1	1/11/2023 6:45:22 PM
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	1/11/2023 6:45:22 PM
Surr: Dibromofluoromethane	94.7	70-130		%Rec	1	1/11/2023 6:45:22 PM
Surr: Toluene-d8	93.4	70-130		%Rec	1	1/11/2023 6:45:22 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 6:45:22 PM
Surr: BFB	92.8	70-130		%Rec	1	1/11/2023 6:45:22 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-105 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:15:00 PM

Lab ID: 2301226-022

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.5		mg/Kg	1	1/12/2023 1:33:37 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/12/2023 1:33:37 PM
Surr: DNOP	186	69-147	S	%Rec	1	1/12/2023 1:33:37 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	1100	60		mg/Kg	20	1/11/2023 3:52:19 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 7:12:25 PM
Toluene	ND	0.046		mg/Kg	1	1/11/2023 7:12:25 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2023 7:12:25 PM
Xylenes, Total	ND	0.092		mg/Kg	1	1/11/2023 7:12:25 PM
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%Rec	1	1/11/2023 7:12:25 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	1/11/2023 7:12:25 PM
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	1/11/2023 7:12:25 PM
Surr: Toluene-d8	92.7	70-130		%Rec	1	1/11/2023 7:12:25 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2023 7:12:25 PM
Surr: BFB	98.6	70-130		%Rec	1	1/11/2023 7:12:25 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-105 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:20:00 PM

Lab ID: 2301226-023

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.3		mg/Kg	1	1/12/2023 1:44:18 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/12/2023 1:44:18 PM
Surr: DNOP	143	69-147		%Rec	1	1/12/2023 1:44:18 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	100	60		mg/Kg	20	1/11/2023 4:29:20 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 7:39:25 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 7:39:25 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 7:39:25 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2023 7:39:25 PM
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	1/11/2023 7:39:25 PM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	1/11/2023 7:39:25 PM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	1/11/2023 7:39:25 PM
Surr: Toluene-d8	86.4	70-130		%Rec	1	1/11/2023 7:39:25 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 7:39:25 PM
Surr: BFB	92.2	70-130		%Rec	1	1/11/2023 7:39:25 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-105 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:25:00 PM

Lab ID: 2301226-024

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.2		mg/Kg	1	1/12/2023 1:54:58 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/12/2023 1:54:58 PM
Surr: DNOP	125	69-147		%Rec	1	1/12/2023 1:54:58 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	200	59		mg/Kg	20	1/11/2023 4:41:41 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 8:06:26 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 8:06:26 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 8:06:26 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 8:06:26 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	1/11/2023 8:06:26 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	1/11/2023 8:06:26 PM
Surr: Dibromofluoromethane	96.2	70-130		%Rec	1	1/11/2023 8:06:26 PM
Surr: Toluene-d8	89.8	70-130		%Rec	1	1/11/2023 8:06:26 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 8:06:26 PM
Surr: BFB	98.9	70-130		%Rec	1	1/11/2023 8:06:26 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-106 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:30:00 PM

Lab ID: 2301226-025

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.7		mg/Kg	1	1/12/2023 2:05:46 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/12/2023 2:05:46 PM
Surr: DNOP	124	69-147		%Rec	1	1/12/2023 2:05:46 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	1600	60		mg/Kg	20	1/11/2023 4:54:02 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 8:33:26 PM
Toluene	ND	0.046		mg/Kg	1	1/11/2023 8:33:26 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2023 8:33:26 PM
Xylenes, Total	ND	0.092		mg/Kg	1	1/11/2023 8:33:26 PM
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%Rec	1	1/11/2023 8:33:26 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	1/11/2023 8:33:26 PM
Surr: Dibromofluoromethane	95.6	70-130		%Rec	1	1/11/2023 8:33:26 PM
Surr: Toluene-d8	86.9	70-130		%Rec	1	1/11/2023 8:33:26 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2023 8:33:26 PM
Surr: BFB	96.4	70-130		%Rec	1	1/11/2023 8:33:26 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-106 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:35:00 PM

Lab ID: 2301226-026

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.7		mg/Kg	1	1/12/2023 2:16:32 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2023 2:16:32 PM
Surr: DNOP	112	69-147		%Rec	1	1/12/2023 2:16:32 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	230	60		mg/Kg	20	1/11/2023 5:06:23 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 9:00:26 PM
Toluene	ND	0.046		mg/Kg	1	1/11/2023 9:00:26 PM
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2023 9:00:26 PM
Xylenes, Total	ND	0.092		mg/Kg	1	1/11/2023 9:00:26 PM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	1/11/2023 9:00:26 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	1/11/2023 9:00:26 PM
Surr: Dibromofluoromethane	98.4	70-130		%Rec	1	1/11/2023 9:00:26 PM
Surr: Toluene-d8	88.2	70-130		%Rec	1	1/11/2023 9:00:26 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2023 9:00:26 PM
Surr: BFB	96.5	70-130		%Rec	1	1/11/2023 9:00:26 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-106 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:40:00 PM

Lab ID: 2301226-027

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.9		mg/Kg	1	1/12/2023 2:27:21 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/12/2023 2:27:21 PM
Surr: DNOP	117	69-147		%Rec	1	1/12/2023 2:27:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	84	60		mg/Kg	20	1/11/2023 5:18:44 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 9:27:28 PM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 9:27:28 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 9:27:28 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/11/2023 9:27:28 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	1/11/2023 9:27:28 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	1/11/2023 9:27:28 PM
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	1/11/2023 9:27:28 PM
Surr: Toluene-d8	88.1	70-130		%Rec	1	1/11/2023 9:27:28 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 9:27:28 PM
Surr: BFB	91.6	70-130		%Rec	1	1/11/2023 9:27:28 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-107 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:45:00 PM

Lab ID: 2301226-028

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.5		mg/Kg	1	1/12/2023 2:38:07 PM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	1/12/2023 2:38:07 PM
Surr: DNOP	131	69-147		%Rec	1	1/12/2023 2:38:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 5:55:47 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	1/11/2023 9:54:27 PM
Toluene	ND	0.047		mg/Kg	1	1/11/2023 9:54:27 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/11/2023 9:54:27 PM
Xylenes, Total	ND	0.094		mg/Kg	1	1/11/2023 9:54:27 PM
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	1/11/2023 9:54:27 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	1/11/2023 9:54:27 PM
Surr: Dibromofluoromethane	99.4	70-130		%Rec	1	1/11/2023 9:54:27 PM
Surr: Toluene-d8	92.5	70-130		%Rec	1	1/11/2023 9:54:27 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/11/2023 9:54:27 PM
Surr: BFB	94.9	70-130		%Rec	1	1/11/2023 9:54:27 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-107 2'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:50:00 PM

Lab ID: 2301226-029

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.2		mg/Kg	1	1/12/2023 2:48:53 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/12/2023 2:48:53 PM
Surr: DNOP	121	69-147		%Rec	1	1/12/2023 2:48:53 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	560	60		mg/Kg	20	1/11/2023 6:08:08 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 10:21:23 PM
Toluene	ND	0.047		mg/Kg	1	1/11/2023 10:21:23 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/11/2023 10:21:23 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/11/2023 10:21:23 PM
Surr: 1,2-Dichloroethane-d4	85.9	70-130		%Rec	1	1/11/2023 10:21:23 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	1/11/2023 10:21:23 PM
Surr: Dibromofluoromethane	95.9	70-130		%Rec	1	1/11/2023 10:21:23 PM
Surr: Toluene-d8	93.2	70-130		%Rec	1	1/11/2023 10:21:23 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/11/2023 10:21:23 PM
Surr: BFB	98.9	70-130		%Rec	1	1/11/2023 10:21:23 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-107 4'

Project: East Pecos Spill

Collection Date: 1/4/2023 1:55:00 PM

Lab ID: 2301226-030

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	9.7		mg/Kg	1	1/11/2023 8:17:52 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/11/2023 8:17:52 PM
Surr: DNOP	109	21-129		%Rec	1	1/11/2023 8:17:52 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 4:08:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/12/2023 4:08:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 4:08:00 AM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 4:08:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 4:08:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2023 4:08:00 AM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	1/12/2023 4:08:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	180	60		mg/Kg	20	1/11/2023 6:20:27 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	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 2301226

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-96 0'

Project: East Pecos Spill

Collection Date: 1/4/2023 2:25:00 PM

Lab ID: 2301226-031

Matrix: SOIL

Received Date: 1/6/2023 7:45:00 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	8.8		mg/Kg	1	1/11/2023 8:49:34 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/11/2023 8:49:34 PM
Surr: DNOP	131	21-129	S	%Rec	1	1/11/2023 8:49:34 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2023 5:06:00 AM
Surr: BFB	102	37.7-212		%Rec	1	1/12/2023 5:06:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2023 5:06:00 AM
Toluene	ND	0.048		mg/Kg	1	1/12/2023 5:06:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2023 5:06:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	1/12/2023 5:06:00 AM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/12/2023 5:06:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	59		mg/Kg	20	1/11/2023 6:32:48 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	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#: 2301226

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>MB-72563</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72563</b>		RunNo: <b>93913</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390385</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72563</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72563</b>		RunNo: <b>93913</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390386</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.5	15.00	0	108	90	110			

Sample ID: <b>MB-72564</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72564</b>		RunNo: <b>93913</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390387</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72564</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72564</b>		RunNo: <b>93913</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390388</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301226

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>LCS-72541</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72541</b>		RunNo: <b>93869</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3388577</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	85.0	64.4	127			
Surr: DNOP	5.7		5.000		113	21	129			

Sample ID: <b>MB-72541</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72541</b>		RunNo: <b>93869</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3388580</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	12		10.00		117	21	129			

Sample ID: <b>2301226-030AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-107 4'</b>	Batch ID: <b>72541</b>		RunNo: <b>93869</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390145</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	9.2	46.13	0	83.3	36.1	154			
Surr: DNOP	5.2		4.613		112	21	129			

Sample ID: <b>2301226-030AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-107 4'</b>	Batch ID: <b>72541</b>		RunNo: <b>93869</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390146</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	85.0	36.1	154	10.2	33.9	
Surr: DNOP	5.8		5.000		116	21	129	0	0	

Sample ID: <b>LCS-72554</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72554</b>		RunNo: <b>93869</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390204</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.8	64.4	127			
Surr: DNOP	6.4		5.000		128	21	129			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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

WO#: 2301226

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>MB-72554</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72554</b>		RunNo: <b>93869</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3390206</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	12		10.00		116	21	129			

Sample ID: <b>LCS-72579</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72579</b>		RunNo: <b>93911</b>							
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>		SeqNo: <b>3390352</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.4	64.4	127			
Surr: DNOP	5.4		5.000		108	69	147			

Sample ID: <b>LCS-72585</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72585</b>		RunNo: <b>93911</b>							
Prep Date: <b>1/12/2023</b>	Analysis Date: <b>1/12/2023</b>		SeqNo: <b>3390353</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		111	69	147			

Sample ID: <b>MB-72579</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72579</b>		RunNo: <b>93911</b>							
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>		SeqNo: <b>3390354</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		110	69	147			

Sample ID: <b>MB-72585</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72585</b>		RunNo: <b>93911</b>							
Prep Date: <b>1/12/2023</b>	Analysis Date: <b>1/12/2023</b>		SeqNo: <b>3390355</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		106	69	147			

Sample ID: <b>2301226-029AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-107 2'</b>	Batch ID: <b>72579</b>		RunNo: <b>93911</b>							
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>		SeqNo: <b>3391652</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#: 2301226

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>2301226-029AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-107 2'</b>	Batch ID: <b>72579</b>		RunNo: <b>93911</b>							
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>		SeqNo: <b>3391652</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.6	48.08	0	90.7	54.2	135			
Surr: DNOP	6.1		4.808		126	69	147			

Sample ID: <b>2301226-029AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH22-107 2'</b>	Batch ID: <b>72579</b>		RunNo: <b>93911</b>							
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>		SeqNo: <b>3391653</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	49.85	0	80.3	54.2	135	8.51	33.9	
Surr: DNOP	5.7		4.985		115	69	147	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 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#: 2301226

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Spill

Sample ID: <b>lcs-72532</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72532</b>			RunNo: <b>93873</b>						
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>			SeqNo: <b>3389575</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	94.8	72.3	137			
Surr: BFB	2200		1000		222	37.7	212			S

Sample ID: <b>mb-72532</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>72532</b>			RunNo: <b>93873</b>						
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>			SeqNo: <b>3389576</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	1100		1000		110	37.7	212			

Sample ID: <b>lcs-72506</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72506</b>			RunNo: <b>93873</b>						
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/11/2023</b>			SeqNo: <b>3389589</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	94.5	72.3	137			
Surr: BFB	2300		1000		230	37.7	212			S

Sample ID: <b>mb-72506</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>72506</b>			RunNo: <b>93873</b>						
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/11/2023</b>			SeqNo: <b>3389590</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	1100		1000		106	37.7	212			

Sample ID: <b>2301226-030ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>BH22-107 4'</b>	Batch ID: <b>72532</b>			RunNo: <b>93873</b>						
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/12/2023</b>			SeqNo: <b>3389614</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	4.9	24.70	0	101	70	130			
Surr: BFB	2300		988.1		230	37.7	212			S

Sample ID: <b>2301226-030amsd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>BH22-107 4'</b>	Batch ID: <b>72532</b>			RunNo: <b>93873</b>						
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/12/2023</b>			SeqNo: <b>3389615</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	4.9	24.70	0	101	70	130			
Surr: BFB	2300		988.1		230	37.7	212			S

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301226  
17-Jan-23

Client: Vertex Resources Services, Inc.  
Project: East Pecos Spill

Sample ID: 2301226-030amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-107 4'		Batch ID: 72532			RunNo: 93873					
Prep Date: 1/10/2023		Analysis Date: 1/12/2023			SeqNo: 3389615		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.65	0	94.4	70	130	6.99	20	
Surr: BFB	2100		986.2		216	37.7	212	0	0	S

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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

Page 37 of 42

## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301226

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Spill

Sample ID: <b>ics-72532</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72532</b>		RunNo: <b>93873</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3389628</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	116	80	120			
Toluene	1.2	0.050	1.000	0	116	80	120			
Ethylbenzene	1.2	0.050	1.000	0	116	80	120			
Xylenes, Total	3.5	0.10	3.000	0	116	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		125	70	130			

Sample ID: <b>mb-72532</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72532</b>		RunNo: <b>93873</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3389629</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	1.3		1.000		126	70	130			

Sample ID: <b>ics-72506</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72506</b>		RunNo: <b>93873</b>							
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3389642</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	111	80	120			
Toluene	1.1	0.050	1.000	0	114	80	120			
Ethylbenzene	1.2	0.050	1.000	0	116	80	120			
Xylenes, Total	3.5	0.10	3.000	0	116	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		121	70	130			

Sample ID: <b>mb-72506</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72506</b>		RunNo: <b>93873</b>							
Prep Date: <b>1/6/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3389643</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	1.2		1.000		122	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#: 2301226

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: 2301226-031ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-96 0'	Batch ID: 72532	RunNo: 93873								
Prep Date: 1/10/2023	Analysis Date: 1/12/2023	SeqNo: 3389668 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.024	0.9625	0	121	68.8	120			S
Toluene	1.2	0.048	0.9625	0	122	73.6	124			
Ethylbenzene	1.2	0.048	0.9625	0	122	72.7	129			
Xylenes, Total	3.5	0.096	2.887	0	122	75.7	126			
Surr: 4-Bromofluorobenzene	1.2		0.9625		124	70	130			

Sample ID: 2301226-031amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-96 0'	Batch ID: 72532	RunNo: 93873								
Prep Date: 1/10/2023	Analysis Date: 1/12/2023	SeqNo: 3389669 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.024	0.9728	0	121	68.8	120	1.42	20	S
Toluene	1.2	0.049	0.9728	0	123	73.6	124	1.59	20	
Ethylbenzene	1.2	0.049	0.9728	0	122	72.7	129	1.34	20	
Xylenes, Total	3.6	0.097	2.918	0	122	75.7	126	1.67	20	
Surr: 4-Bromofluorobenzene	1.2		0.9728		122	70	130	0	0	

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: 2301226

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>2301226-013ams</b>	SampType: <b>MS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BH22-84 0'</b>	Batch ID: <b>72526</b>	RunNo: <b>93872</b>								
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3388645</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9690	0	97.9	75.8	123			
Toluene	0.95	0.048	0.9690	0	97.7	68.3	130			
Ethylbenzene	1.0	0.048	0.9690	0	104	76.6	132			
Xylenes, Total	3.1	0.097	2.907	0	106	74.7	132			
Surr: 1,2-Dichloroethane-d4	0.40		0.4845		82.0	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.4845		100	70	130			
Surr: Dibromofluoromethane	0.47		0.4845		97.5	70	130			
Surr: Toluene-d8	0.44		0.4845		91.6	70	130			

Sample ID: <b>2301226-013amsd</b>	SampType: <b>MSD4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BH22-84 0'</b>	Batch ID: <b>72526</b>	RunNo: <b>93872</b>								
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3388646</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9681	0	105	75.8	123	6.54	20	
Toluene	0.99	0.048	0.9681	0	102	68.3	130	3.96	20	
Ethylbenzene	1.0	0.048	0.9681	0	107	76.6	132	2.88	20	
Xylenes, Total	3.3	0.097	2.904	0	114	74.7	132	6.96	20	
Surr: 1,2-Dichloroethane-d4	0.46		0.4840		95.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.49		0.4840		101	70	130	0	0	
Surr: Dibromofluoromethane	0.49		0.4840		101	70	130	0	0	
Surr: Toluene-d8	0.43		0.4840		88.6	70	130	0	0	

Sample ID: <b>LCS-72526</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>72526</b>	RunNo: <b>93872</b>								
Prep Date: <b>1/9/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3388648</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	95.5	80	120			
Toluene	0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.5	80	120			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.6	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.5	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.46		0.5000		92.6	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

Page 40 of 42

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2301226

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Spill

Sample ID: mb-72526	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 72526	RunNo: 93872								
Prep Date: 1/9/2023	Analysis Date: 1/10/2023	SeqNo: 3388649 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: 1,2-Dichloroethane-d4	0.51		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.0	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.47		0.5000		94.7	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#: 2301226

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Spill

Sample ID: LCS-72526	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 72526	RunNo: 93872								
Prep Date: 1/9/2023	Analysis Date: 1/11/2023	SeqNo: 3388641	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.1	70	130			
Surr: BFB	500		500.0		99.3	70	130			

Sample ID: mb-72526	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 72526	RunNo: 93872								
Prep Date: 1/9/2023	Analysis Date: 1/10/2023	SeqNo: 3388642	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	480		500.0		96.1	70	130			

Qualifiers:

\*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical 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: Vertex Resources  
Services, Inc.

Work Order Number: 2301226

RcptNo: 1

Received By: Juan Rojas 1/6/2023 7:45:00 AM

Completed By: Sean Livingston 1/6/2023 8:18:38 AM

Reviewed By: TML 1/6/23

*[Signature]*

*[Signature]*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: gml/6/23

### Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.2	Good				

## Chain-of-Custody Record

Client: Devon

(Vertex)

Mailing Address: On File

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard☒ Rush5 Day

Project Name:

East Pecos Spill

Project #:

22E-03982

Project Manager:

Monica Peppin

Sampler:

Hunter KleinOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 0.40-1.0-2.0 (°C)

Container Type and #

4oz

Preservative Type

Ice

HEAL No.

2301220

Date

12/14/23

Time

10:05

Matrix

Soil

Sample Name

BH22-80

Depth

0'

Depth

2'

Depth

4'

Depth

0'

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## Chain-of-Custody Record

Client: Devon(Vertex)Mailing Address: On FilePhone #:                     email or Fax#:                     QA/QC Package:                     ☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other                     ☐ EDD (Type)                     Turn-Around Time:                     ☒ Standard ☒ Rush 5 DayProject Name: East Pecos SpillProject #: 22E-03982Project Manager: Monica PeppinSampler: Hunter KleinOn Ice: ☐ Yes ☐ No# of Coolers: 7 YesCooler Temp (including CP): 0.40.1 = 0.2 (°C)

Container Type and #

Preservative Type

HEAL No.

Hoz Ice

013

014

015

016

017

018

019

020

021

022

023

024

Received by: Monica Peppin Date: 1/5/23 Time: 1000Received by: Monica Peppin Date: 1/5/23 Time: 1000Date: 1/4/23 Time: 18:00Date: 1/4/23 Time: 1900Relinquished by: Hunter KleinRelinquished by: Monica Peppin

Remarks:

TPH: 8015D (GRO / DRO / MRO) X8081 Pesticides/8082 PCB's XEDB (Method 504.1) XPAHs by 8310 or 8270SIMS XRCRA 8 Metals X(C) F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub> X8260 (VOA) X8270 (Semi-VOA) XTotal Coliform (Present/Absent) X

## Chain-of-Custody Record

Client: Devon

(Vertex)

Mailing Address: On File

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

East Pecos Spill

Project #:

22E-03982

Project Manager:

Monica Peppin

Sampler:

Hunter KleinOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 6.40.1 = 6.2 (°C)

Container Type and #

Preservative Type

HEAL No.

Date

Time

Matrix

Sample Name

Soil

BH22-106 0'

2'

4'

BH22-107 0'

2'

4'

BH22-96 0'

Soil

BH22-96 0'

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BH22-96 0'

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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)

January 17, 2023

Monica Peppin

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: East Pecos Spill

OrderNo.: 2301272

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 24 sample(s) on 1/7/2023 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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-86 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:00:00 AM

Lab ID: 2301272-001

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	8.8		mg/Kg	1	1/11/2023 10:56:04 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/11/2023 10:56:04 PM
Surr: DNOP	93.5	21-129		%Rec	1	1/11/2023 10:56:04 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2023 1:15:00 PM
Surr: BFB	104	37.7-212		%Rec	1	1/12/2023 1:15:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2023 1:15:00 PM
Toluene	ND	0.049		mg/Kg	1	1/12/2023 1:15:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2023 1:15:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/12/2023 1:15:00 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	1/12/2023 1:15:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 12:33:48 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-86 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:05:00 AM

Lab ID: 2301272-002

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/11/2023 11:06:36 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/11/2023 11:06:36 PM
Surr: DNOP	110	21-129		%Rec	1	1/11/2023 11:06:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2023 1:35:00 PM
Surr: BFB	100	37.7-212		%Rec	1	1/12/2023 1:35:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2023 1:35:00 PM
Toluene	ND	0.048		mg/Kg	1	1/12/2023 1:35:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2023 1:35:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/12/2023 1:35:00 PM
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	1/12/2023 1:35:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 1:11:01 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-86 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:10:00 AM

Lab ID: 2301272-003

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.8		mg/Kg	1	1/11/2023 11:17:09 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/11/2023 11:17:09 PM
Surr: DNOP	105	21-129		%Rec	1	1/11/2023 11:17:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2023 2:14:00 PM
Surr: BFB	99.9	37.7-212		%Rec	1	1/12/2023 2:14:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2023 2:14:00 PM
Toluene	ND	0.048		mg/Kg	1	1/12/2023 2:14:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2023 2:14:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/12/2023 2:14:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/12/2023 2:14:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 1:23:25 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-87 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:15:00 AM

Lab ID: 2301272-004

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.2		mg/Kg	1	1/11/2023 11:27:44 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/11/2023 11:27:44 PM
Surr: DNOP	114	21-129		%Rec	1	1/11/2023 11:27:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 2:34:00 PM
Surr: BFB	101	37.7-212		%Rec	1	1/12/2023 2:34:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 2:34:00 PM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 2:34:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 2:34:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2023 2:34:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/12/2023 2:34:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 1:35:49 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-87 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:20:00 AM

Lab ID: 2301272-005

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.0		mg/Kg	1	1/11/2023 11:38:19 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/11/2023 11:38:19 PM
Surr: DNOP	123	21-129		%Rec	1	1/11/2023 11:38:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2023 2:54:00 PM
Surr: BFB	105	37.7-212		%Rec	1	1/12/2023 2:54:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2023 2:54:00 PM
Toluene	ND	0.048		mg/Kg	1	1/12/2023 2:54:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2023 2:54:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	1/12/2023 2:54:00 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	1/12/2023 2:54:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	110	60		mg/Kg	20	1/11/2023 2:13:03 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-87 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:25:00 AM

Lab ID: 2301272-006

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/12/2023 3:52:52 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/12/2023 3:52:52 PM
Surr: DNOP	127	69-147		%Rec	1	1/12/2023 3:52:52 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 3:20:44 PM
Surr: BFB	100	37.7-212		%Rec	1	1/11/2023 3:20:44 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 3:20:44 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 3:20:44 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 3:20:44 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 3:20:44 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	1/11/2023 3:20:44 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 2:50:16 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-88 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:30:00 AM

Lab ID: 2301272-007

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.5		mg/Kg	1	1/12/2023 4:25:16 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2023 4:25:16 PM
Surr: DNOP	117	69-147		%Rec	1	1/12/2023 4:25:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 4:31:32 PM
Surr: BFB	101	37.7-212		%Rec	1	1/11/2023 4:31:32 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 4:31:32 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 4:31:32 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 4:31:32 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2023 4:31:32 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	1/11/2023 4:31:32 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 3:02:40 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-88 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:35:00 AM

Lab ID: 2301272-008

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/12/2023 4:35:57 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2023 4:35:57 PM
Surr: DNOP	101	69-147		%Rec	1	1/12/2023 4:35:57 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 5:41:56 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 5:41:56 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 5:41:56 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 5:41:56 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 5:41:56 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 5:41:56 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/11/2023 5:41:56 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 3:15:05 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	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.		

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## Analytical Report

Lab Order 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-88 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:40:00 AM

Lab ID: 2301272-009

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.8		mg/Kg	1	1/12/2023 4:46:37 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2023 4:46:37 PM
Surr: DNOP	103	69-147		%Rec	1	1/12/2023 4:46:37 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 6:05:27 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 6:05:27 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 6:05:27 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 6:05:27 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 6:05:27 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 6:05:27 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	1/11/2023 6:05:27 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 3:27:30 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	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.		

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## Analytical Report

Lab Order 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-89 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:45:00 AM

Lab ID: 2301272-010

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.5		mg/Kg	1	1/12/2023 4:57:16 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2023 4:57:16 PM
Surr: DNOP	148	69-147	S	%Rec	1	1/12/2023 4:57:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/11/2023 6:28:54 PM
Surr: BFB	103	37.7-212		%Rec	1	1/11/2023 6:28:54 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 6:28:54 PM
Toluene	ND	0.048		mg/Kg	1	1/11/2023 6:28:54 PM
Ethylbenzene	ND	0.048		mg/Kg	1	1/11/2023 6:28:54 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2023 6:28:54 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	1/11/2023 6:28:54 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	61		mg/Kg	20	1/11/2023 3:39:54 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-89 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:50:00 AM

Lab ID: 2301272-011

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.7		mg/Kg	1	1/12/2023 5:07:53 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2023 5:07:53 PM
Surr: DNOP	111	69-147		%Rec	1	1/12/2023 5:07:53 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 6:52:28 PM
Surr: BFB	104	37.7-212		%Rec	1	1/11/2023 6:52:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/11/2023 6:52:28 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 6:52:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 6:52:28 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2023 6:52:28 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/11/2023 6:52:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 3:52:18 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-89 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 10:55:00 AM

Lab ID: 2301272-012

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/12/2023 5:18:30 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/12/2023 5:18:30 PM
Surr: DNOP	83.0	69-147		%Rec	1	1/12/2023 5:18:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 8:02:53 PM
Surr: BFB	104	37.7-212		%Rec	1	1/11/2023 8:02:53 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 8:02:53 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 8:02:53 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 8:02:53 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2023 8:02:53 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/11/2023 8:02:53 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 4:04:43 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	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.		

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## Analytical Report

Lab Order 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-90 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:00:00 AM

Lab ID: 2301272-013

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.8		mg/Kg	1	1/12/2023 5:29:07 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2023 5:29:07 PM
Surr: DNOP	116	69-147		%Rec	1	1/12/2023 5:29:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 8:26:22 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 8:26:22 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 8:26:22 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 8:26:22 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 8:26:22 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 8:26:22 PM
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	1/11/2023 8:26:22 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	150	60		mg/Kg	20	1/11/2023 4:41:57 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-90 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:05:00 AM

Lab ID: 2301272-014

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/12/2023 5:50:07 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2023 5:50:07 PM
Surr: DNOP	118	69-147		%Rec	1	1/12/2023 5:50:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 8:49:50 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 8:49:50 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 8:49:50 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 8:49:50 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 8:49:50 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 8:49:50 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	1/11/2023 8:49:50 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	100	60		mg/Kg	20	1/11/2023 4:54:22 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-90 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:10:00 AM

Lab ID: 2301272-015

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.8		mg/Kg	1	1/12/2023 6:00:36 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2023 6:00:36 PM
Surr: DNOP	114	69-147		%Rec	1	1/12/2023 6:00:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 9:13:20 PM
Surr: BFB	103	37.7-212		%Rec	1	1/11/2023 9:13:20 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 9:13:20 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 9:13:20 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 9:13:20 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2023 9:13:20 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/11/2023 9:13:20 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	110	60		mg/Kg	20	1/11/2023 5:06:47 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-91 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:15:00 AM

Lab ID: 2301272-016

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/12/2023 6:11:03 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/12/2023 6:11:03 PM
Surr: DNOP	133	69-147		%Rec	1	1/12/2023 6:11:03 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 9:36:45 PM
Surr: BFB	100	37.7-212		%Rec	1	1/11/2023 9:36:45 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 9:36:45 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 9:36:45 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 9:36:45 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2023 9:36:45 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	1/11/2023 9:36:45 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 5:19:11 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-91 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:20:00 AM

Lab ID: 2301272-017

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.3		mg/Kg	1	1/12/2023 6:21:28 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2023 6:21:28 PM
Surr: DNOP	94.8	69-147		%Rec	1	1/12/2023 6:21:28 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 10:00:10 PM
Surr: BFB	99.3	37.7-212		%Rec	1	1/11/2023 10:00:10 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 10:00:10 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 10:00:10 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 10:00:10 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 10:00:10 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	1/11/2023 10:00:10 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 5:31:36 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	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.		

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## Analytical Report

Lab Order 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-91 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:25:00 AM

Lab ID: 2301272-018

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/12/2023 6:31:52 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2023 6:31:52 PM
Surr: DNOP	109	69-147		%Rec	1	1/12/2023 6:31:52 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 10:23:32 PM
Surr: BFB	100	37.7-212		%Rec	1	1/11/2023 10:23:32 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 10:23:32 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 10:23:32 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 10:23:32 PM
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2023 10:23:32 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	1/11/2023 10:23:32 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 5:44:00 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	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.		

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## Analytical Report

Lab Order 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-92 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:30:00 AM

Lab ID: 2301272-019

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.5		mg/Kg	1	1/12/2023 6:42:19 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2023 6:42:19 PM
Surr: DNOP	99.5	69-147		%Rec	1	1/12/2023 6:42:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2023 10:46:54 PM
Surr: BFB	101	37.7-212		%Rec	1	1/11/2023 10:46:54 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 10:46:54 PM
Toluene	ND	0.049		mg/Kg	1	1/11/2023 10:46:54 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2023 10:46:54 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 10:46:54 PM
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	1/11/2023 10:46:54 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 2:37:25 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	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.		

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## Analytical Report

Lab Order 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-92 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:35:00 AM

Lab ID: 2301272-020

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	9.8		mg/Kg	1	1/12/2023 6:52:44 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2023 6:52:44 PM
Surr: DNOP	109	69-147		%Rec	1	1/12/2023 6:52:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 11:10:19 PM
Surr: BFB	99.0	37.7-212		%Rec	1	1/11/2023 11:10:19 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 11:10:19 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 11:10:19 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 11:10:19 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 11:10:19 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	1/11/2023 11:10:19 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	290	60		mg/Kg	20	1/11/2023 2:49:50 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-92 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:40:00 AM

Lab ID: 2301272-021

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	8.6		mg/Kg	1	1/12/2023 7:03:08 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/12/2023 7:03:08 PM
Surr: DNOP	97.4	69-147		%Rec	1	1/12/2023 7:03:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2023 11:33:44 PM
Surr: BFB	102	37.7-212		%Rec	1	1/11/2023 11:33:44 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/11/2023 11:33:44 PM
Toluene	ND	0.050		mg/Kg	1	1/11/2023 11:33:44 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2023 11:33:44 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2023 11:33:44 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	1/11/2023 11:33:44 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	270	60		mg/Kg	20	1/11/2023 3:27:05 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-93 0'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:45:00 AM

Lab ID: 2301272-022

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	1/12/2023 7:13:31 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2023 7:13:31 PM
Surr: DNOP	105	69-147		%Rec	1	1/12/2023 7:13:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2023 12:20:23 AM
Surr: BFB	99.6	37.7-212		%Rec	1	1/12/2023 12:20:23 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 12:20:23 AM
Toluene	ND	0.050		mg/Kg	1	1/12/2023 12:20:23 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2023 12:20:23 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2023 12:20:23 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	1/12/2023 12:20:23 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	60		mg/Kg	20	1/11/2023 3:39:29 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-93 2'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:50:00 AM

Lab ID: 2301272-023

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	10		mg/Kg	1	1/12/2023 7:23:52 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/12/2023 7:23:52 PM
Surr: DNOP	100	69-147		%Rec	1	1/12/2023 7:23:52 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2023 12:43:40 AM
Surr: BFB	101	37.7-212		%Rec	1	1/12/2023 12:43:40 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2023 12:43:40 AM
Toluene	ND	0.048		mg/Kg	1	1/12/2023 12:43:40 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2023 12:43:40 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/12/2023 12:43:40 AM
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	1/12/2023 12:43:40 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	ND	59		mg/Kg	20	1/11/2023 3:51:54 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	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 2301272

Date Reported: 1/17/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-93 4'

Project: East Pecos Spill

Collection Date: 1/5/2023 11:55:00 AM

Lab ID: 2301272-024

Matrix: SOIL

Received Date: 1/7/2023 8:30:00 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	10		mg/Kg	1	1/12/2023 7:34:11 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/12/2023 7:34:11 PM
Surr: DNOP	111	69-147		%Rec	1	1/12/2023 7:34:11 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2023 1:07:02 AM
Surr: BFB	99.5	37.7-212		%Rec	1	1/12/2023 1:07:02 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2023 1:07:02 AM
Toluene	ND	0.049		mg/Kg	1	1/12/2023 1:07:02 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2023 1:07:02 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2023 1:07:02 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	1/12/2023 1:07:02 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	1700	60		mg/Kg	20	1/11/2023 4:04:19 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	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#: 2301272

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>MB-72575</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72575</b>	RunNo: <b>93895</b>								
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3389504</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72575</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72575</b>	RunNo: <b>93895</b>								
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3389505</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.5	90	110			

Sample ID: <b>MB-72570</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72570</b>	RunNo: <b>93870</b>								
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3389810</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72570</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72570</b>	RunNo: <b>93870</b>								
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/11/2023</b>	SeqNo: <b>3389812</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.6	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 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

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

WO#: 2301272

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>LCS-72541</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72541</b>			RunNo: <b>93869</b>						
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>			SeqNo: <b>3388577</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	85.0	64.4	127			
Surr: DNOP	5.7		5.000		113	21	129			

Sample ID: <b>MB-72541</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>72541</b>			RunNo: <b>93869</b>						
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>			SeqNo: <b>3388580</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	12		10.00		117	21	129			

Sample ID: <b>LCS-72585</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>72585</b>			RunNo: <b>93911</b>						
Prep Date: <b>1/12/2023</b>	Analysis Date: <b>1/12/2023</b>			SeqNo: <b>3390353</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		111	69	147			

Sample ID: <b>MB-72585</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>72585</b>			RunNo: <b>93911</b>						
Prep Date: <b>1/12/2023</b>	Analysis Date: <b>1/12/2023</b>			SeqNo: <b>3390355</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		106	69	147			

Sample ID: <b>2301272-006AMS</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>BH22-87 4'</b>	Batch ID: <b>72572</b>			RunNo: <b>93911</b>						
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>			SeqNo: <b>3391667</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	9.8	49.07	0	81.9	54.2	135			
Surr: DNOP	5.1		4.907		105	69	147			

Sample ID: <b>2301272-006AMSD</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>BH22-87 4'</b>	Batch ID: <b>72572</b>			RunNo: <b>93911</b>						
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>			SeqNo: <b>3391668</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.3	46.47	0	99.1	54.2	135	13.6	33.9	

**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#: 2301272

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>2301272-006AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-87 4'</b>	Batch ID: <b>72572</b>	RunNo: <b>93911</b>								
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>	SeqNo: <b>3391668</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.0		4.647		128	69	147	0	0	

Sample ID: <b>LCS-72572</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72572</b>	RunNo: <b>93911</b>								
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>	SeqNo: <b>3391721</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	10	50.00	0	75.7	61.9	130			
Surr: DNOP	5.4		5.000		107	69	147			

Sample ID: <b>MB-72572</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72572</b>	RunNo: <b>93911</b>								
Prep Date: <b>1/11/2023</b>	Analysis Date: <b>1/12/2023</b>	SeqNo: <b>3391726</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	15		10.00		147	69	147			S

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301272

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>lcs-72537</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>72537</b>				RunNo: <b>93875</b>					
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>				SeqNo: <b>3388796</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	99.8	72.3	137			
Surr: BFB	2000		1000		203	37.7	212			

Sample ID: <b>mb-72537</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>PBS</b>	Batch ID: <b>72537</b>				RunNo: <b>93875</b>					
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>				SeqNo: <b>3388797</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	1100		1000		106	37.7	212			

Sample ID: <b>lcs-72532</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>72532</b>				RunNo: <b>93873</b>					
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>				SeqNo: <b>3389575</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	94.8	72.3	137			
Surr: BFB	2200		1000		222	37.7	212			S

Sample ID: <b>mb-72532</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>PBS</b>	Batch ID: <b>72532</b>				RunNo: <b>93873</b>					
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>				SeqNo: <b>3389576</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	1100		1000		110	37.7	212			

Sample ID: <b>2301272-006ams</b>	SampType: <b>MS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>BH22-87 4'</b>	Batch ID: <b>72537</b>				RunNo: <b>93875</b>					
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>				SeqNo: <b>3389752</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	24.88	0	76.5	70	130			
Surr: BFB	1700		995.0		175	37.7	212			

Sample ID: <b>2301272-006amsd</b>	SampType: <b>MSD</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>BH22-87 4'</b>	Batch ID: <b>72537</b>				RunNo: <b>93875</b>					
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>				SeqNo: <b>3389753</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	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#: 2301272  
17-Jan-23

Client: Vertex Resources Services, Inc.  
Project: East Pecos Spill

Sample ID: 2301272-006amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH22-87 4'		Batch ID: 72537		RunNo: 93875						
Prep Date: 1/10/2023		Analysis Date: 1/11/2023		SeqNo: 3389753		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.70	0	101	70	130	26.6	20	R
Surr: BFB	2100		988.1		209	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 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#: 2301272

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: <b>LCS-72537</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72537</b>		RunNo: <b>93875</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3388802</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.4	80	120			
Toluene	0.98	0.050	1.000	0	98.4	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	70	130			

Sample ID: <b>mb-72537</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72537</b>		RunNo: <b>93875</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3388803</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	0.98		1.000		98.4	70	130			

Sample ID: <b>lcs-72532</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72532</b>		RunNo: <b>93873</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3389628</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	116	80	120			
Toluene	1.2	0.050	1.000	0	116	80	120			
Ethylbenzene	1.2	0.050	1.000	0	116	80	120			
Xylenes, Total	3.5	0.10	3.000	0	116	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		125	70	130			

Sample ID: <b>mb-72532</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72532</b>		RunNo: <b>93873</b>							
Prep Date: <b>1/10/2023</b>	Analysis Date: <b>1/11/2023</b>		SeqNo: <b>3389629</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	1.3		1.000		126	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301272

17-Jan-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Spill

Sample ID: 2301272-007ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-88 0'	Batch ID: 72537	RunNo: 93875								
Prep Date: 1/10/2023	Analysis Date: 1/11/2023	SeqNo: 3389908 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9794	0	98.8	68.8	120			
Toluene	0.99	0.049	0.9794	0.01690	99.6	73.6	124			
Ethylbenzene	1.0	0.049	0.9794	0	102	72.7	129			
Xylenes, Total	3.0	0.098	2.938	0	101	75.7	126			
Surr: 4-Bromofluorobenzene	0.96		0.9794		97.5	70	130			

Sample ID: 2301272-007amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH22-88 0'	Batch ID: 72537	RunNo: 93875								
Prep Date: 1/10/2023	Analysis Date: 1/11/2023	SeqNo: 3389909 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9643	0	108	68.8	120	7.02	20	
Toluene	1.1	0.048	0.9643	0.01690	109	73.6	124	7.31	20	
Ethylbenzene	1.1	0.048	0.9643	0	112	72.7	129	7.54	20	
Xylenes, Total	3.2	0.096	2.893	0	111	75.7	126	8.01	20	
Surr: 4-Bromofluorobenzene	0.97		0.9643		101	70	130	0	0	

**Qualifiers:**

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



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

## Sample Log-In Check List

Client Name: **Vertex Resources Services, Inc.**

Work Order Number: **2301272**

RcptNo: **1**

Received By: **Cheyenne Cason** 1/7/2023 8:30:00 AM

Completed By: **Cheyenne Cason** 1/7/2023 9:03:20 AM

Reviewed By: *gm/1/9/23*

*Chul*

*Chul*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: *CMC 1/7/23*

### 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:

COC Sample dates and times filled in from sample bottles by CMC 1/7/23

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Not Present	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)

February 02, 2023

Kent Stallings

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX

RE: East Pecos Pipeline Spill

OrderNo.: 2301981

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 20 sample(s) on 1/26/2023 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 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 9:40:00 AM

Lab ID: 2301981-001

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.3		mg/Kg	1	1/28/2023 1:54:36 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/28/2023 1:54:36 AM
Surr: DNOP	96.9	69-147		%Rec	1	1/28/2023 1:54:36 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2023 12:34:41 AM
Surr: BFB	102	37.7-212		%Rec	1	1/28/2023 12:34:41 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/28/2023 12:34:41 AM
Toluene	ND	0.050		mg/Kg	1	1/28/2023 12:34:41 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2023 12:34:41 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/28/2023 12:34:41 AM
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	1/28/2023 12:34:41 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	17000	600		mg/Kg	200	1/30/2023 7:57:42 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 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 9:50:00 AM

Lab ID: 2301981-002

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.2		mg/Kg	1	1/28/2023 2:25:31 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/28/2023 2:25:31 AM
Surr: DNOP	99.8	69-147		%Rec	1	1/28/2023 2:25:31 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/28/2023 1:44:08 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 1:44:08 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 1:44:08 AM
Toluene	ND	0.049		mg/Kg	1	1/28/2023 1:44:08 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/28/2023 1:44:08 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/28/2023 1:44:08 AM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	1/28/2023 1:44:08 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	7300	300		mg/Kg	100	1/30/2023 8:10:34 AM

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

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

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CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:00:00 AM

Lab ID: 2301981-003

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JME
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	1/28/2023 2:35:44 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/28/2023 2:35:44 AM
Surr: DNOP	98.1	69-147		%Rec	1	1/28/2023 2:35:44 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/28/2023 2:53:30 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 2:53:30 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 2:53:30 AM
Toluene	ND	0.048		mg/Kg	1	1/28/2023 2:53:30 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/28/2023 2:53:30 AM
Xylenes, Total	ND	0.095		mg/Kg	1	1/28/2023 2:53:30 AM
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	1/28/2023 2:53:30 AM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	13000	600		mg/Kg	200	1/30/2023 8:23:26 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.		

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:10:00 AM

Lab ID: 2301981-004

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.9		mg/Kg	1	1/28/2023 2:45:56 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/28/2023 2:45:56 AM
Surr: DNOP	96.8	69-147		%Rec	1	1/28/2023 2:45:56 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/28/2023 3:16:34 AM
Surr: BFB	100	37.7-212		%Rec	1	1/28/2023 3:16:34 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 3:16:34 AM
Toluene	ND	0.048		mg/Kg	1	1/28/2023 3:16:34 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/28/2023 3:16:34 AM
Xylenes, Total	ND	0.096		mg/Kg	1	1/28/2023 3:16:34 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	1/28/2023 3:16:34 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	13000	600		mg/Kg	200	1/30/2023 8:36:18 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:20:00 AM

Lab ID: 2301981-005

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.3		mg/Kg	1	1/28/2023 2:56:09 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/28/2023 2:56:09 AM
Surr: DNOP	112	69-147		%Rec	1	1/28/2023 2:56:09 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 3:39:43 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 3:39:43 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 3:39:43 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 3:39:43 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 3:39:43 AM
Xylenes, Total	ND	0.094		mg/Kg	1	1/28/2023 3:39:43 AM
Surr: 4-Bromofluorobenzene	93.1	70-130		%Rec	1	1/28/2023 3:39:43 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	2400	150		mg/Kg	50	1/30/2023 8:49:10 AM

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

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

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CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:30:00 AM

Lab ID: 2301981-006

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/28/2023 3:06:27 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/28/2023 3:06:27 AM
Surr: DNOP	111	69-147		%Rec	1	1/28/2023 3:06:27 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/28/2023 4:02:52 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 4:02:52 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 4:02:52 AM
Toluene	ND	0.049		mg/Kg	1	1/28/2023 4:02:52 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/28/2023 4:02:52 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/28/2023 4:02:52 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	1/28/2023 4:02:52 AM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	2800	150		mg/Kg	50	1/30/2023 9:02:01 AM

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

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

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:40:00 AM

Lab ID: 2301981-007

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.7		mg/Kg	1	1/28/2023 3:16:47 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/28/2023 3:16:47 AM
Surr: DNOP	97.5	69-147		%Rec	1	1/28/2023 3:16:47 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 4:25:56 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 4:25:56 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	1/28/2023 4:25:56 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 4:25:56 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 4:25:56 AM
Xylenes, Total	ND	0.094		mg/Kg	1	1/28/2023 4:25:56 AM
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	1/28/2023 4:25:56 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	1800	60		mg/Kg	20	1/28/2023 12:50:24 PM

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

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

## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:50:00 AM

Lab ID: 2301981-008

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	8.8		mg/Kg	1	1/28/2023 3:27:08 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/28/2023 3:27:08 AM
Surr: DNOP	107	69-147		%Rec	1	1/28/2023 3:27:08 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 4:49:04 AM
Surr: BFB	102	37.7-212		%Rec	1	1/28/2023 4:49:04 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 4:49:04 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 4:49:04 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 4:49:04 AM
Xylenes, Total	ND	0.095		mg/Kg	1	1/28/2023 4:49:04 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	1/28/2023 4:49:04 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	1200	60		mg/Kg	20	1/28/2023 1:02:45 PM

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

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

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
Lab Order 2301981  
Date Reported: 2/2/2023

CLIENT: Vertex Resources Services, Inc.  
Project: East Pecos Pipeline Spill  
Lab ID: 2301981-009

Client Sample ID: BH22-110 10'  
Collection Date: 1/23/2023 11:00:00 AM  
Received Date: 1/26/2023 7:25:00 AM

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JME
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	1/28/2023 3:37:34 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/28/2023 3:37:34 AM
Surr: DNOP	96.7	69-147		%Rec	1	1/28/2023 3:37:34 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 5:12:07 AM
Surr: BFB	98.1	37.7-212		%Rec	1	1/28/2023 5:12:07 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 5:12:07 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 5:12:07 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 5:12:07 AM
Xylenes, Total	ND	0.094		mg/Kg	1	1/28/2023 5:12:07 AM
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	1/28/2023 5:12:07 AM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	9200	600		mg/Kg	200	1/30/2023 9:14:53 AM

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

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

## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-110 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:10:00 AM

Lab ID: 2301981-010

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.2		mg/Kg	1	2/1/2023 1:34:34 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/1/2023 1:34:34 PM
Surr: DNOP	115	69-147		%Rec	1	2/1/2023 1:34:34 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 5:35:09 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 5:35:09 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.023		mg/Kg	1	1/28/2023 5:35:09 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 5:35:09 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 5:35:09 AM
Xylenes, Total	ND	0.093		mg/Kg	1	1/28/2023 5:35:09 AM
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	1/28/2023 5:35:09 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	14000	600		mg/Kg	200	1/30/2023 9:27:46 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 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-110 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:20:00 AM

Lab ID: 2301981-011

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	8.9		mg/Kg	1	1/28/2023 4:08:46 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/28/2023 4:08:46 AM
Surr: DNOP	96.6	69-147		%Rec	1	1/28/2023 4:08:46 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/28/2023 6:21:20 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 6:21:20 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 6:21:20 AM
Toluene	ND	0.048		mg/Kg	1	1/28/2023 6:21:20 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/28/2023 6:21:20 AM
Xylenes, Total	ND	0.095		mg/Kg	1	1/28/2023 6:21:20 AM
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	1/28/2023 6:21:20 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	3100	150		mg/Kg	50	1/30/2023 9:40:38 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 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-110 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:30:00 AM

Lab ID: 2301981-012

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	8.4		mg/Kg	1	1/28/2023 4:19:14 AM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	1/28/2023 4:19:14 AM
Surr: DNOP	102	69-147		%Rec	1	1/28/2023 4:19:14 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/28/2023 6:44:21 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 6:44:21 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/28/2023 6:44:21 AM
Toluene	ND	0.049		mg/Kg	1	1/28/2023 6:44:21 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/28/2023 6:44:21 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/28/2023 6:44:21 AM
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	1/28/2023 6:44:21 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	2900	150		mg/Kg	50	1/30/2023 9:53:30 AM

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

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

## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:40:00 AM

Lab ID: 2301981-013

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.8		mg/Kg	1	1/28/2023 4:29:45 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/28/2023 4:29:45 AM
Surr: DNOP	93.5	69-147		%Rec	1	1/28/2023 4:29:45 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 7:07:23 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 7:07:23 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 7:07:23 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 7:07:23 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 7:07:23 AM
Xylenes, Total	ND	0.094		mg/Kg	1	1/28/2023 7:07:23 AM
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	1/28/2023 7:07:23 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	7600	300		mg/Kg	100	1/30/2023 10:32:05 AM

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

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

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:50:00 AM

Lab ID: 2301981-014

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.1		mg/Kg	1	1/28/2023 4:40:26 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/28/2023 4:40:26 AM
Surr: DNOP	95.2	69-147		%Rec	1	1/28/2023 4:40:26 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/28/2023 7:30:25 AM
Surr: BFB	98.0	37.7-212		%Rec	1	1/28/2023 7:30:25 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 7:30:25 AM
Toluene	ND	0.049		mg/Kg	1	1/28/2023 7:30:25 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/28/2023 7:30:25 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/28/2023 7:30:25 AM
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	1/28/2023 7:30:25 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	11000	590		mg/Kg	200	1/30/2023 10:44:58 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.		

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:00:00 PM

Lab ID: 2301981-015

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	8.7		mg/Kg	1	1/28/2023 4:51:04 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/28/2023 4:51:04 AM
Surr: DNOP	91.9	69-147		%Rec	1	1/28/2023 4:51:04 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/28/2023 7:53:34 AM
Surr: BFB	99.7	37.7-212		%Rec	1	1/28/2023 7:53:34 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/28/2023 7:53:34 AM
Toluene	ND	0.049		mg/Kg	1	1/28/2023 7:53:34 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/28/2023 7:53:34 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/28/2023 7:53:34 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	1/28/2023 7:53:34 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	3800	150		mg/Kg	50	1/30/2023 10:57:48 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.		

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:10:00 PM

Lab ID: 2301981-016

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.2		mg/Kg	1	1/28/2023 5:01:42 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/28/2023 5:01:42 AM
Surr: DNOP	93.3	69-147		%Rec	1	1/28/2023 5:01:42 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 8:16:39 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 8:16:39 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 8:16:39 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 8:16:39 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 8:16:39 AM
Xylenes, Total	ND	0.095		mg/Kg	1	1/28/2023 8:16:39 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	1/28/2023 8:16:39 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	8900	300		mg/Kg	100	1/30/2023 11:10:40 AM

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

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

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:20:00 PM

Lab ID: 2301981-017

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	1/28/2023 5:12:16 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/28/2023 5:12:16 AM
Surr: DNOP	94.1	69-147		%Rec	1	1/28/2023 5:12:16 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/28/2023 8:39:45 AM
Surr: BFB	99.1	37.7-212		%Rec	1	1/28/2023 8:39:45 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 8:39:45 AM
Toluene	ND	0.047		mg/Kg	1	1/28/2023 8:39:45 AM
Ethylbenzene	ND	0.047		mg/Kg	1	1/28/2023 8:39:45 AM
Xylenes, Total	ND	0.095		mg/Kg	1	1/28/2023 8:39:45 AM
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	1/28/2023 8:39:45 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	10000	600		mg/Kg	200	1/30/2023 11:23:32 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.		

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:30:00 PM

Lab ID: 2301981-018

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.2		mg/Kg	1	1/28/2023 5:22:51 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/28/2023 5:22:51 AM
Surr: DNOP	95.6	69-147		%Rec	1	1/28/2023 5:22:51 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2023 9:02:53 AM
Surr: BFB	101	37.7-212		%Rec	1	1/28/2023 9:02:53 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/28/2023 9:02:53 AM
Toluene	ND	0.050		mg/Kg	1	1/28/2023 9:02:53 AM
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2023 9:02:53 AM
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2023 9:02:53 AM
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	1/28/2023 9:02:53 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	11000	600		mg/Kg	200	1/30/2023 11:36:24 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.		

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## Analytical Report

Lab Order 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:40:00 PM

Lab ID: 2301981-019

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	8.7		mg/Kg	1	1/28/2023 5:33:24 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/28/2023 5:33:24 AM
Surr: DNOP	94.3	69-147		%Rec	1	1/28/2023 5:33:24 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/28/2023 9:26:01 AM
Surr: BFB	102	37.7-212		%Rec	1	1/28/2023 9:26:01 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/28/2023 9:26:01 AM
Toluene	ND	0.048		mg/Kg	1	1/28/2023 9:26:01 AM
Ethylbenzene	ND	0.048		mg/Kg	1	1/28/2023 9:26:01 AM
Xylenes, Total	ND	0.096		mg/Kg	1	1/28/2023 9:26:01 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	1/28/2023 9:26:01 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	4000	150		mg/Kg	50	1/30/2023 11:49:16 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 2301981

Date Reported: 2/2/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:50:00 PM

Lab ID: 2301981-020

Matrix: SOIL

Received Date: 1/26/2023 7:25:00 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	9.5		mg/Kg	1	1/28/2023 5:43:55 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/28/2023 5:43:55 AM
Surr: DNOP	98.5	69-147		%Rec	1	1/28/2023 5:43:55 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/28/2023 9:49:15 AM
Surr: BFB	100	37.7-212		%Rec	1	1/28/2023 9:49:15 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	1/28/2023 9:49:15 AM
Toluene	ND	0.046		mg/Kg	1	1/28/2023 9:49:15 AM
Ethylbenzene	ND	0.046		mg/Kg	1	1/28/2023 9:49:15 AM
Xylenes, Total	ND	0.093		mg/Kg	1	1/28/2023 9:49:15 AM
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	1/28/2023 9:49:15 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	4700	300		mg/Kg	100	1/30/2023 12:02:07 PM

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

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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2301981

02-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-72878</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72878</b>	RunNo: <b>94262</b>								
Prep Date: <b>1/28/2023</b>	Analysis Date: <b>1/28/2023</b>	SeqNo: <b>3404635</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72878</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72878</b>	RunNo: <b>94262</b>								
Prep Date: <b>1/28/2023</b>	Analysis Date: <b>1/28/2023</b>	SeqNo: <b>3404636</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	90	110			

Sample ID: <b>MB-72880</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72880</b>	RunNo: <b>94262</b>								
Prep Date: <b>1/28/2023</b>	Analysis Date: <b>1/28/2023</b>	SeqNo: <b>3404697</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-72880</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72880</b>	RunNo: <b>94262</b>								
Prep Date: <b>1/28/2023</b>	Analysis Date: <b>1/28/2023</b>	SeqNo: <b>3404698</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	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 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#: 2301981

02-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-72851</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72851</b>	RunNo: <b>94273</b>								
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/27/2023</b>	SeqNo: <b>3405036</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	10		10.00		104	69	147			

Sample ID: <b>LCS-72851</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72851</b>	RunNo: <b>94273</b>								
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/27/2023</b>	SeqNo: <b>3405040</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	85.1	61.9	130			
Surr: DNOP	5.1		5.000		102	69	147			

Sample ID: <b>2301981-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-108 10'</b>	Batch ID: <b>72851</b>	RunNo: <b>94273</b>								
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/28/2023</b>	SeqNo: <b>3405130</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	9.4	47.17	0	88.8	54.2	135			
Surr: DNOP	4.6		4.717		98.2	69	147			

Sample ID: <b>2301981-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-108 10'</b>	Batch ID: <b>72851</b>	RunNo: <b>94273</b>								
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/28/2023</b>	SeqNo: <b>3405133</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	9.9	49.46	0	85.6	54.2	135	1.11	29.2	
Surr: DNOP	4.7		4.946		95.5	69	147	0	0	

Sample ID: <b>LCS-72898</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72898</b>	RunNo: <b>94303</b>								
Prep Date: <b>1/30/2023</b>	Analysis Date: <b>1/31/2023</b>	SeqNo: <b>3406297</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	10	50.00	0	106	61.9	130			
Surr: DNOP	6.1		5.000		121	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#: 2301981

02-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-72898</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72898</b>		RunNo: <b>94303</b>							
Prep Date: <b>1/30/2023</b>	Analysis Date: <b>1/31/2023</b>		SeqNo: <b>3406300</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		109	69	147			

Sample ID: <b>LCS-72922</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72922</b>		RunNo: <b>94350</b>							
Prep Date: <b>1/31/2023</b>	Analysis Date: <b>2/1/2023</b>		SeqNo: <b>3408369</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	69	147			

Sample ID: <b>MB-72922</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72922</b>		RunNo: <b>94350</b>							
Prep Date: <b>1/31/2023</b>	Analysis Date: <b>2/1/2023</b>		SeqNo: <b>3408373</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.2	69	147			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2301981

02-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>lcs-72845</b>		SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>LCSS</b>		Batch ID: <b>72845</b>			RunNo: <b>94260</b>					
Prep Date: <b>1/26/2023</b>		Analysis Date: <b>1/27/2023</b>			SeqNo: <b>3404509</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	121	72.3	137			
Surr: BFB	1200		1000		115	37.7	212			

Sample ID: <b>mb-72845</b>		SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>		Batch ID: <b>72845</b>			RunNo: <b>94260</b>						
Prep Date: <b>1/26/2023</b>		Analysis Date: <b>1/28/2023</b>			SeqNo: <b>3404511</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		103	37.7	212			

Sample ID: 2301981-001ams		SampType: MS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-108 10'		Batch ID: 72845			RunNo: 94260					
Prep Date: 1/26/2023		Analysis Date: 1/28/2023			SeqNo: 3404559		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.73	0	135	70	130			S
Surr: BFB	1100		989.1		113	37.7	212			

Sample ID: 2301981-001amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-108 10'		Batch ID: 72845			RunNo: 94260					
Prep Date: 1/26/2023		Analysis Date: 1/28/2023			SeqNo: 3404560		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	34	5.0	24.78	0	135	70	130	0.287	20	S
Surr: BFB	1200		991.1		117	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 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#: 2301981

02-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-72845</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>72845</b>		RunNo: <b>94260</b>							
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/27/2023</b>		SeqNo: <b>3404586</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	96.0	80	120			
Toluene	0.98	0.050	1.000	0	97.7	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.8	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.8	70	130			

Sample ID: <b>mb-72845</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>72845</b>		RunNo: <b>94260</b>							
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/28/2023</b>		SeqNo: <b>3404588</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	0.95		1.000		94.9	70	130			

Sample ID: <b>2301981-002ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-108 20'</b>	Batch ID: <b>72845</b>		RunNo: <b>94260</b>							
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/28/2023</b>		SeqNo: <b>3404613</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.024	0.9533	0	104	68.8	120			
Toluene	1.0	0.048	0.9533	0.01795	104	73.6	124			
Ethylbenzene	0.99	0.048	0.9533	0	104	72.7	129			
Xylenes, Total	3.0	0.095	2.860	0.02820	103	75.7	126			
Surr: 4-Bromofluorobenzene	0.92		0.9533		96.3	70	130			

Sample ID: <b>2301981-002amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-108 20'</b>	Batch ID: <b>72845</b>		RunNo: <b>94260</b>							
Prep Date: <b>1/26/2023</b>	Analysis Date: <b>1/28/2023</b>		SeqNo: <b>3404614</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9881	0	95.1	68.8	120	5.23	20	
Toluene	0.95	0.049	0.9881	0.01795	94.0	73.6	124	6.13	20	
Ethylbenzene	0.93	0.049	0.9881	0	94.4	72.7	129	6.12	20	
Xylenes, Total	2.8	0.099	2.964	0.02820	93.0	75.7	126	6.26	20	
Surr: 4-Bromofluorobenzene	0.90		0.9881		91.5	70	130	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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: Vertex Resources  
Services, Inc.

Work Order Number: 2301981

RcptNo: 1

Received By: Tracy Casarrubias 1/26/2023 7:25:00 AM

Completed By: Tracy Casarrubias 1/26/2023 7:31:50 AM

Reviewed By: *JA 1-26-23*

## 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 1/26/23*

## 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: Missing mailing address, phone number and email on COC- TMC 1/26/23

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0	Good	Yes	<i>Yogi</i>	<i>1/26/23</i>	



Client: **Vertex**  
Project Name: **East Pecos Pipeline Spill**  
Project #: **22E-03982**



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

Project Manager: **Kent Stallings**  
Sampler: **L. Pullman**  
On Ice: ☒ Yes ☐ No  
# of Coolers: **1**  
Cooler Temp (including CP): **0.1-0.1 = 0.2**

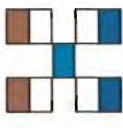
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
01/01/23	9:40	Soil	BH22-108 10'	1, 4oz jar		001
01/01/23	9:50	Soil	BH22-108 20'	1, 4oz jar		002
01/01/23	10:00	Soil	BH22-108 30'	1, 4oz jar		003
01/02/23	10:10	Soil	BH22-108 40'	1, 4oz jar		004
01/02/23	10:20	Soil	BH22-109 10'	1, 4oz jar		005
01/02/23	10:30	Soil	BH22-109 20'	1, 4oz jar		006
01/02/23	10:40	Soil	BH22-109 30'	1, 4oz jar		007
01/02/23	10:50	Soil	BH22-109 40'	1, 4oz jar		008
01/02/23	11:00	Soil	BH22-110 10'	1, 4oz jar		009
01/02/23	11:10	Soil	BH22-110 20'	1, 4oz jar		010
01/02/23	11:20	Soil	BH22-110 30'	1, 4oz jar		011
01/02/23	11:30	Soil	BH22-110 40'	1, 4oz jar		012

Relinquished by: **S. Pullman** Date: **01/01/23** Time: **07:00**  
Relinquished by: **S. Pullman** Date: **01/01/23** Time: **19:00**

Analysis Request									
BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			

Remarks: Direct bill to Devon, Jim Raley cc. kstallings@vertex.ca and mpeppin@vertex.ca for Final Report & All samples were collected on 1/23/23 per Client. jw 1/26/23





**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

[illegible]

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

February 13, 2023

Monica Peppin

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: East Pecos Pipeline Spill

OrderNo.: 2302198

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 20 sample(s) on 2/4/2023 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 9:40:00 AM

Lab ID: 2302198-001

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	13	H	mg/Kg	1	2/7/2023 4:40:58 PM
Motor Oil Range Organics (MRO)	ND	43	H	mg/Kg	1	2/7/2023 4:40:58 PM
Surr: DNOP	101	69-147	H	%Rec	1	2/7/2023 4:40:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	2/7/2023 3:56:00 PM
Surr: BFB	99.1	37.7-212	H	%Rec	1	2/7/2023 3:56:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 3:56:00 PM
Toluene	ND	0.048	H	mg/Kg	1	2/7/2023 3:56:00 PM
Ethylbenzene	ND	0.048	H	mg/Kg	1	2/7/2023 3:56:00 PM
Xylenes, Total	ND	0.096	H	mg/Kg	1	2/7/2023 3:56:00 PM
Surr: 4-Bromofluorobenzene	97.0	70-130	H	%Rec	1	2/7/2023 3:56:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	17000	600		mg/Kg	200	2/6/2023 1:18:36 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	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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 9:50:00 AM

Lab ID: 2302198-002

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 5:22:36 PM
Motor Oil Range Organics (MRO)	ND	49	H	mg/Kg	1	2/7/2023 5:22:36 PM
Surr: DNOP	102	69-147	H	%Rec	1	2/7/2023 5:22:36 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 4:55:00 PM
Surr: BFB	95.6	37.7-212	H	%Rec	1	2/7/2023 4:55:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 4:55:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 4:55:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 4:55:00 PM
Xylenes, Total	ND	0.098	H	mg/Kg	1	2/7/2023 4:55:00 PM
Surr: 4-Bromofluorobenzene	91.3	70-130	H	%Rec	1	2/7/2023 4:55:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	5300	300		mg/Kg	100	2/7/2023 6:03:54 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	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.		

Page 2 of 25

## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:00:00 AM

Lab ID: 2302198-003

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	13	H	mg/Kg	1	2/7/2023 5:35:46 PM
Motor Oil Range Organics (MRO)	ND	43	H	mg/Kg	1	2/7/2023 5:35:46 PM
Surr: DNOP	101	69-147	H	%Rec	1	2/7/2023 5:35:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 5:54:00 PM
Surr: BFB	93.0	37.7-212	H	%Rec	1	2/7/2023 5:54:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 5:54:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 5:54:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 5:54:00 PM
Xylenes, Total	ND	0.097	H	mg/Kg	1	2/7/2023 5:54:00 PM
Surr: 4-Bromofluorobenzene	91.9	70-130	H	%Rec	1	2/7/2023 5:54:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	600		mg/Kg	200	2/7/2023 6:16:18 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	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.		

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## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-108 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:10:00 AM

Lab ID: 2302198-004

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	14	H	mg/Kg	1	2/7/2023 5:48:53 PM
Motor Oil Range Organics (MRO)	ND	47	H	mg/Kg	1	2/7/2023 5:48:53 PM
Surr: DNOP	99.8	69-147	H	%Rec	1	2/7/2023 5:48:53 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	2/7/2023 6:33:00 PM
Surr: BFB	94.8	37.7-212	H	%Rec	1	2/7/2023 6:33:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 6:33:00 PM
Toluene	ND	0.048	H	mg/Kg	1	2/7/2023 6:33:00 PM
Ethylbenzene	ND	0.048	H	mg/Kg	1	2/7/2023 6:33:00 PM
Xylenes, Total	ND	0.096	H	mg/Kg	1	2/7/2023 6:33:00 PM
Surr: 4-Bromofluorobenzene	93.0	70-130	H	%Rec	1	2/7/2023 6:33:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	600		mg/Kg	200	2/7/2023 6:28:42 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	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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:20:00 AM

Lab ID: 2302198-005

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 6:01:43 PM
Motor Oil Range Organics (MRO)	ND	49	H	mg/Kg	1	2/7/2023 6:01:43 PM
Surr: DNOP	100	69-147	H	%Rec	1	2/7/2023 6:01:43 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 6:53:00 PM
Surr: BFB	93.8	37.7-212	H	%Rec	1	2/7/2023 6:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 6:53:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 6:53:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 6:53:00 PM
Xylenes, Total	ND	0.098	H	mg/Kg	1	2/7/2023 6:53:00 PM
Surr: 4-Bromofluorobenzene	93.8	70-130	H	%Rec	1	2/7/2023 6:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	2200	300		mg/Kg	100	2/7/2023 6:41:07 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	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.		

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## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:30:00 AM

Lab ID: 2302198-006

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	13	H	mg/Kg	1	2/7/2023 6:14:27 PM
Motor Oil Range Organics (MRO)	ND	45	H	mg/Kg	1	2/7/2023 6:14:27 PM
Surr: DNOP	105	69-147	H	%Rec	1	2/7/2023 6:14:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0	H	mg/Kg	1	2/7/2023 7:13:00 PM
Surr: BFB	95.2	37.7-212	H	%Rec	1	2/7/2023 7:13:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025	H	mg/Kg	1	2/7/2023 7:13:00 PM
Toluene	ND	0.050	H	mg/Kg	1	2/7/2023 7:13:00 PM
Ethylbenzene	ND	0.050	H	mg/Kg	1	2/7/2023 7:13:00 PM
Xylenes, Total	ND	0.099	H	mg/Kg	1	2/7/2023 7:13:00 PM
Surr: 4-Bromofluorobenzene	93.0	70-130	H	%Rec	1	2/7/2023 7:13:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	2700	150		mg/Kg	50	2/7/2023 8:47:10 AM

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

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

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## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:40:00 AM

Lab ID: 2302198-007

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	13	H	mg/Kg	1	2/7/2023 6:27:21 PM
Motor Oil Range Organics (MRO)	ND	44	H	mg/Kg	1	2/7/2023 6:27:21 PM
Surr: DNOP	99.6	69-147	H	%Rec	1	2/7/2023 6:27:21 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	2/7/2023 7:33:00 PM
Surr: BFB	95.1	37.7-212	H	%Rec	1	2/7/2023 7:33:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 7:33:00 PM
Toluene	ND	0.048	H	mg/Kg	1	2/7/2023 7:33:00 PM
Ethylbenzene	ND	0.048	H	mg/Kg	1	2/7/2023 7:33:00 PM
Xylenes, Total	ND	0.096	H	mg/Kg	1	2/7/2023 7:33:00 PM
Surr: 4-Bromofluorobenzene	94.7	70-130	H	%Rec	1	2/7/2023 7:33:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	1900	61		mg/Kg	20	2/6/2023 6:41:21 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	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.		

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## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-109 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 10:50:00 AM

Lab ID: 2302198-008

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	13	H	mg/Kg	1	2/7/2023 6:40:03 PM
Motor Oil Range Organics (MRO)	ND	44	H	mg/Kg	1	2/7/2023 6:40:03 PM
Surr: DNOP	103	69-147	H	%Rec	1	2/7/2023 6:40:03 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 7:52:00 PM
Surr: BFB	97.9	37.7-212	H	%Rec	1	2/7/2023 7:52:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025	H	mg/Kg	1	2/7/2023 7:52:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 7:52:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 7:52:00 PM
Xylenes, Total	ND	0.099	H	mg/Kg	1	2/7/2023 7:52:00 PM
Surr: 4-Bromofluorobenzene	90.8	70-130	H	%Rec	1	2/7/2023 7:52:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	1400	61		mg/Kg	20	2/6/2023 7:18:36 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	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.		

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## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-110 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:00:00 AM

Lab ID: 2302198-009

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	14	H	mg/Kg	1	2/7/2023 7:05:19 PM
Motor Oil Range Organics (MRO)	ND	47	H	mg/Kg	1	2/7/2023 7:05:19 PM
Surr: DNOP	105	69-147	H	%Rec	1	2/7/2023 7:05:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0	H	mg/Kg	1	2/7/2023 8:12:00 PM
Surr: BFB	97.2	37.7-212	H	%Rec	1	2/7/2023 8:12:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025	H	mg/Kg	1	2/7/2023 8:12:00 PM
Toluene	ND	0.050	H	mg/Kg	1	2/7/2023 8:12:00 PM
Ethylbenzene	ND	0.050	H	mg/Kg	1	2/7/2023 8:12:00 PM
Xylenes, Total	ND	0.10	H	mg/Kg	1	2/7/2023 8:12:00 PM
Surr: 4-Bromofluorobenzene	91.6	70-130	H	%Rec	1	2/7/2023 8:12:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	10000	600		mg/Kg	200	2/7/2023 8:59:34 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.		

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## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-110 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:10:00 AM

Lab ID: 2302198-010

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 7:17:58 PM
Motor Oil Range Organics (MRO)	ND	49	H	mg/Kg	1	2/7/2023 7:17:58 PM
Surr: DNOP	108	69-147	H	%Rec	1	2/7/2023 7:17:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	2/7/2023 8:31:00 PM
Surr: BFB	94.2	37.7-212	H	%Rec	1	2/7/2023 8:31:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 8:31:00 PM
Toluene	ND	0.048	H	mg/Kg	1	2/7/2023 8:31:00 PM
Ethylbenzene	ND	0.048	H	mg/Kg	1	2/7/2023 8:31:00 PM
Xylenes, Total	ND	0.097	H	mg/Kg	1	2/7/2023 8:31:00 PM
Surr: 4-Bromofluorobenzene	92.2	70-130	H	%Rec	1	2/7/2023 8:31:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	14000	600		mg/Kg	200	2/7/2023 9:11:59 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-110 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:02:00 AM

Lab ID: 2302198-011

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 7:30:41 PM
Motor Oil Range Organics (MRO)	ND	50	H	mg/Kg	1	2/7/2023 7:30:41 PM
Surr: DNOP	105	69-147	H	%Rec	1	2/7/2023 7:30:41 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	2/7/2023 8:51:00 PM
Surr: BFB	91.2	37.7-212	H	%Rec	1	2/7/2023 8:51:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 8:51:00 PM
Toluene	ND	0.048	H	mg/Kg	1	2/7/2023 8:51:00 PM
Ethylbenzene	ND	0.048	H	mg/Kg	1	2/7/2023 8:51:00 PM
Xylenes, Total	ND	0.097	H	mg/Kg	1	2/7/2023 8:51:00 PM
Surr: 4-Bromofluorobenzene	91.1	70-130	H	%Rec	1	2/7/2023 8:51:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	5700	600		mg/Kg	200	2/7/2023 9:24:24 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-110 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:30:00 AM

Lab ID: 2302198-012

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	14	H	mg/Kg	1	2/7/2023 7:43:53 PM
Motor Oil Range Organics (MRO)	ND	47	H	mg/Kg	1	2/7/2023 7:43:53 PM
Surr: DNOP	109	69-147	H	%Rec	1	2/7/2023 7:43:53 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 9:10:00 PM
Surr: BFB	93.0	37.7-212	H	%Rec	1	2/7/2023 9:10:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 9:10:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 9:10:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 9:10:00 PM
Xylenes, Total	ND	0.097	H	mg/Kg	1	2/7/2023 9:10:00 PM
Surr: 4-Bromofluorobenzene	92.7	70-130	H	%Rec	1	2/7/2023 9:10:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	3000	150		mg/Kg	50	2/8/2023 8:35:42 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:40:00 AM

Lab ID: 2302198-013

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 7:56:59 PM
Motor Oil Range Organics (MRO)	ND	49	H	mg/Kg	1	2/7/2023 7:56:59 PM
Surr: DNOP	111	69-147	H	%Rec	1	2/7/2023 7:56:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.7	H	mg/Kg	1	2/7/2023 9:30:00 PM
Surr: BFB	91.9	37.7-212	H	%Rec	1	2/7/2023 9:30:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.023	H	mg/Kg	1	2/7/2023 9:30:00 PM
Toluene	ND	0.047	H	mg/Kg	1	2/7/2023 9:30:00 PM
Ethylbenzene	ND	0.047	H	mg/Kg	1	2/7/2023 9:30:00 PM
Xylenes, Total	ND	0.094	H	mg/Kg	1	2/7/2023 9:30:00 PM
Surr: 4-Bromofluorobenzene	91.2	70-130	H	%Rec	1	2/7/2023 9:30:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	8700	300		mg/Kg	100	2/8/2023 8:48:07 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 11:50:00 AM

Lab ID: 2302198-014

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	13	H	mg/Kg	1	2/7/2023 8:10:18 PM
Motor Oil Range Organics (MRO)	ND	44	H	mg/Kg	1	2/7/2023 8:10:18 PM
Surr: DNOP	104	69-147	H	%Rec	1	2/7/2023 8:10:18 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 10:29:00 PM
Surr: BFB	94.9	37.7-212	H	%Rec	1	2/7/2023 10:29:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 10:29:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 10:29:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 10:29:00 PM
Xylenes, Total	ND	0.097	H	mg/Kg	1	2/7/2023 10:29:00 PM
Surr: 4-Bromofluorobenzene	94.7	70-130	H	%Rec	1	2/7/2023 10:29:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	12000	600		mg/Kg	200	2/8/2023 9:00:32 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:00:00 PM

Lab ID: 2302198-015

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	14	H	mg/Kg	1	2/7/2023 8:23:40 PM
Motor Oil Range Organics (MRO)	ND	47	H	mg/Kg	1	2/7/2023 8:23:40 PM
Surr: DNOP	102	69-147	H	%Rec	1	2/7/2023 8:23:40 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 10:49:00 PM
Surr: BFB	93.8	37.7-212	H	%Rec	1	2/7/2023 10:49:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025	H	mg/Kg	1	2/7/2023 10:49:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 10:49:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 10:49:00 PM
Xylenes, Total	ND	0.099	H	mg/Kg	1	2/7/2023 10:49:00 PM
Surr: 4-Bromofluorobenzene	93.7	70-130	H	%Rec	1	2/7/2023 10:49:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	5100	150		mg/Kg	50	2/8/2023 9:12:56 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-111 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:10:00 PM

Lab ID: 2302198-016

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 8:36:58 PM
Motor Oil Range Organics (MRO)	ND	49	H	mg/Kg	1	2/7/2023 8:36:58 PM
Surr: DNOP	102	69-147	H	%Rec	1	2/7/2023 8:36:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 11:09:00 PM
Surr: BFB	93.1	37.7-212	H	%Rec	1	2/7/2023 11:09:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 11:09:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 11:09:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 11:09:00 PM
Xylenes, Total	ND	0.098	H	mg/Kg	1	2/7/2023 11:09:00 PM
Surr: 4-Bromofluorobenzene	91.5	70-130	H	%Rec	1	2/7/2023 11:09:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	9700	300		mg/Kg	100	2/8/2023 9:25:20 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 10'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:20:00 PM

Lab ID: 2302198-017

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 8:50:32 PM
Motor Oil Range Organics (MRO)	ND	49	H	mg/Kg	1	2/7/2023 8:50:32 PM
Surr: DNOP	101	69-147	H	%Rec	1	2/7/2023 8:50:32 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/7/2023 11:28:00 PM
Surr: BFB	92.5	37.7-212	H	%Rec	1	2/7/2023 11:28:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 11:28:00 PM
Toluene	ND	0.049	H	mg/Kg	1	2/7/2023 11:28:00 PM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/7/2023 11:28:00 PM
Xylenes, Total	ND	0.098	H	mg/Kg	1	2/7/2023 11:28:00 PM
Surr: 4-Bromofluorobenzene	91.2	70-130	H	%Rec	1	2/7/2023 11:28:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	11000	600		mg/Kg	200	2/8/2023 9:37:45 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.		

## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 20'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:30:00 PM

Lab ID: 2302198-018

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	15	H	mg/Kg	1	2/7/2023 9:03:56 PM
Motor Oil Range Organics (MRO)	ND	50	H	mg/Kg	1	2/7/2023 9:03:56 PM
Surr: DNOP	102	69-147	H	%Rec	1	2/7/2023 9:03:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	2/7/2023 11:48:00 PM
Surr: BFB	93.0	37.7-212	H	%Rec	1	2/7/2023 11:48:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/7/2023 11:48:00 PM
Toluene	ND	0.048	H	mg/Kg	1	2/7/2023 11:48:00 PM
Ethylbenzene	ND	0.048	H	mg/Kg	1	2/7/2023 11:48:00 PM
Xylenes, Total	ND	0.096	H	mg/Kg	1	2/7/2023 11:48:00 PM
Surr: 4-Bromofluorobenzene	91.2	70-130	H	%Rec	1	2/7/2023 11:48:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	13000	600		mg/Kg	200	2/8/2023 9:50:10 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.		

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## Analytical Report

Lab Order 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 30'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:40:00 PM

Lab ID: 2302198-019

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	14	H	mg/Kg	1	2/7/2023 9:17:34 PM
Motor Oil Range Organics (MRO)	ND	46	H	mg/Kg	1	2/7/2023 9:17:34 PM
Surr: DNOP	103	69-147	H	%Rec	1	2/7/2023 9:17:34 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/8/2023 12:07:00 AM
Surr: BFB	94.4	37.7-212	H	%Rec	1	2/8/2023 12:07:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/8/2023 12:07:00 AM
Toluene	ND	0.049	H	mg/Kg	1	2/8/2023 12:07:00 AM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/8/2023 12:07:00 AM
Xylenes, Total	ND	0.098	H	mg/Kg	1	2/8/2023 12:07:00 AM
Surr: 4-Bromofluorobenzene	92.4	70-130	H	%Rec	1	2/8/2023 12:07:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	3600	150		mg/Kg	50	2/8/2023 10:02:34 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 2302198

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-112 40'

Project: East Pecos Pipeline Spill

Collection Date: 1/23/2023 12:50:00 PM

Lab ID: 2302198-020

Matrix: SOIL

Received Date: 2/4/2023 9:00:00 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	14	H	mg/Kg	1	2/7/2023 9:30:59 PM
Motor Oil Range Organics (MRO)	ND	48	H	mg/Kg	1	2/7/2023 9:30:59 PM
Surr: DNOP	103	69-147	H	%Rec	1	2/7/2023 9:30:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	2/8/2023 12:27:00 AM
Surr: BFB	92.9	37.7-212	H	%Rec	1	2/8/2023 12:27:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024	H	mg/Kg	1	2/8/2023 12:27:00 AM
Toluene	ND	0.049	H	mg/Kg	1	2/8/2023 12:27:00 AM
Ethylbenzene	ND	0.049	H	mg/Kg	1	2/8/2023 12:27:00 AM
Xylenes, Total	ND	0.098	H	mg/Kg	1	2/8/2023 12:27:00 AM
Surr: 4-Bromofluorobenzene	91.4	70-130	H	%Rec	1	2/8/2023 12:27:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	4700	150		mg/Kg	50	2/8/2023 10:39:49 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#: 2302198

13-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-73004</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73004</b>		RunNo: <b>94417</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/4/2023</b>		SeqNo: <b>3411174</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73004</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73004</b>		RunNo: <b>94417</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/4/2023</b>		SeqNo: <b>3411175</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	90	110			

Sample ID: <b>MB-73029</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73029</b>		RunNo: <b>94437</b>							
Prep Date: <b>2/6/2023</b>	Analysis Date: <b>2/6/2023</b>		SeqNo: <b>3412127</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73029</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73029</b>		RunNo: <b>94437</b>							
Prep Date: <b>2/6/2023</b>	Analysis Date: <b>2/6/2023</b>		SeqNo: <b>3412128</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.1	90	110			

Sample ID: <b>MB-73043</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73043</b>		RunNo: <b>94445</b>							
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413497</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73043</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73043</b>		RunNo: <b>94445</b>							
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413498</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.8	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 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#: 2302198

13-Feb-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: MB-73030	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73030	RunNo: 94448								
Prep Date: 2/6/2023	Analysis Date: 2/7/2023	SeqNo: 3413657 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	69	147			

Sample ID: LCS-73030	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73030	RunNo: 94448								
Prep Date: 2/6/2023	Analysis Date: 2/7/2023	SeqNo: 3413658 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.8	69	147			

Sample ID: MB-73047	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73047	RunNo: 94448								
Prep Date: 2/7/2023	Analysis Date: 2/7/2023	SeqNo: 3413672 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.1	69	147			

Sample ID: LCS-73047	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73047	RunNo: 94448								
Prep Date: 2/7/2023	Analysis Date: 2/7/2023	SeqNo: 3413673 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	15	50.00	0	116	61.9	130			
Surr: DNOP	4.7		5.000		93.1	69	147			

Sample ID: 2302198-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-108 10'	Batch ID: 73047	RunNo: 94448								
Prep Date: 2/7/2023	Analysis Date: 2/7/2023	SeqNo: 3413675 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	14	47.08	8.381	96.0	54.2	135			H
Surr: DNOP	4.6		4.708		97.0	69	147			H

Sample ID: 2302198-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-108 10'	Batch ID: 73047	RunNo: 94448								
Prep Date: 2/7/2023	Analysis Date: 2/7/2023	SeqNo: 3413676 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	14	47.30	8.381	96.8	54.2	135	1.11	29.2	H

## 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#: 2302198

13-Feb-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: 2302198-001AMSD		SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: BH22-108 10'		Batch ID: 73047			RunNo: 94448					
Prep Date: 2/7/2023		Analysis Date: 2/7/2023			SeqNo: 3413676		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		4.730		99.6	69	147	0	0	H

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#: 2302198

13-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>ics-73003</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413257</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	99.2	72.3	137			
Surr: BFB	1100		1000		110	37.7	212			

Sample ID: <b>mb-73003</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413258</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	970		1000		96.7	37.7	212			

Sample ID: <b>2302198-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-108 10'</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413260</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	4.8	23.83	0	101	70	130			H
Surr: BFB	1100		953.3		113	37.7	212			H

Sample ID: <b>2302198-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-108 10'</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413261</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	4.8	23.95	0	102	70	130	1.35	20	H
Surr: BFB	1000		957.9		105	37.7	212	0	0	H

**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#: 2302198

13-Feb-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>ics-73003</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413303</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.7	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.2	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.8	70	130			

Sample ID: <b>mb-73003</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413304</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	0.95		1.000		94.6	70	130			

Sample ID: <b>2302198-002AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-108 20'</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413307</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9671	0	95.1	68.8	120			H
Toluene	0.93	0.048	0.9671	0	96.1	73.6	124			H
Ethylbenzene	0.92	0.048	0.9671	0	94.7	72.7	129			H
Xylenes, Total	2.7	0.097	2.901	0	94.2	75.7	126			H
Surr: 4-Bromofluorobenzene	0.90		0.9671		93.4	70	130			H

Sample ID: <b>2302198-002AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-108 20'</b>	Batch ID: <b>73003</b>		RunNo: <b>94442</b>							
Prep Date: <b>2/4/2023</b>	Analysis Date: <b>2/7/2023</b>		SeqNo: <b>3413308</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	0.9823	0	93.7	68.8	120	0.147	20	H
Toluene	0.92	0.049	0.9823	0	93.8	73.6	124	0.797	20	H
Ethylbenzene	0.91	0.049	0.9823	0	92.5	72.7	129	0.732	20	H
Xylenes, Total	2.7	0.098	2.947	0	92.3	75.7	126	0.451	20	H
Surr: 4-Bromofluorobenzene	0.92		0.9823		93.2	70	130	0	0	H

**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: Vertex Resources  
Services, Inc.

Work Order Number: 2302198

RcptNo: 1

Received By: Cheyenne Cason 2/4/2023 9:00:00 AM

Completed By: Cheyenne Cason 2/4/2023 9:09:20 AM

Reviewed By: *me* 02/04/2023

*me*

*me*

### 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: *me* 2/4/23

### 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:

Client Information incomplete on COC - CMC 2/4/23

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Not Present	Morty		
2	0.6	Good	Not Present	Morty		



## Chain-of-Custody Record

Client: Devon (Vertex)Mailing Address: on file

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
12/13/23	09:40	Soil	BH22-108	402 Jar	Ice	2302198
	09:50		BH22-108			202
	10:00		BH22-108			203
	10:10		BH22-108			204
	10:20		BH22-109			205
	10:30		BH22-109			206
	10:40		BH22-109			207
	10:50		BH22-109			208
	11:00		BH22-110			209
	11:10		BH22-110			210
	11:20		BH22-110			211
	11:30		BH22-110			212

Date: 12/13/23 Time: 12:26Relinquished by: S. RetaDate: 12/13/23 Time: 1900Relinquished by: [Signature]Received by: [Signature]Date: 12/13/23 Time: 12:26Received by: [Signature]Date: 12/13/23 Time: 0900Via: one carrier 2/14/23 0900

Turn-Around Time:

☐ Standard ☒ Rush 48 hrs

Project Name:

East Pecos Pipeline Spill

Project #:

22E-03982

Project Manager:

Monica PappinSampler: HROn Ice: ☒ Yes ☐ No Marty# of Coolers: 2 1, 3-0-1.3Cooler Temp (including CFY): 0.6-0-0.6 (°C)

Container Type and #

Preservative Type

HEAL No.

2302198

## Analysis Request

BTEX / MTBE / TMB's (8021)

TPH/8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

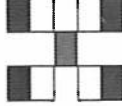
RCRA 8 Metals

Cl<sup>-</sup>, F<sup>-</sup>, Br<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, NO<sub>2</sub><sup>-</sup>, PO<sub>4</sub><sup>3-</sup>, SO<sub>4</sub><sup>2-</sup>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks: Direct Bill to Devon

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Chain-of-Custody Record

Client: Debon (Vertex)Mailing Address: on file

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush 48 Hrs

Project Name:

East Pecos Pipeline Spill

Project #:

225-03982

Project Manager:

Monica Peppin

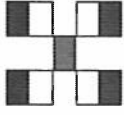
Sampler:

HR

On Ice:

☒ Yes ☐ No Mod# of Coolers: 2 1, 3-0-1.3Cooler Temp (including CF): 0.6-0-0.6 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
12/13/23	11:40	Soil	BH22-111	4oz Jar	Ice	2302198
	11:50		BH22-111			013
	12:00		BH22-111			014
	12:10		BH22-111			015
	12:20		BH22-112			016
	12:30		BH22-112			017
	12:40		BH22-112			018
	12:50		BH22-112			019
						020

Date: 12/13/23 Time: 12:26Date: 12/13/23 Time: 19:00Received by: [Signature] Date: 12/13/23 Time: 12:26Received by: [Signature] Date: 12/13/23 Time: 19:00Remarks: Direct Bill to DebonHALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

TPH8015D(GRO / DRO / MRO)  
8081 Pesticides/8082 PCB's  
EDB (Method 504.1)  
PAHs by 8310 or 8270SIMS  
RCRA 8 Metals  
Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>  
8260 (VOA)  
8270 (Semi-VOA)  
Total Coliform (Present/Absent)



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)

February 13, 2023

Monica Peppin

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (575) 748-0176

FAX

RE: East Pecos

OrderNo.: 2302264

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 40 sample(s) on 2/7/2023 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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-07 0'

Project: East Pecos

Collection Date: 2/3/2023 12:05:00 PM

Lab ID: 2302264-001

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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)	2700	94		mg/Kg	10	2/9/2023 6:22:09 AM
Motor Oil Range Organics (MRO)	1200	470		mg/Kg	10	2/9/2023 6:22:09 AM
Surr: DNOP	0	69-147	S	%Rec	10	2/9/2023 6:22:09 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/8/2023 1:05:44 PM
Surr: BFB	112	37.7-212		%Rec	1	2/8/2023 1:05:44 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	2/8/2023 1:05:44 PM
Toluene	ND	0.050		mg/Kg	1	2/8/2023 1:05:44 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/8/2023 1:05:44 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/8/2023 1:05:44 PM
Surr: 4-Bromofluorobenzene	83.0	70-130		%Rec	1	2/8/2023 1:05:44 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	13000	600		mg/Kg	200	2/9/2023 8:38:53 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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-07 2'

Project: East Pecos

Collection Date: 2/3/2023 12:10:00 PM

Lab ID: 2302264-002

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.2		mg/Kg	1	2/9/2023 4:54:50 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/9/2023 4:54:50 PM
Surr: DNOP	100	69-147		%Rec	1	2/9/2023 4:54:50 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 1:29:26 PM
Surr: BFB	118	37.7-212		%Rec	1	2/8/2023 1:29:26 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/8/2023 1:29:26 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 1:29:26 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 1:29:26 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/8/2023 1:29:26 PM
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	1	2/8/2023 1:29:26 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	9700	600		mg/Kg	200	2/9/2023 8:51:18 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-07 4'

Project: East Pecos

Collection Date: 2/3/2023 12:15:00 PM

Lab ID: 2302264-003

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.1		mg/Kg	1	2/9/2023 5:18:51 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/9/2023 5:18:51 PM
Surr: DNOP	104	69-147		%Rec	1	2/9/2023 5:18:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/8/2023 1:53:09 PM
Surr: BFB	100	37.7-212		%Rec	1	2/8/2023 1:53:09 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	2/8/2023 1:53:09 PM
Toluene	ND	0.050		mg/Kg	1	2/8/2023 1:53:09 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/8/2023 1:53:09 PM
Xylenes, Total	ND	0.099		mg/Kg	1	2/8/2023 1:53:09 PM
Surr: 4-Bromofluorobenzene	83.5	70-130		%Rec	1	2/8/2023 1:53:09 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	10000	600		mg/Kg	200	2/9/2023 9:03:42 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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-116 0'

Project: East Pecos

Collection Date: 2/3/2023 9:00:00 AM

Lab ID: 2302264-004

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	10		mg/Kg	1	2/9/2023 5:43:07 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/9/2023 5:43:07 PM
Surr: DNOP	116	69-147		%Rec	1	2/9/2023 5:43:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/8/2023 2:16:51 PM
Surr: BFB	103	37.7-212		%Rec	1	2/8/2023 2:16:51 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	2/8/2023 2:16:51 PM
Toluene	ND	0.050		mg/Kg	1	2/8/2023 2:16:51 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/8/2023 2:16:51 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/8/2023 2:16:51 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	2/8/2023 2:16:51 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	260	60		mg/Kg	20	2/8/2023 4:28:37 PM

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

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





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 08, 2023

Monica Peppin

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: East Pecos

OrderNo.: 2302A68

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 12 sample(s) on 2/24/2023 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 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-132 0'

Project: East Pecos

Collection Date: 2/22/2023 10:00:00 AM

Lab ID: 2302A68-001

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	3/2/2023 10:48:17 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/2/2023 10:48:17 PM
Surr: DNOP	97.3	69-147		%Rec	1	3/2/2023 10:48:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/3/2023 10:41:00 PM
Surr: BFB	85.2	37.7-212		%Rec	1	3/3/2023 10:41:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	3/3/2023 10:41:00 PM
Toluene	ND	0.049		mg/Kg	1	3/3/2023 10:41:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/3/2023 10:41:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/3/2023 10:41:00 PM
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	3/3/2023 10:41:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/2/2023 6:23:38 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	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.		

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## Analytical Report

Lab Order 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-132 2'

Project: East Pecos

Collection Date: 2/22/2023 10:05:00 AM

Lab ID: 2302A68-002

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	3/2/2023 11:12:16 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2023 11:12:16 PM
Surr: DNOP	117	69-147		%Rec	1	3/2/2023 11:12:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/3/2023 11:03:00 PM
Surr: BFB	87.9	37.7-212		%Rec	1	3/3/2023 11:03:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	3/3/2023 11:03:00 PM
Toluene	ND	0.049		mg/Kg	1	3/3/2023 11:03:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/3/2023 11:03:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/3/2023 11:03:00 PM
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	3/3/2023 11:03:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/2/2023 7:00:40 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	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.		

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## Analytical Report

Lab Order 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-133 0'

Project: East Pecos

Collection Date: 2/22/2023 10:10:00 AM

Lab ID: 2302A68-003

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	3/2/2023 11:36:38 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/2/2023 11:36:38 PM
Surr: DNOP	123	69-147		%Rec	1	3/2/2023 11:36:38 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/3/2023 11:25:00 PM
Surr: BFB	88.4	37.7-212		%Rec	1	3/3/2023 11:25:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	3/3/2023 11:25:00 PM
Toluene	ND	0.050		mg/Kg	1	3/3/2023 11:25:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/3/2023 11:25:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	3/3/2023 11:25:00 PM
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	3/3/2023 11:25:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/2/2023 7:37:43 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	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.		

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## Analytical Report

Lab Order 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-133 2'

Project: East Pecos

Collection Date: 2/22/2023 10:15:00 AM

Lab ID: 2302A68-004

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	3/2/2023 10:18:52 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2023 10:18:52 AM
Surr: DNOP	105	69-147		%Rec	1	3/2/2023 10:18:52 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/3/2023 11:46:00 PM
Surr: BFB	89.4	37.7-212		%Rec	1	3/3/2023 11:46:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	3/3/2023 11:46:00 PM
Toluene	ND	0.049		mg/Kg	1	3/3/2023 11:46:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/3/2023 11:46:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	3/3/2023 11:46:00 PM
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	3/3/2023 11:46:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	400	60		mg/Kg	20	3/2/2023 7:50:04 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	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 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-134 0'

Project: East Pecos

Collection Date: 2/22/2023 10:20:00 AM

Lab ID: 2302A68-005

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	3/2/2023 11:31:30 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/2/2023 11:31:30 AM
Surr: DNOP	121	69-147		%Rec	1	3/2/2023 11:31:30 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2023 12:08:00 AM
Surr: BFB	90.6	37.7-212		%Rec	1	3/4/2023 12:08:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	3/4/2023 12:08:00 AM
Toluene	ND	0.049		mg/Kg	1	3/4/2023 12:08:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2023 12:08:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/4/2023 12:08:00 AM
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	3/4/2023 12:08:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	360	61		mg/Kg	20	3/2/2023 8:27:04 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	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 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-134 2'

Project: East Pecos

Collection Date: 2/22/2023 10:25:00 AM

Lab ID: 2302A68-006

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	9.7		mg/Kg	1	3/2/2023 11:55:36 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2023 11:55:36 AM
Surr: DNOP	114	69-147		%Rec	1	3/2/2023 11:55:36 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	850	60		mg/Kg	20	3/2/2023 8:39:25 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	2/28/2023 7:49:51 PM
Toluene	ND	0.048		mg/Kg	1	2/28/2023 7:49:51 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/28/2023 7:49:51 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/28/2023 7:49:51 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	2/28/2023 7:49:51 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	2/28/2023 7:49:51 PM
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	2/28/2023 7:49:51 PM
Surr: Toluene-d8	95.5	70-130		%Rec	1	2/28/2023 7:49:51 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/28/2023 7:49:51 PM
Surr: BFB	102	70-130		%Rec	1	2/28/2023 7:49:51 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	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 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-135 0'

Project: East Pecos

Collection Date: 2/22/2023 10:30:00 AM

Lab ID: 2302A68-007

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	3/2/2023 12:19:50 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/2/2023 12:19:50 PM
Surr: DNOP	101	69-147		%Rec	1	3/2/2023 12:19:50 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/2/2023 8:51:46 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	2/28/2023 8:17:04 PM
Toluene	ND	0.050		mg/Kg	1	2/28/2023 8:17:04 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/28/2023 8:17:04 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/28/2023 8:17:04 PM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%Rec	1	2/28/2023 8:17:04 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	2/28/2023 8:17:04 PM
Surr: Dibromofluoromethane	96.6	70-130		%Rec	1	2/28/2023 8:17:04 PM
Surr: Toluene-d8	96.2	70-130		%Rec	1	2/28/2023 8:17:04 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/28/2023 8:17:04 PM
Surr: BFB	103	70-130		%Rec	1	2/28/2023 8:17:04 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	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.		

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## Analytical Report

Lab Order 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-135 2'

Project: East Pecos

Collection Date: 2/22/2023 10:35:00 AM

Lab ID: 2302A68-008

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	10		mg/Kg	1	3/2/2023 12:43:55 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/2/2023 12:43:55 PM
Surr: DNOP	128	69-147		%Rec	1	3/2/2023 12:43:55 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	720	60		mg/Kg	20	3/2/2023 9:04:06 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	2/28/2023 8:44:14 PM
Toluene	ND	0.048		mg/Kg	1	2/28/2023 8:44:14 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/28/2023 8:44:14 PM
Xylenes, Total	ND	0.095		mg/Kg	1	2/28/2023 8:44:14 PM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%Rec	1	2/28/2023 8:44:14 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	2/28/2023 8:44:14 PM
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	2/28/2023 8:44:14 PM
Surr: Toluene-d8	97.1	70-130		%Rec	1	2/28/2023 8:44:14 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/28/2023 8:44:14 PM
Surr: BFB	102	70-130		%Rec	1	2/28/2023 8:44:14 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	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 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-136 0'

Project: East Pecos

Collection Date: 2/22/2023 10:40:00 AM

Lab ID: 2302A68-009

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	8.9		mg/Kg	1	3/2/2023 1:08:05 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	3/2/2023 1:08:05 PM
Surr: DNOP	101	69-147		%Rec	1	3/2/2023 1:08:05 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	120	60		mg/Kg	20	3/2/2023 9:16:27 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>JR</b>
Benzene	ND	0.025		mg/Kg	1	2/28/2023 11:27:11 PM
Toluene	ND	0.049		mg/Kg	1	2/28/2023 11:27:11 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/28/2023 11:27:11 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/28/2023 11:27:11 PM
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%Rec	1	2/28/2023 11:27:11 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	2/28/2023 11:27:11 PM
Surr: Dibromofluoromethane	95.3	70-130		%Rec	1	2/28/2023 11:27:11 PM
Surr: Toluene-d8	95.9	70-130		%Rec	1	2/28/2023 11:27:11 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/28/2023 11:27:11 PM
Surr: BFB	102	70-130		%Rec	1	2/28/2023 11:27:11 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	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 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-136 2'

Project: East Pecos

Collection Date: 2/22/2023 10:45:00 AM

Lab ID: 2302A68-010

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	10		mg/Kg	1	3/2/2023 1:32:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/2/2023 1:32:10 PM
Surr: DNOP	109	69-147		%Rec	1	3/2/2023 1:32:10 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	850	59		mg/Kg	20	3/2/2023 9:28:48 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>JR</b>
Benzene	ND	0.024		mg/Kg	1	2/28/2023 11:54:21 PM
Toluene	ND	0.048		mg/Kg	1	2/28/2023 11:54:21 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/28/2023 11:54:21 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/28/2023 11:54:21 PM
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%Rec	1	2/28/2023 11:54:21 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	2/28/2023 11:54:21 PM
Surr: Dibromofluoromethane	97.2	70-130		%Rec	1	2/28/2023 11:54:21 PM
Surr: Toluene-d8	98.4	70-130		%Rec	1	2/28/2023 11:54:21 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/28/2023 11:54:21 PM
Surr: BFB	106	70-130		%Rec	1	2/28/2023 11:54:21 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	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 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-137 0'

Project: East Pecos

Collection Date: 2/22/2023 10:50:00 AM

Lab ID: 2302A68-011

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	9.4		mg/Kg	1	3/2/2023 1:41:01 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/2/2023 1:41:01 AM
Surr: DNOP	122	69-147		%Rec	1	3/2/2023 1:41:01 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/3/2023 6:15:57 AM
Surr: BFB	99.8	37.7-212		%Rec	1	3/3/2023 6:15:57 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	3/3/2023 6:15:00 AM
Toluene	ND	0.050		mg/Kg	1	3/3/2023 6:15:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/3/2023 6:15:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/3/2023 6:15:00 AM
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	3/3/2023 6:15:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	ND	59		mg/Kg	20	3/2/2023 12:23:45 AM

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

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

## Analytical Report

Lab Order 2302A68

Date Reported: 3/8/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-137 2'

Project: East Pecos

Collection Date: 2/22/2023 10:55:00 AM

Lab ID: 2302A68-012

Matrix: SOIL

Received Date: 2/24/2023 7:28:00 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	10		mg/Kg	1	3/3/2023 12:30:40 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/3/2023 12:30:40 PM
Surr: DNOP	93.4	69-147		%Rec	1	3/3/2023 12:30:40 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/4/2023 2:17:00 AM
Surr: BFB	91.5	37.7-212		%Rec	1	3/4/2023 2:17:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	3/4/2023 2:17:00 AM
Toluene	ND	0.050		mg/Kg	1	3/4/2023 2:17:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/4/2023 2:17:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	3/4/2023 2:17:00 AM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	3/4/2023 2:17:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	490	60		mg/Kg	20	3/2/2023 9:41:08 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	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.		

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2302A68

08-Mar-23

Client: Devon Energy

Project: East Pecos

Sample ID: <b>MB-73467</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73467</b>		RunNo: <b>94974</b>							
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/1/2023</b>		SeqNo: <b>3433861</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73467</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73467</b>		RunNo: <b>94974</b>							
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/1/2023</b>		SeqNo: <b>3433862</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Sample ID: <b>MB-73490</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73490</b>		RunNo: <b>94984</b>							
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/2/2023</b>		SeqNo: <b>3435083</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73490</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73490</b>		RunNo: <b>94984</b>							
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/2/2023</b>		SeqNo: <b>3435084</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	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 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

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

WO#: 2302A68

08-Mar-23

**Client:** Devon Energy**Project:** East Pecos

Sample ID: <b>MB-73436</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73436</b>	RunNo: <b>94952</b>								
Prep Date: <b>2/28/2023</b>	Analysis Date: <b>3/1/2023</b>	SeqNo: <b>3433068</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		92.3	69	147			

Sample ID: <b>LCS-73436</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73436</b>	RunNo: <b>94952</b>								
Prep Date: <b>2/28/2023</b>	Analysis Date: <b>3/1/2023</b>	SeqNo: <b>3433069</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	80.8	61.9	130			
Surr: DNOP	4.6		5.000		92.6	69	147			

Sample ID: <b>2302A68-004AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-133 2'</b>	Batch ID: <b>73470</b>	RunNo: <b>94981</b>								
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>	SeqNo: <b>3434717</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	9.2	46.17	0	92.8	54.2	135			
Surr: DNOP	4.4		4.617		96.1	69	147			

Sample ID: <b>2302A68-004AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-133 2'</b>	Batch ID: <b>73470</b>	RunNo: <b>94981</b>								
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>	SeqNo: <b>3434718</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.4	46.77	0	98.0	54.2	135	6.70	29.2	
Surr: DNOP	4.6		4.677		99.1	69	147	0	0	

Sample ID: <b>LCS-73460</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73460</b>	RunNo: <b>94981</b>								
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>	SeqNo: <b>3434725</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	61.9	130			
Surr: DNOP	5.4		5.000		108	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#: 2302A68

08-Mar-23

Client: Devon Energy

Project: East Pecos

Sample ID: <b>LCS-73470</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73470</b>			RunNo: <b>94981</b>						
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>			SeqNo: <b>3434726</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.5	61.9	130			
Surr: DNOP	4.3		5.000		86.9	69	147			

Sample ID: <b>MB-73460</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73460</b>			RunNo: <b>94981</b>						
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>			SeqNo: <b>3434727</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	10		10.00		105	69	147			

Sample ID: <b>MB-73470</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73470</b>			RunNo: <b>94981</b>						
Prep Date: <b>3/1/2023</b>	Analysis Date: <b>3/2/2023</b>			SeqNo: <b>3434728</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	10		10.00		102	69	147			

Sample ID: <b>LCS-73482</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73482</b>			RunNo: <b>95019</b>						
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/3/2023</b>			SeqNo: <b>3435788</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	10	50.00	0	83.8	61.9	130			
Surr: DNOP	4.2		5.000		84.9	69	147			

Sample ID: <b>MB-73482</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73482</b>			RunNo: <b>95019</b>						
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/3/2023</b>			SeqNo: <b>3435791</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	8.6		10.00		86.3	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#: 2302A68  
08-Mar-23

Client: Devon Energy  
Project: East Pecos

Sample ID: 2302A68-012AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-137 2'	Batch ID: 73482	RunNo: 95019								
Prep Date: 3/2/2023	Analysis Date: 3/3/2023	SeqNo: 3436785		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.3	46.69	0	80.9	54.2	135			
Surr: DNOP	4.1		4.669		87.9	69	147			

Sample ID: 2302A68-012AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-137 2'	Batch ID: 73482	RunNo: 95019								
Prep Date: 3/2/2023	Analysis Date: 3/3/2023	SeqNo: 3436786		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.4	47.17	0	92.9	54.2	135	14.8	29.2	
Surr: DNOP	4.6		4.717		96.8	69	147	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 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#: 2302A68  
08-Mar-23

Client: Devon Energy  
Project: East Pecos

Sample ID: 2.5ug gro lcs		SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS		Batch ID: GS94977			RunNo: 94977					
Prep Date:		Analysis Date: 3/2/2023			SeqNo: 3433961		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		199	37.7	212			

Sample ID: mb		SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS		Batch ID: GS94977			RunNo: 94977					
Prep Date:		Analysis Date: 3/2/2023			SeqNo: 3433962		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	37.7	212			

Sample ID: lcs-73430		SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS		Batch ID: 73430			RunNo: 94977					
Prep Date: 2/28/2023		Analysis Date: 3/2/2023			SeqNo: 3435300		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.6	72.3	137			
Surr: BFB	2000		1000		197	37.7	212			

Sample ID: MB-73430		SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS		Batch ID: 73430			RunNo: 94977					
Prep Date: 2/28/2023		Analysis Date: 3/2/2023			SeqNo: 3435301		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	37.7	212			

Sample ID: lcs-73374		SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS		Batch ID: 73374			RunNo: 95021					
Prep Date: 2/24/2023		Analysis Date: 3/3/2023			SeqNo: 3435872		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		197	37.7	212			

Sample ID: mb-73374		SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS		Batch ID: 73374			RunNo: 95021					
Prep Date: 2/24/2023		Analysis Date: 3/3/2023			SeqNo: 3435873		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	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#: 2302A68

08-Mar-23

Client: Devon Energy

Project: East Pecos

Sample ID: <b>ics-73373</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73373</b>		RunNo: <b>95008</b>							
Prep Date: <b>2/24/2023</b>	Analysis Date: <b>3/3/2023</b>		SeqNo: <b>3436374</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.5	72.3	137			
Surr: BFB	2100		1000		208	37.7	212			

Sample ID: <b>mb-73373</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73373</b>		RunNo: <b>95008</b>							
Prep Date: <b>2/24/2023</b>	Analysis Date: <b>3/3/2023</b>		SeqNo: <b>3436375</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		87.6	37.7	212			

Sample ID: <b>ics-73472</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73472</b>		RunNo: <b>95008</b>							
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/4/2023</b>		SeqNo: <b>3436398</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	78.2	72.3	137			
Surr: BFB	1800		1000		176	37.7	212			

Sample ID: <b>mb-73472</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73472</b>		RunNo: <b>95008</b>							
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/4/2023</b>		SeqNo: <b>3436399</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		90.7	37.7	212			

Sample ID: <b>2302A68-012ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-137 2'</b>	Batch ID: <b>73472</b>		RunNo: <b>95008</b>							
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/4/2023</b>		SeqNo: <b>3436401</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.75	0	89.7	70	130			
Surr: BFB	1900		990.1		194	37.7	212			

Sample ID: <b>2302A68-012amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-137 2'</b>	Batch ID: <b>73472</b>		RunNo: <b>95008</b>							
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/4/2023</b>		SeqNo: <b>3436402</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.75	0	89.7	70	130			
Surr: BFB	1900		990.1		194	37.7	212			

### 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#: 2302A68

08-Mar-23

Client: Devon Energy

Project: East Pecos

Sample ID: 2302A68-012amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH22-137 2'		Batch ID: 73472			RunNo: 95008					
Prep Date: 3/2/2023		Analysis Date: 3/4/2023			SeqNo: 3436402		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.73	0	88.8	70	130	1.08	20	
Surr: BFB	2000		989.1		197	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 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#: 2302A68  
08-Mar-23

Client: Devon Energy  
Project: East Pecos

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: R94977			RunNo: 94977						
Prep Date:	Analysis Date: 3/2/2023			SeqNo: 3433969			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		92.8	70	130			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: R94977			RunNo: 94977						
Prep Date:	Analysis Date: 3/2/2023			SeqNo: 3433970			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		91.8	70	130			

Sample ID: LCS-73430	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 73430			RunNo: 94977						
Prep Date: 2/28/2023	Analysis Date: 3/2/2023			SeqNo: 3435356			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	81.9	80	120			
Toluene	0.85	0.050	1.000	0	85.3	80	120			
Ethylbenzene	0.84	0.050	1.000	0	84.1	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.8	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.5	70	130			

Sample ID: MB-73430	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 73430			RunNo: 94977						
Prep Date: 2/28/2023	Analysis Date: 3/2/2023			SeqNo: 3435357			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	0.91		1.000		91.4	70	130			

Sample ID: LCS-73374	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 73374			RunNo: 95021						
Prep Date: 2/24/2023	Analysis Date: 3/3/2023			SeqNo: 3435881			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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#: 2302A68

08-Mar-23

Client: Devon Energy

Project: East Pecos

Sample ID: <b>mb-73374</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73374</b>			RunNo: <b>95021</b>						
Prep Date: <b>2/24/2023</b>	Analysis Date: <b>3/3/2023</b>			SeqNo: <b>3435882</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		93.1	70	130			

Sample ID: <b>lcs-73373</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73373</b>			RunNo: <b>95008</b>						
Prep Date: <b>2/24/2023</b>	Analysis Date: <b>3/3/2023</b>			SeqNo: <b>3436437</b>	Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.6	80	120			
Toluene	0.93	0.050	1.000	0	93.0	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.5	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.8	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.4	70	130			

Sample ID: <b>mb-73373</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73373</b>			RunNo: <b>95008</b>						
Prep Date: <b>2/24/2023</b>	Analysis Date: <b>3/3/2023</b>			SeqNo: <b>3436438</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		88.5	70	130			

Sample ID: <b>lcs-73472</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73472</b>			RunNo: <b>95008</b>						
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/4/2023</b>			SeqNo: <b>3436461</b>	Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	83.5	80	120			
Toluene	0.83	0.050	1.000	0	83.2	80	120			
Ethylbenzene	0.82	0.050	1.000	0	81.8	80	120			
Xylenes, Total	2.4	0.10	3.000	0	81.0	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.0	70	130			

Sample ID: <b>mb-73472</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73472</b>			RunNo: <b>95008</b>						
Prep Date: <b>3/2/2023</b>	Analysis Date: <b>3/4/2023</b>			SeqNo: <b>3436462</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#: 2302A68

08-Mar-23

Client: Devon Energy

Project: East Pecos

Sample ID: mb-73472	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 73472	RunNo: 95008								
Prep Date: 3/2/2023	Analysis Date: 3/4/2023	SeqNo: 3436462	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	0.91		1.000		90.9	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#: 2302A6808-Mar-23

Client: Devon Energy  
Project: East Pecos

Sample ID: Ics-73404	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 73404	RunNo: 94927								
Prep Date: 2/27/2023	Analysis Date: 2/28/2023	SeqNo: 3431736	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	82.0	80	120			
Toluene	0.94	0.050	1.000	0	94.0	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.1	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.1	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.5	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.3	70	130			
Surr: Toluene-d8	0.50		0.5000		99.6	70	130			

Sample ID: mb-73404	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 73404	RunNo: 94927								
Prep Date: 2/27/2023	Analysis Date: 2/28/2023	SeqNo: 3431737	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: 1,2-Dichloroethane-d4	0.48		0.5000		95.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.1	70	130			
Surr: Toluene-d8	0.49		0.5000		98.7	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#: 2302A68

08-Mar-23

Client: Devon Energy

Project: East Pecos

Sample ID: Ics-73404	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: 73404			RunNo: 94927						
Prep Date: 2/27/2023	Analysis Date: 2/28/2023			SeqNo: 3431792		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	78.4	70	130			
Surr: BFB	500		500.0		99.4	70	130			

Sample ID: mb-73404	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: 73404			RunNo: 94927						
Prep Date: 2/27/2023	Analysis Date: 2/28/2023			SeqNo: 3431793		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	530		500.0		105	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: 2302A68

RcptNo: 1

Received By: Tracy Casarrubias 2/24/2023 7:28:00 AM

Completed By: Tracy Casarrubias 2/24/2023 8:33:07 AM

Reviewed By: *na 2/24/23*

### 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: *na 2/24/23*

### 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: *Sample collection times noted by sample receiving on COC. <sup>W</sup> 2/24/23*

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.4	Good	Yes	Morty		





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 24, 2023

Kent Stallings

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX

RE: East Pecos Pipeline Spill

OrderNo.: 2303967

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 3/18/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](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 horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-138 20'

Project: East Pecos Pipeline Spill

Collection Date: 3/15/2023 1:30:00 PM

Lab ID: 2303967-001

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/22/2023 1:36:15 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/22/2023 1:36:15 PM
Surr: DNOP	103	69-147		%Rec	1	3/22/2023 1:36:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2023 10:18:44 AM
Surr: BFB	101	37.7-212		%Rec	1	3/21/2023 10:18:44 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	3/21/2023 10:18:44 AM
Toluene	ND	0.050		mg/Kg	1	3/21/2023 10:18:44 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/21/2023 10:18:44 AM
Xylenes, Total	ND	0.099		mg/Kg	1	3/21/2023 10:18:44 AM
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	3/21/2023 10:18:44 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	11000	600		mg/Kg	200	3/22/2023 11:00:44 AM

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

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

## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-138 30'

Project: East Pecos Pipeline Spill

Collection Date: 3/15/2023 2:15:00 PM

Lab ID: 2303967-002

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	3/22/2023 2:00:27 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	3/22/2023 2:00:27 PM
Surr: DNOP	99.7	69-147		%Rec	1	3/22/2023 2:00:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2023 10:42:20 AM
Surr: BFB	101	37.7-212		%Rec	1	3/21/2023 10:42:20 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 10:42:20 AM
Toluene	ND	0.049		mg/Kg	1	3/21/2023 10:42:20 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2023 10:42:20 AM
Xylenes, Total	ND	0.097		mg/Kg	1	3/21/2023 10:42:20 AM
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	3/21/2023 10:42:20 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	3100	150		mg/Kg	50	3/22/2023 11:13:09 AM

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

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

## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-138 40'

Project: East Pecos Pipeline Spill

Collection Date: 3/15/2023 3:15:00 PM

Lab ID: 2303967-003

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/22/2023 2:24:29 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/22/2023 2:24:29 PM
Surr: DNOP	105	69-147		%Rec	1	3/22/2023 2:24:29 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/21/2023 11:05:57 AM
Surr: BFB	103	37.7-212		%Rec	1	3/21/2023 11:05:57 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	3/21/2023 11:05:57 AM
Toluene	ND	0.047		mg/Kg	1	3/21/2023 11:05:57 AM
Ethylbenzene	ND	0.047		mg/Kg	1	3/21/2023 11:05:57 AM
Xylenes, Total	ND	0.094		mg/Kg	1	3/21/2023 11:05:57 AM
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	3/21/2023 11:05:57 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	2400	60		mg/Kg	20	3/21/2023 5:02:13 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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.		

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CLIENT: Vertex Resources Services, Inc.  
Project: East Pecos Pipeline Spill  
Lab ID: 2303967-004

Client Sample ID: BH22-138 45'  
Collection Date: 3/15/2023 3:55:00 PM  
Received Date: 3/18/2023 8:00:00 AM

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	3/22/2023 2:48:47 PM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	3/22/2023 2:48:47 PM
Surr: DNOP	96.2	69-147		%Rec	1	3/22/2023 2:48:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2023 11:29:39 AM
Surr: BFB	101	37.7-212		%Rec	1	3/21/2023 11:29:39 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 11:29:39 AM
Toluene	ND	0.048		mg/Kg	1	3/21/2023 11:29:39 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2023 11:29:39 AM
Xylenes, Total	ND	0.096		mg/Kg	1	3/21/2023 11:29:39 AM
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	3/21/2023 11:29:39 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	2200	60		mg/Kg	20	3/21/2023 5:14:34 PM

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

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

## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-138 50'

Project: East Pecos Pipeline Spill

Collection Date: 3/15/2023 4:20:00 PM

Lab ID: 2303967-005

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/22/2023 12:53:46 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/22/2023 12:53:46 PM
Surr: DNOP	88.6	69-147		%Rec	1	3/22/2023 12:53:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2023 11:53:20 AM
Surr: BFB	104	37.7-212		%Rec	1	3/21/2023 11:53:20 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 11:53:20 AM
Toluene	ND	0.048		mg/Kg	1	3/21/2023 11:53:20 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2023 11:53:20 AM
Xylenes, Total	ND	0.096		mg/Kg	1	3/21/2023 11:53:20 AM
Surr: 4-Bromofluorobenzene	94.3	70-130		%Rec	1	3/21/2023 11:53:20 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	9800	300		mg/Kg	100	3/22/2023 11:25:34 AM

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

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

## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-139 20'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 10:50:00 AM

Lab ID: 2303967-006

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/22/2023 1:04:26 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/22/2023 1:04:26 PM
Surr: DNOP	90.8	69-147		%Rec	1	3/22/2023 1:04:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2023 12:17:03 PM
Surr: BFB	103	37.7-212		%Rec	1	3/21/2023 12:17:03 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 12:17:03 PM
Toluene	ND	0.049		mg/Kg	1	3/21/2023 12:17:03 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2023 12:17:03 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/21/2023 12:17:03 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	3/21/2023 12:17:03 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	7600	300		mg/Kg	100	3/22/2023 11:37:59 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.		

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## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-139 30'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 11:15:00 AM

Lab ID: 2303967-007

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	3/22/2023 1:15:07 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	3/22/2023 1:15:07 PM
Surr: DNOP	95.4	69-147		%Rec	1	3/22/2023 1:15:07 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/21/2023 12:40:49 PM
Surr: BFB	102	37.7-212		%Rec	1	3/21/2023 12:40:49 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 12:40:49 PM
Toluene	ND	0.047		mg/Kg	1	3/21/2023 12:40:49 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/21/2023 12:40:49 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/21/2023 12:40:49 PM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	3/21/2023 12:40:49 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	8100	300		mg/Kg	100	3/22/2023 11:50:23 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 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-139 40'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 11:45:00 AM

Lab ID: 2303967-008

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/22/2023 1:25:48 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/22/2023 1:25:48 PM
Surr: DNOP	103	69-147		%Rec	1	3/22/2023 1:25:48 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/21/2023 1:04:36 PM
Surr: BFB	101	37.7-212		%Rec	1	3/21/2023 1:04:36 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	3/21/2023 1:04:36 PM
Toluene	ND	0.047		mg/Kg	1	3/21/2023 1:04:36 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/21/2023 1:04:36 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/21/2023 1:04:36 PM
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	3/21/2023 1:04:36 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	4700	300		mg/Kg	100	3/22/2023 12:27:37 PM

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

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

## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-139 45'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 11:45:00 AM

Lab ID: 2303967-009

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	3/22/2023 1:36:32 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	3/22/2023 1:36:32 PM
Surr: DNOP	82.2	69-147		%Rec	1	3/22/2023 1:36:32 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2023 1:28:22 PM
Surr: BFB	102	37.7-212		%Rec	1	3/21/2023 1:28:22 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 1:28:22 PM
Toluene	ND	0.048		mg/Kg	1	3/21/2023 1:28:22 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2023 1:28:22 PM
Xylenes, Total	ND	0.096		mg/Kg	1	3/21/2023 1:28:22 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	3/21/2023 1:28:22 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	3800	300		mg/Kg	100	3/22/2023 12:40:02 PM

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

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

## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-140 25'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 1:45:00 PM

Lab ID: 2303967-010

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/22/2023 1:47:15 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/22/2023 1:47:15 PM
Surr: DNOP	93.0	69-147		%Rec	1	3/22/2023 1:47:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2023 1:52:13 PM
Surr: BFB	100	37.7-212		%Rec	1	3/21/2023 1:52:13 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 1:52:13 PM
Toluene	ND	0.048		mg/Kg	1	3/21/2023 1:52:13 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2023 1:52:13 PM
Xylenes, Total	ND	0.096		mg/Kg	1	3/21/2023 1:52:13 PM
Surr: 4-Bromofluorobenzene	90.8	70-130		%Rec	1	3/21/2023 1:52:13 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	5300	300		mg/Kg	100	3/22/2023 12:52:27 PM

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

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

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## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-140 30'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 2:00:00 PM

Lab ID: 2303967-011

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	3/22/2023 1:57:59 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/22/2023 1:57:59 PM
Surr: DNOP	95.9	69-147		%Rec	1	3/22/2023 1:57:59 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2023 2:39:42 PM
Surr: BFB	104	37.7-212		%Rec	1	3/21/2023 2:39:42 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 2:39:42 PM
Toluene	ND	0.048		mg/Kg	1	3/21/2023 2:39:42 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2023 2:39:42 PM
Xylenes, Total	ND	0.096		mg/Kg	1	3/21/2023 2:39:42 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	3/21/2023 2:39:42 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	4400	150		mg/Kg	50	3/22/2023 1:04:51 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	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 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-140 35'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 2:00:00 PM

Lab ID: 2303967-012

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	3/22/2023 2:08:44 PM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	3/22/2023 2:08:44 PM
Surr: DNOP	96.8	69-147		%Rec	1	3/22/2023 2:08:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/21/2023 3:03:26 PM
Surr: BFB	103	37.7-212		%Rec	1	3/21/2023 3:03:26 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 3:03:26 PM
Toluene	ND	0.047		mg/Kg	1	3/21/2023 3:03:26 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/21/2023 3:03:26 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/21/2023 3:03:26 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%Rec	1	3/21/2023 3:03:26 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	6000	150		mg/Kg	50	3/22/2023 1:17:16 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	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 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-140 40'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 2:40:00 PM

Lab ID: 2303967-013

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/22/2023 2:19:31 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/22/2023 2:19:31 PM
Surr: DNOP	85.7	69-147		%Rec	1	3/22/2023 2:19:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2023 3:27:14 PM
Surr: BFB	102	37.7-212		%Rec	1	3/21/2023 3:27:14 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	3/21/2023 3:27:14 PM
Toluene	ND	0.049		mg/Kg	1	3/21/2023 3:27:14 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2023 3:27:14 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/21/2023 3:27:14 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	3/21/2023 3:27:14 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	4500	150		mg/Kg	50	3/22/2023 1:29:41 PM

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

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

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## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-140 44'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 2:40:00 PM

Lab ID: 2303967-014

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	3/22/2023 3:31:44 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	3/22/2023 3:31:44 PM
Surr: DNOP	93.0	69-147		%Rec	1	3/22/2023 3:31:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2023 3:50:46 PM
Surr: BFB	103	37.7-212		%Rec	1	3/21/2023 3:50:46 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 3:50:46 PM
Toluene	ND	0.048		mg/Kg	1	3/21/2023 3:50:46 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2023 3:50:46 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/21/2023 3:50:46 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	3/21/2023 3:50:46 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	5500	300		mg/Kg	100	3/22/2023 1:42:06 PM

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

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

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## Analytical Report

Lab Order 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 20'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 4:25:00 PM

Lab ID: 2303967-015

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	3/22/2023 3:42:33 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	3/22/2023 3:42:33 PM
Surr: DNOP	89.9	69-147		%Rec	1	3/22/2023 3:42:33 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/21/2023 4:14:18 PM
Surr: BFB	102	37.7-212		%Rec	1	3/21/2023 4:14:18 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/21/2023 4:14:18 PM
Toluene	ND	0.047		mg/Kg	1	3/21/2023 4:14:18 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/21/2023 4:14:18 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/21/2023 4:14:18 PM
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	3/21/2023 4:14:18 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	3800	150		mg/Kg	50	3/22/2023 1:54:30 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	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 2303967

Date Reported: 3/24/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 26'

Project: East Pecos Pipeline Spill

Collection Date: 3/16/2023 5:15:00 PM

Lab ID: 2303967-016

Matrix: SOIL

Received Date: 3/18/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/22/2023 3:53:27 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/22/2023 3:53:27 PM
Surr: DNOP	90.2	69-147		%Rec	1	3/22/2023 3:53:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2023 4:37:59 PM
Surr: BFB	101	37.7-212		%Rec	1	3/21/2023 4:37:59 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	3/21/2023 4:37:59 PM
Toluene	ND	0.049		mg/Kg	1	3/21/2023 4:37:59 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2023 4:37:59 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/21/2023 4:37:59 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	3/21/2023 4:37:59 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	4700	150		mg/Kg	50	3/22/2023 2:06:55 PM

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2303967  
24-Mar-23

Client: Vertex Resources Services, Inc.  
Project: East Pecos Pipeline Spill

Sample ID: <b>MB-73843</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>73843</b>		RunNo: <b>95459</b>						
Prep Date: <b>3/21/2023</b>		Analysis Date: <b>3/21/2023</b>		SeqNo: <b>3453137</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73843</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>73843</b>		RunNo: <b>95459</b>						
Prep Date: <b>3/21/2023</b>		Analysis Date: <b>3/21/2023</b>		SeqNo: <b>3453138</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.2	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 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

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

WO#: 2303967

24-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-73836</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73836</b>	RunNo: <b>95454</b>								
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>	SeqNo: <b>3453575</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	8.9		10.00		88.8	69	147			

Sample ID: <b>LCS-73836</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73836</b>	RunNo: <b>95454</b>								
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>	SeqNo: <b>3453577</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	61.9	130			
Surr: DNOP	4.7		5.000		93.6	69	147			

Sample ID: <b>2303967-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-138 20'</b>	Batch ID: <b>73836</b>	RunNo: <b>95454</b>								
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>	SeqNo: <b>3454052</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.6	47.89	0	96.8	54.2	135			
Surr: DNOP	4.5		4.789		94.7	69	147			

Sample ID: <b>2303967-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-138 20'</b>	Batch ID: <b>73836</b>	RunNo: <b>95454</b>								
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>	SeqNo: <b>3454055</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	9.3	46.73	0	90.6	54.2	135	9.13	29.2	
Surr: DNOP	4.5		4.673		97.3	69	147	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 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#: 2303967

24-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>lcs-73817</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>73817</b>				RunNo: <b>95411</b>					
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>				SeqNo: <b>3451793</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	95.4	70	130			
Surr: BFB	2000		1000		196	37.7	212			

Sample ID: <b>mb-73817</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>PBS</b>	Batch ID: <b>73817</b>				RunNo: <b>95411</b>					
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>				SeqNo: <b>3451794</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		101	37.7	212			

Sample ID: <b>2303967-001ams</b>	SampType: <b>MS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>BH22-138 20'</b>	Batch ID: <b>73817</b>				RunNo: <b>95411</b>					
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>				SeqNo: <b>3452649</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.63	0	110	70	130			
Surr: BFB	2100		985.2		217	37.7	212			S

Sample ID: <b>2303967-001amsd</b>	SampType: <b>MSD</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>BH22-138 20'</b>	Batch ID: <b>73817</b>				RunNo: <b>95411</b>					
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>				SeqNo: <b>3452650</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	4.9	24.70	0	105	70	130	4.72	20	
Surr: BFB	2100		988.1		211	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 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#: 2303967

24-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-73817</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73817</b>		RunNo: <b>95411</b>							
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>		SeqNo: <b>3451796</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.6	80	120			
Toluene	0.90	0.050	1.000	0	90.2	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.8	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	70	130			

Sample ID: <b>mb-73817</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73817</b>		RunNo: <b>95411</b>							
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>		SeqNo: <b>3451797</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	0.92		1.000		92.5	70	130			

Sample ID: <b>2303967-002ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-138 30'</b>	Batch ID: <b>73817</b>		RunNo: <b>95411</b>							
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>		SeqNo: <b>3452697</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9699	0	96.3	68.8	120			
Toluene	0.94	0.048	0.9699	0	96.6	73.6	124			
Ethylbenzene	0.94	0.048	0.9699	0	97.3	72.7	129			
Xylenes, Total	2.8	0.097	2.910	0	96.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.94		0.9699		96.5	70	130			

Sample ID: <b>2303967-002amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH22-138 30'</b>	Batch ID: <b>73817</b>		RunNo: <b>95411</b>							
Prep Date: <b>3/20/2023</b>	Analysis Date: <b>3/21/2023</b>		SeqNo: <b>3452698</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9662	0	98.4	68.8	120	1.80	20	
Toluene	0.96	0.048	0.9662	0	98.9	73.6	124	2.01	20	
Ethylbenzene	0.95	0.048	0.9662	0	98.8	72.7	129	1.22	20	
Xylenes, Total	2.9	0.097	2.899	0	99.1	75.7	126	2.09	20	
Surr: 4-Bromofluorobenzene	0.93		0.9662		96.7	70	130	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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: Vertex Resources  
Services, Inc.

Work Order Number: 2303967

RcptNo: 1

Received By: Juan Rojas

3/18/2023 8:00:00 AM

*Juan Rojas*

Completed By: Juan Rojas

3/18/2023 8:16:42 AM

*Juan Rojas*

Reviewed By:

*TME*

*3/18/23*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: *Ju 3/18/23*

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	<i>Monety</i>			

*Mr 3/20/23*





HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Turn-Around Time:

Standard ☐ Rush ☒ 48-hr

Project Name:

East Pecos Pipeline Spill

Project #:

22E-03982

Project Manager:

Kent Stallings

kstallings@vertex.ca

Sampler: L. Pullman

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 2.9 on 2.8

Container Type and #

Preservative Type

HEAL No. 2303962

1, 4oz jar

1, 4oz jar

1, 4oz jar

1, 4oz jar

1, 4oz jar

1, 4oz jar

1, 4oz jar

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1, 4oz jar

1, 4oz jar

1, 4oz jar

1, 4oz jar

Client: Vertex

(direct bill to Devon)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Date

Time

Matrix

Sample Name

BH22-138 20'

BH22-138 30'

BH22-138 40'

BH22-138 45'

BH22-138 50'

BH22-139 20'

BH22-139 30'

BH22-139 40'

BH22-139 45'

BH22-140 25'

BH22-140 30'

BH22-140 35'

Date

Time

Relinquished by

Relinquished by

3-17-23 07:00

3-17-23 19:00

3-17-23 19:00

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3-17-23 19:00



## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-116 2'

Project: East Pecos

Collection Date: 2/3/2023 9:05:00 AM

Lab ID: 2302264-005

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	2/9/2023 6:07:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2023 6:07:09 PM
Surr: DNOP	120	69-147		%Rec	1	2/9/2023 6:07:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 2:40:14 PM
Surr: BFB	103	37.7-212		%Rec	1	2/8/2023 2:40:14 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/8/2023 2:40:14 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 2:40:14 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 2:40:14 PM
Xylenes, Total	ND	0.096		mg/Kg	1	2/8/2023 2:40:14 PM
Surr: 4-Bromofluorobenzene	85.4	70-130		%Rec	1	2/8/2023 2:40:14 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	190	59		mg/Kg	20	2/8/2023 4:41:01 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-117 0'

Project: East Pecos

Collection Date: 2/3/2023 9:10:00 AM

Lab ID: 2302264-006

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.9		mg/Kg	1	2/9/2023 6:31:22 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/9/2023 6:31:22 PM
Surr: DNOP	123	69-147		%Rec	1	2/9/2023 6:31:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 3:04:07 PM
Surr: BFB	101	37.7-212		%Rec	1	2/8/2023 3:04:07 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	2/8/2023 3:04:07 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 3:04:07 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 3:04:07 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 3:04:07 PM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	2/8/2023 3:04:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	400	60		mg/Kg	20	2/8/2023 4:53:26 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-117 2'

Project: East Pecos

Collection Date: 2/3/2023 9:15:00 AM

Lab ID: 2302264-007

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.7		mg/Kg	1	2/9/2023 6:55:46 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/9/2023 6:55:46 PM
Surr: DNOP	121	69-147		%Rec	1	2/9/2023 6:55:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 3:27:53 PM
Surr: BFB	101	37.7-212		%Rec	1	2/8/2023 3:27:53 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/8/2023 3:27:53 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 3:27:53 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 3:27:53 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/8/2023 3:27:53 PM
Surr: 4-Bromofluorobenzene	83.9	70-130		%Rec	1	2/8/2023 3:27:53 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 5:05:51 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-118 0'

Project: East Pecos

Collection Date: 2/3/2023 9:20:00 AM

Lab ID: 2302264-008

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	10		mg/Kg	1	2/9/2023 7:20:09 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/9/2023 7:20:09 PM
Surr: DNOP	106	69-147		%Rec	1	2/9/2023 7:20:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 3:51:32 PM
Surr: BFB	99.6	37.7-212		%Rec	1	2/8/2023 3:51:32 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/8/2023 3:51:32 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 3:51:32 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 3:51:32 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 3:51:32 PM
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	2/8/2023 3:51:32 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	3200	150		mg/Kg	50	2/9/2023 9:16:07 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.		

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-118 2'

Project: East Pecos

Collection Date: 2/3/2023 9:25:00 AM

Lab ID: 2302264-009

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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)	21	9.0		mg/Kg	1	2/9/2023 3:16:34 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/9/2023 3:16:34 PM
Surr: DNOP	129	69-147		%Rec	1	2/9/2023 3:16:34 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 4:15:09 PM
Surr: BFB	102	37.7-212		%Rec	1	2/8/2023 4:15:09 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.025		mg/Kg	1	2/8/2023 4:15:09 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 4:15:09 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 4:15:09 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 4:15:09 PM
Surr: 4-Bromofluorobenzene	84.7	70-130		%Rec	1	2/8/2023 4:15:09 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	1100	60		mg/Kg	20	2/8/2023 6:45:08 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	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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-119 0'

Project: East Pecos

Collection Date: 2/3/2023 9:30:00 AM

Lab ID: 2302264-010

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.7		mg/Kg	1	2/9/2023 2:05:01 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2023 2:05:01 PM
Surr: DNOP	122	69-147		%Rec	1	2/9/2023 2:05:01 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>JJP</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 5:25:28 PM
Surr: BFB	101	37.7-212		%Rec	1	2/8/2023 5:25:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>JJP</b>
Benzene	ND	0.024		mg/Kg	1	2/8/2023 5:25:28 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 5:25:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 5:25:28 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 5:25:28 PM
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	2/8/2023 5:25:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>NAI</b>
Chloride	73	60		mg/Kg	20	2/8/2023 7:22:21 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	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.		

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-119 2'

Project: East Pecos

Collection Date: 2/3/2023 9:35:00 AM

Lab ID: 2302264-011

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.3		mg/Kg	1	2/9/2023 7:44:08 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/9/2023 7:44:08 PM
Surr: DNOP	108	69-147		%Rec	1	2/9/2023 7:44:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 5:49:07 PM
Surr: BFB	102	37.7-212		%Rec	1	2/8/2023 5:49:07 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/8/2023 5:49:07 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 5:49:07 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 5:49:07 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/8/2023 5:49:07 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	2/8/2023 5:49:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 7:34:45 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-120 0'

Project: East Pecos

Collection Date: 2/3/2023 9:40:00 AM

Lab ID: 2302264-012

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	10		mg/Kg	1	2/9/2023 8:08:16 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/9/2023 8:08:16 PM
Surr: DNOP	104	69-147		%Rec	1	2/9/2023 8:08:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/8/2023 7:47:00 PM
Surr: BFB	96.7	37.7-212		%Rec	1	2/8/2023 7:47:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	2/8/2023 7:47:00 PM
Toluene	ND	0.047		mg/Kg	1	2/8/2023 7:47:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/8/2023 7:47:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	2/8/2023 7:47:00 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	2/8/2023 7:47:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 8:11:58 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	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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-120 2'

Project: East Pecos

Collection Date: 2/3/2023 9:45:00 AM

Lab ID: 2302264-013

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.9		mg/Kg	1	2/9/2023 8:32:15 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/9/2023 8:32:15 PM
Surr: DNOP	82.1	69-147		%Rec	1	2/9/2023 8:32:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/8/2023 8:46:00 PM
Surr: BFB	98.0	37.7-212		%Rec	1	2/8/2023 8:46:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/8/2023 8:46:00 PM
Toluene	ND	0.050		mg/Kg	1	2/8/2023 8:46:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/8/2023 8:46:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	2/8/2023 8:46:00 PM
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	2/8/2023 8:46:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	100	60		mg/Kg	20	2/8/2023 8:24:23 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-120 4'

Project: East Pecos

Collection Date: 2/3/2023 9:50:00 AM

Lab ID: 2302264-014

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.8		mg/Kg	1	2/9/2023 8:56:25 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/9/2023 8:56:25 PM
Surr: DNOP	73.2	69-147		%Rec	1	2/9/2023 8:56:25 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/8/2023 9:46:00 PM
Surr: BFB	96.8	37.7-212		%Rec	1	2/8/2023 9:46:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	2/8/2023 9:46:00 PM
Toluene	ND	0.047		mg/Kg	1	2/8/2023 9:46:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/8/2023 9:46:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	2/8/2023 9:46:00 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	2/8/2023 9:46:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	180	60		mg/Kg	20	2/8/2023 8:36:47 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-121 0'

Project: East Pecos

Collection Date: 2/3/2023 9:55:00 AM

Lab ID: 2302264-015

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	2/9/2023 9:20:19 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2023 9:20:19 PM
Surr: DNOP	107	69-147		%Rec	1	2/9/2023 9:20:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 10:05:00 PM
Surr: BFB	92.7	37.7-212		%Rec	1	2/8/2023 10:05:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/8/2023 10:05:00 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 10:05:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 10:05:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 10:05:00 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	1	2/8/2023 10:05:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 8:49:11 PM

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

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

CLIENT: Devon Energy

Client Sample ID: BH22-121 2'

Project: East Pecos

Collection Date: 2/3/2023 10:00:00 AM

Lab ID: 2302264-016

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JME
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	2/9/2023 9:44:27 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/9/2023 9:44:27 PM
Surr: DNOP	92.5	69-147		%Rec	1	2/9/2023 9:44:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 10:25:00 PM
Surr: BFB	92.9	37.7-212		%Rec	1	2/8/2023 10:25:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/8/2023 10:25:00 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 10:25:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 10:25:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	2/8/2023 10:25:00 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	2/8/2023 10:25:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 9:01:36 PM

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

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



## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-122 0'

Project: East Pecos

Collection Date: 2/3/2023 10:05:00 AM

Lab ID: 2302264-017

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.3		mg/Kg	1	2/9/2023 10:08:23 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/9/2023 10:08:23 PM
Surr: DNOP	93.7	69-147		%Rec	1	2/9/2023 10:08:23 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/8/2023 10:45:00 PM
Surr: BFB	94.4	37.7-212		%Rec	1	2/8/2023 10:45:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	2/8/2023 10:45:00 PM
Toluene	ND	0.047		mg/Kg	1	2/8/2023 10:45:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/8/2023 10:45:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	2/8/2023 10:45:00 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	2/8/2023 10:45:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 9:14:01 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	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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-122 2'

Project: East Pecos

Collection Date: 2/3/2023 10:10:00 AM

Lab ID: 2302264-018

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.8		mg/Kg	1	2/9/2023 10:32:18 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/9/2023 10:32:18 PM
Surr: DNOP	116	69-147		%Rec	1	2/9/2023 10:32:18 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 11:05:00 PM
Surr: BFB	95.0	37.7-212		%Rec	1	2/8/2023 11:05:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/8/2023 11:05:00 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 11:05:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 11:05:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	2/8/2023 11:05:00 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	2/8/2023 11:05:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	88	60		mg/Kg	20	2/8/2023 9:26:25 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	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.		

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-122 4'

Project: East Pecos

Collection Date: 2/3/2023 10:15:00 AM

Lab ID: 2302264-019

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.6		mg/Kg	1	2/9/2023 10:56:12 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/9/2023 10:56:12 PM
Surr: DNOP	99.8	69-147		%Rec	1	2/9/2023 10:56:12 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 11:24:00 PM
Surr: BFB	94.6	37.7-212		%Rec	1	2/8/2023 11:24:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/8/2023 11:24:00 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 11:24:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 11:24:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	2/8/2023 11:24:00 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	2/8/2023 11:24:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 9:38:50 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-123 0'

Project: East Pecos

Collection Date: 2/3/2023 10:20:00 AM

Lab ID: 2302264-020

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.4		mg/Kg	1	2/10/2023 12:08:17 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/10/2023 12:08:17 AM
Surr: DNOP	113	69-147		%Rec	1	2/10/2023 12:08:17 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 11:44:00 PM
Surr: BFB	90.5	37.7-212		%Rec	1	2/8/2023 11:44:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/8/2023 11:44:00 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 11:44:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 11:44:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	2/8/2023 11:44:00 PM
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	2/8/2023 11:44:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 9:51:14 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-123 2'

Project: East Pecos

Collection Date: 2/3/2023 10:25:00 AM

Lab ID: 2302264-021

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.7		mg/Kg	1	2/10/2023 12:32:07 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/10/2023 12:32:07 AM
Surr: DNOP	105	69-147		%Rec	1	2/10/2023 12:32:07 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/9/2023 12:04:00 AM
Surr: BFB	97.7	37.7-212		%Rec	1	2/9/2023 12:04:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/9/2023 12:04:00 AM
Toluene	ND	0.050		mg/Kg	1	2/9/2023 12:04:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/9/2023 12:04:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/9/2023 12:04:00 AM
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	2/9/2023 12:04:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	62	61		mg/Kg	20	2/8/2023 10:03:39 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-124 0'

Project: East Pecos

Collection Date: 2/3/2023 10:30:00 AM

Lab ID: 2302264-022

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.8		mg/Kg	1	2/10/2023 12:56:06 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/10/2023 12:56:06 AM
Surr: DNOP	99.5	69-147		%Rec	1	2/10/2023 12:56:06 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/9/2023 12:43:00 AM
Surr: BFB	95.4	37.7-212		%Rec	1	2/9/2023 12:43:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/9/2023 12:43:00 AM
Toluene	ND	0.049		mg/Kg	1	2/9/2023 12:43:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/9/2023 12:43:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/9/2023 12:43:00 AM
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	2/9/2023 12:43:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 10:40:53 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-124 2'

Project: East Pecos

Collection Date: 2/3/2023 10:35:00 AM

Lab ID: 2302264-023

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.7		mg/Kg	1	2/10/2023 1:19:53 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/10/2023 1:19:53 AM
Surr: DNOP	94.7	69-147		%Rec	1	2/10/2023 1:19:53 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/9/2023 1:02:00 AM
Surr: BFB	90.2	37.7-212		%Rec	1	2/9/2023 1:02:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/9/2023 1:02:00 AM
Toluene	ND	0.050		mg/Kg	1	2/9/2023 1:02:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/9/2023 1:02:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/9/2023 1:02:00 AM
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	2/9/2023 1:02:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	940	60		mg/Kg	20	2/8/2023 10:53:17 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-125 0'

Project: East Pecos

Collection Date: 2/3/2023 10:40:00 AM

Lab ID: 2302264-024

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.7		mg/Kg	1	2/10/2023 1:43:47 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/10/2023 1:43:47 AM
Surr: DNOP	122	69-147		%Rec	1	2/10/2023 1:43:47 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/9/2023 1:22:00 AM
Surr: BFB	90.9	37.7-212		%Rec	1	2/9/2023 1:22:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/9/2023 1:22:00 AM
Toluene	ND	0.047		mg/Kg	1	2/9/2023 1:22:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	2/9/2023 1:22:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	2/9/2023 1:22:00 AM
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	2/9/2023 1:22:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	100	60		mg/Kg	20	2/8/2023 11:05:42 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-125 2'

Project: East Pecos

Collection Date: 2/3/2023 10:45:00 AM

Lab ID: 2302264-025

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	10		mg/Kg	1	2/10/2023 2:07:35 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/10/2023 2:07:35 AM
Surr: DNOP	117	69-147		%Rec	1	2/10/2023 2:07:35 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/9/2023 1:42:00 AM
Surr: BFB	90.7	37.7-212		%Rec	1	2/9/2023 1:42:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/9/2023 1:42:00 AM
Toluene	ND	0.049		mg/Kg	1	2/9/2023 1:42:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/9/2023 1:42:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/9/2023 1:42:00 AM
Surr: 4-Bromofluorobenzene	91.5	70-130		%Rec	1	2/9/2023 1:42:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	1200	60		mg/Kg	20	2/8/2023 11:18:07 PM

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

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

CLIENT: Devon Energy

Client Sample ID: BH22-125 4'

Project: East Pecos

Collection Date: 2/3/2023 10:50:00 AM

Lab ID: 2302264-026

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JME
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	2/10/2023 2:31:35 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/10/2023 2:31:35 AM
Surr: DNOP	118	69-147		%Rec	1	2/10/2023 2:31:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/9/2023 2:01:00 AM
Surr: BFB	96.0	37.7-212		%Rec	1	2/9/2023 2:01:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	2/9/2023 2:01:00 AM
Toluene	ND	0.046		mg/Kg	1	2/9/2023 2:01:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	2/9/2023 2:01:00 AM
Xylenes, Total	ND	0.091		mg/Kg	1	2/9/2023 2:01:00 AM
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	2/9/2023 2:01:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	140	60		mg/Kg	20	2/8/2023 11:30:31 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-126 0'

Project: East Pecos

Collection Date: 2/3/2023 10:55:00 AM

Lab ID: 2302264-027

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.0		mg/Kg	1	2/10/2023 3:19:35 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/10/2023 3:19:35 AM
Surr: DNOP	106	69-147		%Rec	1	2/10/2023 3:19:35 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/9/2023 2:34:00 PM
Surr: BFB	96.7	37.7-212		%Rec	1	2/9/2023 2:34:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/9/2023 2:34:00 PM
Toluene	ND	0.047		mg/Kg	1	2/9/2023 2:34:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/9/2023 2:34:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	2/9/2023 2:34:00 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	2/9/2023 2:34:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: NAI
Chloride	ND	60		mg/Kg	20	2/8/2023 11:42:55 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-126 2'

Project: East Pecos

Collection Date: 2/3/2023 11:00:00 AM

Lab ID: 2302264-028

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.1		mg/Kg	1	2/10/2023 3:43:32 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/10/2023 3:43:32 AM
Surr: DNOP	132	69-147		%Rec	1	2/10/2023 3:43:32 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/9/2023 2:54:00 PM
Surr: BFB	94.9	37.7-212		%Rec	1	2/9/2023 2:54:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	2/9/2023 2:54:00 PM
Toluene	ND	0.046		mg/Kg	1	2/9/2023 2:54:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	2/9/2023 2:54:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	2/9/2023 2:54:00 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	2/9/2023 2:54:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	1000	60		mg/Kg	20	2/8/2023 5:08:36 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Devon Energy

**Client Sample ID:** BH22-127 0'

**Project:** East Pecos

**Collection Date:** 2/3/2023 11:05:00 AM

**Lab ID:** 2302264-029

**Matrix:** SOIL

Received Date: 2/7/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/10/2023 4:07:35 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/10/2023 4:07:35 AM
Surr: DNOP	95.9	69-147		%Rec	1	2/10/2023 4:07:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/9/2023 3:14:00 PM
Surr: BFB	96.8	37.7-212		%Rec	1	2/9/2023 3:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/9/2023 3:14:00 PM
Toluene	ND	0.047		mg/Kg	1	2/9/2023 3:14:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/9/2023 3:14:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	2/9/2023 3:14:00 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	2/9/2023 3:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	64	60		mg/Kg	20	2/8/2023 5:21:00 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	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.		

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-127 2'

Project: East Pecos

Collection Date: 2/3/2023 11:10:00 AM

Lab ID: 2302264-030

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.9		mg/Kg	1	2/10/2023 4:29:45 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/10/2023 4:29:45 AM
Surr: DNOP	95.9	69-147		%Rec	1	2/10/2023 4:29:45 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/9/2023 3:33:00 PM
Surr: BFB	98.8	37.7-212		%Rec	1	2/9/2023 3:33:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	2/9/2023 3:33:00 PM
Toluene	ND	0.046		mg/Kg	1	2/9/2023 3:33:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	2/9/2023 3:33:00 PM
Xylenes, Total	ND	0.091		mg/Kg	1	2/9/2023 3:33:00 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	2/9/2023 3:33:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	110	60		mg/Kg	20	2/8/2023 6:23:05 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-128 0'

Project: East Pecos

Collection Date: 2/3/2023 11:15:00 AM

Lab ID: 2302264-031

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	10		mg/Kg	1	2/10/2023 4:55:31 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/10/2023 4:55:31 AM
Surr: DNOP	112	69-147		%Rec	1	2/10/2023 4:55:31 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/9/2023 3:53:00 PM
Surr: BFB	91.2	37.7-212		%Rec	1	2/9/2023 3:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/9/2023 3:53:00 PM
Toluene	ND	0.049		mg/Kg	1	2/9/2023 3:53:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/9/2023 3:53:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/9/2023 3:53:00 PM
Surr: 4-Bromofluorobenzene	91.5	70-130		%Rec	1	2/9/2023 3:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	ND	60		mg/Kg	20	2/8/2023 7:00:18 PM

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

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

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-128 2'

Project: East Pecos

Collection Date: 2/3/2023 11:20:00 AM

Lab ID: 2302264-032

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.8		mg/Kg	1	2/10/2023 5:19:23 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/10/2023 5:19:23 AM
Surr: DNOP	106	69-147		%Rec	1	2/10/2023 5:19:23 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	620	60		mg/Kg	20	2/8/2023 7:12:43 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 3:57:19 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 3:57:19 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 3:57:19 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 3:57:19 PM
Surr: 1,2-Dichloroethane-d4	118	70-130		%Rec	1	2/8/2023 3:57:19 PM
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	2/8/2023 3:57:19 PM
Surr: Dibromofluoromethane	107	70-130		%Rec	1	2/8/2023 3:57:19 PM
Surr: Toluene-d8	107	70-130		%Rec	1	2/8/2023 3:57:19 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 3:57:19 PM
Surr: BFB	106	70-130		%Rec	1	2/8/2023 3:57:19 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-129 0'

Project: East Pecos

Collection Date: 2/3/2023 11:25:00 AM

Lab ID: 2302264-033

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	2/10/2023 5:43:28 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/10/2023 5:43:28 AM
Surr: DNOP	102	69-147		%Rec	1	2/10/2023 5:43:28 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	120	60		mg/Kg	20	2/8/2023 7:25:08 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 5:19:09 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 5:19:09 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 5:19:09 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 5:19:09 PM
Surr: 1,2-Dichloroethane-d4	134	70-130	S	%Rec	1	2/8/2023 5:19:09 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	2/8/2023 5:19:09 PM
Surr: Dibromofluoromethane	117	70-130		%Rec	1	2/8/2023 5:19:09 PM
Surr: Toluene-d8	104	70-130		%Rec	1	2/8/2023 5:19:09 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 5:19:09 PM
Surr: BFB	112	70-130		%Rec	1	2/8/2023 5:19:09 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-129 2'

Project: East Pecos

Collection Date: 2/3/2023 11:30:00 AM

Lab ID: 2302264-034

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.0		mg/Kg	1	2/10/2023 6:07:24 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/10/2023 6:07:24 AM
Surr: DNOP	101	69-147		%Rec	1	2/10/2023 6:07:24 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	880	60		mg/Kg	20	2/8/2023 7:37:33 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 6:40:50 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 6:40:50 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 6:40:50 PM
Xylenes, Total	ND	0.096		mg/Kg	1	2/8/2023 6:40:50 PM
Surr: 1,2-Dichloroethane-d4	124	70-130		%Rec	1	2/8/2023 6:40:50 PM
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	2/8/2023 6:40:50 PM
Surr: Dibromofluoromethane	116	70-130		%Rec	1	2/8/2023 6:40:50 PM
Surr: Toluene-d8	105	70-130		%Rec	1	2/8/2023 6:40:50 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 6:40:50 PM
Surr: BFB	116	70-130		%Rec	1	2/8/2023 6:40:50 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-130 0'

Project: East Pecos

Collection Date: 2/3/2023 11:35:00 AM

Lab ID: 2302264-035

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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)	15000	180		mg/Kg	20	2/9/2023 6:45:53 AM
Motor Oil Range Organics (MRO)	8000	920		mg/Kg	20	2/9/2023 6:45:53 AM
Surr: DNOP	0	69-147	S	%Rec	20	2/9/2023 6:45:53 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	12000	600		mg/Kg	200	2/9/2023 9:28:32 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.12		mg/Kg	5	2/8/2023 7:08:01 PM
Toluene	ND	0.23		mg/Kg	5	2/8/2023 7:08:01 PM
Ethylbenzene	ND	0.23		mg/Kg	5	2/8/2023 7:08:01 PM
Xylenes, Total	0.59	0.47		mg/Kg	5	2/8/2023 7:08:01 PM
Surr: 1,2-Dichloroethane-d4	126	70-130		%Rec	5	2/8/2023 7:08:01 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	5	2/8/2023 7:08:01 PM
Surr: Dibromofluoromethane	117	70-130		%Rec	5	2/8/2023 7:08:01 PM
Surr: Toluene-d8	109	70-130		%Rec	5	2/8/2023 7:08:01 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	38	23		mg/Kg	5	2/8/2023 7:08:01 PM
Surr: BFB	125	70-130		%Rec	5	2/8/2023 7:08:01 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	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 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-130 2'

Project: East Pecos

Collection Date: 2/3/2023 11:40:00 AM

Lab ID: 2302264-036

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: JME
Diesel Range Organics (DRO)	120	9.2		mg/Kg	1	2/10/2023 6:31:30 AM
Motor Oil Range Organics (MRO)	66	46		mg/Kg	1	2/10/2023 6:31:30 AM
Surr: DNOP	101	69-147		%Rec	1	2/10/2023 6:31:30 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	5000	300		mg/Kg	100	2/9/2023 9:40:56 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 7:35:13 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 7:35:13 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 7:35:13 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/8/2023 7:35:13 PM
Surr: 1,2-Dichloroethane-d4	132	70-130	S	%Rec	1	2/8/2023 7:35:13 PM
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	2/8/2023 7:35:13 PM
Surr: Dibromofluoromethane	116	70-130		%Rec	1	2/8/2023 7:35:13 PM
Surr: Toluene-d8	105	70-130		%Rec	1	2/8/2023 7:35:13 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 7:35:13 PM
Surr: BFB	113	70-130		%Rec	1	2/8/2023 7:35:13 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	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.		

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## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-130 4'

Project: East Pecos

Collection Date: 2/3/2023 11:45:00 AM

Lab ID: 2302264-037

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.7		mg/Kg	1	2/10/2023 6:55:30 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/10/2023 6:55:30 AM
Surr: DNOP	96.6	69-147		%Rec	1	2/10/2023 6:55:30 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	4500	150		mg/Kg	50	2/9/2023 9:53:20 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 8:02:23 PM
Toluene	ND	0.049		mg/Kg	1	2/8/2023 8:02:23 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/8/2023 8:02:23 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/8/2023 8:02:23 PM
Surr: 1,2-Dichloroethane-d4	119	70-130		%Rec	1	2/8/2023 8:02:23 PM
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	2/8/2023 8:02:23 PM
Surr: Dibromofluoromethane	120	70-130		%Rec	1	2/8/2023 8:02:23 PM
Surr: Toluene-d8	110	70-130		%Rec	1	2/8/2023 8:02:23 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/8/2023 8:02:23 PM
Surr: BFB	118	70-130		%Rec	1	2/8/2023 8:02:23 PM

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

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



## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-131 0'

Project: East Pecos

Collection Date: 2/3/2023 11:50:00 AM

Lab ID: 2302264-038

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: JME
Diesel Range Organics (DRO)	74	9.2		mg/Kg	1	2/10/2023 7:19:40 AM
Motor Oil Range Organics (MRO)	48	46		mg/Kg	1	2/10/2023 7:19:40 AM
Surr: DNOP	107	69-147		%Rec	1	2/10/2023 7:19:40 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	4900	150		mg/Kg	50	2/9/2023 10:05:44 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 8:29:32 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 8:29:32 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 8:29:32 PM
Xylenes, Total	ND	0.095		mg/Kg	1	2/8/2023 8:29:32 PM
Surr: 1,2-Dichloroethane-d4	125	70-130		%Rec	1	2/8/2023 8:29:32 PM
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	2/8/2023 8:29:32 PM
Surr: Dibromofluoromethane	119	70-130		%Rec	1	2/8/2023 8:29:32 PM
Surr: Toluene-d8	104	70-130		%Rec	1	2/8/2023 8:29:32 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 8:29:32 PM
Surr: BFB	118	70-130		%Rec	1	2/8/2023 8:29:32 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-131 2'

Project: East Pecos

Collection Date: 2/3/2023 11:55:00 AM

Lab ID: 2302264-039

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	9.2		mg/Kg	1	2/10/2023 10:56:02 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/10/2023 10:56:02 AM
Surr: DNOP	90.5	69-147		%Rec	1	2/10/2023 10:56:02 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	9400	600		mg/Kg	200	2/9/2023 2:22:16 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 8:56:40 PM
Toluene	ND	0.048		mg/Kg	1	2/8/2023 8:56:40 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/8/2023 8:56:40 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/8/2023 8:56:40 PM
Surr: 1,2-Dichloroethane-d4	134	70-130	S	%Rec	1	2/8/2023 8:56:40 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	2/8/2023 8:56:40 PM
Surr: Dibromofluoromethane	121	70-130		%Rec	1	2/8/2023 8:56:40 PM
Surr: Toluene-d8	105	70-130		%Rec	1	2/8/2023 8:56:40 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/8/2023 8:56:40 PM
Surr: BFB	116	70-130		%Rec	1	2/8/2023 8:56:40 PM

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

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

## Analytical Report

Lab Order 2302264

Date Reported: 2/13/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH22-131 4'

Project: East Pecos

Collection Date: 2/3/2023 12:00:00 PM

Lab ID: 2302264-040

Matrix: SOIL

Received Date: 2/7/2023 7:50:00 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	8.5		mg/Kg	1	2/10/2023 12:08:07 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/10/2023 12:08:07 PM
Surr: DNOP	90.2	69-147		%Rec	1	2/10/2023 12:08:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JMT
Chloride	9300	600		mg/Kg	200	2/9/2023 2:34:41 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/8/2023 9:23:49 PM
Toluene	ND	0.047		mg/Kg	1	2/8/2023 9:23:49 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/8/2023 9:23:49 PM
Xylenes, Total	ND	0.095		mg/Kg	1	2/8/2023 9:23:49 PM
Surr: 1,2-Dichloroethane-d4	126	70-130		%Rec	1	2/8/2023 9:23:49 PM
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	2/8/2023 9:23:49 PM
Surr: Dibromofluoromethane	117	70-130		%Rec	1	2/8/2023 9:23:49 PM
Surr: Toluene-d8	108	70-130		%Rec	1	2/8/2023 9:23:49 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/8/2023 9:23:49 PM
Surr: BFB	118	70-130		%Rec	1	2/8/2023 9:23:49 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical 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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: <b>MB-73076</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73076</b>	RunNo: <b>94475</b>								
Prep Date: <b>2/8/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3414519</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73076</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73076</b>	RunNo: <b>94475</b>								
Prep Date: <b>2/8/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3414520</b> Units: <b>mg/Kg</b>								
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			

Sample ID: <b>MB-73077</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73077</b>	RunNo: <b>94475</b>								
Prep Date: <b>2/8/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3414551</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73077</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73077</b>	RunNo: <b>94475</b>								
Prep Date: <b>2/8/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3414552</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Sample ID: <b>MB-73088</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73088</b>	RunNo: <b>94479</b>								
Prep Date: <b>2/8/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3415035</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73088</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73088</b>	RunNo: <b>94479</b>								
Prep Date: <b>2/8/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3415036</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	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 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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: MB-73097		SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID: PBS		Batch ID: 73097			RunNo: 94508					
Prep Date: 2/9/2023		Analysis Date: 2/9/2023			SeqNo: 3415573		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-73097		SampType: LCS			TestCode: EPA Method 300.0: Anions					
Client ID: LCSS		Batch ID: 73097			RunNo: 94508					
Prep Date: 2/9/2023		Analysis Date: 2/9/2023			SeqNo: 3415574		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.0	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 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

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## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: LCS-73062	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73062	RunNo: 94502								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3415581		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	116	61.9	130			
Surr: DNOP	5.7		5.000		114	69	147			

Sample ID: 2302264-019AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-122 4'	Batch ID: 73065	RunNo: 94521								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3416219		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	9.4	47.13	0	77.7	54.2	135			
Surr: DNOP	3.6		4.713		76.1	69	147			

Sample ID: 2302264-019AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-122 4'	Batch ID: 73065	RunNo: 94521								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3416220		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.1	45.62	0	89.6	54.2	135	11.1	29.2	
Surr: DNOP	3.9		4.562		86.0	69	147	0	0	

Sample ID: LCS-73072	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73072	RunNo: 94521								
Prep Date: 2/8/2023	Analysis Date: 2/10/2023	SeqNo: 3416239		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	105	61.9	130			
Surr: DNOP	5.4		5.000		109	69	147			

Sample ID: MB-73072	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73072	RunNo: 94521								
Prep Date: 2/8/2023	Analysis Date: 2/10/2023	SeqNo: 3416240		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.4	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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: MB-73062	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73062	RunNo: 94502								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3416376			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		130	69	147			

Sample ID: MB-73065	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73065	RunNo: 94502								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3416377			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		115	69	147			

Sample ID: LCS-73065	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73065	RunNo: 94502								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3416378			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	61.9	130			
Surr: DNOP	6.0		5.000		120	69	147			

Sample ID: MB-73042	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73042	RunNo: 94502								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3416464			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		121	69	147			

Sample ID: LCS-73042	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73042	RunNo: 94502								
Prep Date: 2/7/2023	Analysis Date: 2/9/2023	SeqNo: 3416465			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.9		5.000		138	69	147			

Sample ID: MB-73034	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73034	RunNo: 94521								
Prep Date: 2/6/2023	Analysis Date: 2/10/2023	SeqNo: 3417017			Units: %Rec					
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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: MB-73034	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73034	RunNo: 94521								
Prep Date: 2/6/2023	Analysis Date: 2/10/2023	SeqNo: 3417017			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		88.9	69	147			

Sample ID: 2302264-039AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-131 2'	Batch ID: 73072	RunNo: 94521								
Prep Date: 2/8/2023	Analysis Date: 2/10/2023	SeqNo: 3417020			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.5	47.30	0	93.7	54.2	135			
Surr: DNOP	4.5		4.730		95.9	69	147			

Sample ID: 2302264-039AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-131 2'	Batch ID: 73072	RunNo: 94521								
Prep Date: 2/8/2023	Analysis Date: 2/10/2023	SeqNo: 3417021			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.9	49.41	0	89.2	54.2	135	0.556	29.2	
Surr: DNOP	4.5		4.941		90.9	69	147	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 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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: <b>lcs-73053</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>73053</b>				RunNo: <b>94468</b>					
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>				SeqNo: <b>3413852</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	98.5	72.3	137			
Surr: BFB	1100		1000		112	37.7	212			

Sample ID: <b>mb-73053</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>PBS</b>	Batch ID: <b>73053</b>				RunNo: <b>94468</b>					
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>				SeqNo: <b>3413853</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		99.5	37.7	212			

Sample ID: <b>lcs-73057</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>73057</b>				RunNo: <b>94465</b>					
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>				SeqNo: <b>3414659</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	93.7	72.3	137			
Surr: BFB	1000		1000		102	37.7	212			

Sample ID: <b>mb-73057</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>PBS</b>	Batch ID: <b>73057</b>				RunNo: <b>94465</b>					
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>				SeqNo: <b>3414660</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	990		1000		98.7	37.7	212			

Sample ID: <b>2302264-012ams</b>	SampType: <b>MS</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>BH22-120 0'</b>	Batch ID: <b>73057</b>				RunNo: <b>94465</b>					
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>				SeqNo: <b>3414662</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	4.6	23.21	0	103	70	130			
Surr: BFB	970		928.5		104	37.7	212			

Sample ID: <b>2302264-012amsd</b>	SampType: <b>MSD</b>				TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>BH22-120 0'</b>	Batch ID: <b>73057</b>				RunNo: <b>94465</b>					
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>				SeqNo: <b>3414663</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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: 2302264-012amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH22-120 0'		Batch ID: 73057		RunNo: 94465						
Prep Date: 2/7/2023		Analysis Date: 2/8/2023		SeqNo: 3414663		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.26	0	95.7	70	130	6.67	20	
Surr: BFB	970		930.2		104	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 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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: <b>LCS-73053</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73053</b>		RunNo: <b>94468</b>							
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>		SeqNo: <b>3413860</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	84.9	80	120			
Toluene	0.86	0.050	1.000	0	86.1	80	120			
Ethylbenzene	0.88	0.050	1.000	0	87.5	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.4	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		85.5	70	130			

Sample ID: <b>mb-73053</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73053</b>		RunNo: <b>94468</b>							
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>		SeqNo: <b>3413861</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	0.84		1.000		84.1	70	130			

Sample ID: <b>lcs-73057</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73057</b>		RunNo: <b>94465</b>							
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>		SeqNo: <b>3414751</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.5	80	120			
Toluene	0.94	0.050	1.000	0	93.5	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.8	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	70	130			

Sample ID: <b>mb-73057</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73057</b>		RunNo: <b>94465</b>							
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>		SeqNo: <b>3414752</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	0.97		1.000		96.7	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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: 2302264-013ams		SampType: MS			TestCode: EPA Method 8021B: Volatiles					
Client ID: BH22-120 2'		Batch ID: 73057			RunNo: 94465					
Prep Date: 2/7/2023		Analysis Date: 2/8/2023			SeqNo: 3414755		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	0.9814	0	98.5	68.8	120			
Toluene	0.97	0.049	0.9814	0	98.8	73.6	124			
Ethylbenzene	0.97	0.049	0.9814	0	98.7	72.7	129			
Xylenes, Total	2.9	0.098	2.944	0	98.7	75.7	126			
Surr: 4-Bromofluorobenzene	0.90		0.9814		91.9	70	130			

Sample ID: 2302264-013amsd		SampType: MSD			TestCode: EPA Method 8021B: Volatiles					
Client ID: BH22-120 2'		Batch ID: 73057			RunNo: 94465					
Prep Date: 2/7/2023		Analysis Date: 2/8/2023			SeqNo: 3414756		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	0.9862	0	97.2	68.8	120	0.838	20	
Toluene	0.96	0.049	0.9862	0	97.2	73.6	124	1.13	20	
Ethylbenzene	0.96	0.049	0.9862	0	97.0	72.7	129	1.18	20	
Xylenes, Total	2.9	0.099	2.959	0	97.2	75.7	126	1.09	20	
Surr: 4-Bromofluorobenzene	0.92		0.9862		93.2	70	130	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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

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

WO#: 2302264

13-Feb-23

**Client:** Devon Energy**Project:** East Pecos

Sample ID: <b>2302264-033ams</b>	SampType: <b>MS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BH22-129 0'</b>	Batch ID: <b>73058</b>	RunNo: <b>94486</b>								
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3414308</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9756	0	113	75.8	123			
Toluene	1.1	0.049	0.9756	0	115	68.3	130			
Ethylbenzene	1.1	0.049	0.9756	0	115	76.6	132			
Xylenes, Total	3.6	0.098	2.927	0.02159	122	74.7	132			
Surr: 1,2-Dichloroethane-d4	0.66		0.4878		135	70	130			S
Surr: 4-Bromofluorobenzene	0.59		0.4878		122	70	130			
Surr: Dibromofluoromethane	0.60		0.4878		124	70	130			
Surr: Toluene-d8	0.54		0.4878		112	70	130			

Sample ID: <b>2302264-033amsd</b>	SampType: <b>MS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BH22-129 0'</b>	Batch ID: <b>73058</b>	RunNo: <b>94486</b>								
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3414309</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9747	0	106	75.8	123	6.84	0	
Toluene	1.0	0.049	0.9747	0	103	68.3	130	11.2	0	
Ethylbenzene	1.1	0.049	0.9747	0	111	76.6	132	3.18	0	
Xylenes, Total	3.4	0.097	2.924	0.02159	116	74.7	132	5.16	0	
Surr: 1,2-Dichloroethane-d4	0.57		0.4873		117	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.53		0.4873		109	70	130	0	0	
Surr: Dibromofluoromethane	0.51		0.4873		105	70	130	0	0	
Surr: Toluene-d8	0.48		0.4873		98.6	70	130	0	0	

Sample ID: <b>LCS-73058</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>73058</b>	RunNo: <b>94486</b>								
Prep Date: <b>2/7/2023</b>	Analysis Date: <b>2/8/2023</b>	SeqNo: <b>3414319</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	94.9	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	0.61		0.5000		123	70	130			
Surr: 4-Bromofluorobenzene	0.56		0.5000		112	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.53		0.5000		106	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#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: mb-73058	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 73058	RunNo: 94486								
Prep Date: 2/7/2023	Analysis Date: 2/8/2023	SeqNo: 3414320		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: 1,2-Dichloroethane-d4	0.60		0.5000		121	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		120	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.54		0.5000		109	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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2302264

13-Feb-23

Client: Devon Energy

Project: East Pecos

Sample ID: 2302264-032ams	SampType: MS	TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: BH22-128 2'	Batch ID: 73058	RunNo: 94486
Prep Date: 2/7/2023	Analysis Date: 2/8/2023	SeqNo: 3414291 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	31	4.9 24.44 0 128 65.9 123 S
Surr: BFB	540	488.8 110 70 130

Sample ID: 2302264-032amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: BH22-128 2'	Batch ID: 73058	RunNo: 94486
Prep Date: 2/7/2023	Analysis Date: 2/8/2023	SeqNo: 3414292 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	30	4.9 24.37 0 122 65.9 123 4.71 20
Surr: BFB	550	487.3 114 70 130 0 0

Sample ID: LCS-73058	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: LCSS	Batch ID: 73058	RunNo: 94486
Prep Date: 2/7/2023	Analysis Date: 2/8/2023	SeqNo: 3414303 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	27	5.0 25.00 0 108 70 130
Surr: BFB	580	500.0 116 70 130

Sample ID: mb-73058	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: PBS	Batch ID: 73058	RunNo: 94486
Prep Date: 2/7/2023	Analysis Date: 2/8/2023	SeqNo: 3414304 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	570	500.0 114 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: Vertex Resources  
Services, Inc.

Work Order Number: 2302264

RcptNo: 1

Received By: Juan Rojas 2/7/2023 7:50:00 AM

Completed By: Sean Livingston 2/7/2023 8:22:42 AM

Reviewed By: *JA* 2-7-23

*Juan Rojas*

*Sean Livingston*

### 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* 2/7/23

### 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.2	Good	Not Present	Morty		

## Chain-of-Custody Record

Client: Devon (Vertex)

Mailing Address: On File

Phone #: ↓

email or Fax#: ↓

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type) \_\_\_\_\_

Date	Time	Matrix	Sample Name
12/23	12:05	Soil	BH22-07 0'
12/23	12:10		BH22-07 2'
12/23	12:15		BH22-07 4'
12/23	9:00		BH22-116 0'
12/23	9:05		BH22-116 2'
12/23	9:10		BH22-117 0'
12/23	9:15		BH22-117 2'
12/23	9:20		BH22-118 0'
12/23	9:25		BH22-118 2'
12/23	9:30		BH22-119 0'
12/23	9:35		BH22-119 2'
12/23	9:40		BH22-120 0'

Date: 12/23 Time: 5:00 Relinquished by: Hunter Klein

Date: 12/23 Time: 9:00 Relinquished by: Monica Peppin

Turn-Around Time:

☐ Standard ☒ Rush 48hr

Project Name:

East Pecos

Project #:

22E-03982

Project Manager:

Monica Peppin

Sampler:

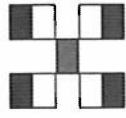
Hunter KleinOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 5.4-0.2 = 5.2 (°C)

Container Type and #	Preservative Type	HEAL No.
H02	Ice	2302264

001	002	003	004	005	006	007	008	009	010	011	012
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Received by: Monica Peppin Date: 12/23 Time: 9:15

Received by: Monica Peppin Date: 12/23 Time: 7:50


**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl <sup>-</sup> , F <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , PO <sub>4</sub> <sup>3-</sup> , SO <sub>4</sub> <sup>2-</sup>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
----------------------------	---------------------------	--------------------	--------------------------	---------------	--	------------	-----------------	---------------------------------

Remarks:

CC Monica Peppin





## Chain-of-Custody Record

Client: DevonMailing Address: On File (Vertex)Phone #:                       
email or Fax#:                     QA/QC Package:                       
☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance  
☐ NELAC ☐ Other                     ☐ EDD (Type)                     

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
2/3/23	10:45	Soil	BH22-125 2'	H02	Ice	025
	10:50		BH22-125 4'			026
	10:55		BH22-126 0'			027
	11:00		BH22-126 2'			028
	11:05		BH22-127 0'			029
	11:10		BH22-127 2'			030
	11:15		BH22-128 0'			031
	11:20		BH22-128 2'			032
	11:25		BH22-129 0'			033
	11:30		BH22-129 2'			034
	11:35		BH22-130 0'			035
	11:40		BH22-130 2'			036

Date:	Time:	Relinquished by:	Received by:	Via:	Date:	Time
2/3/23	5:00 PM	<u>Hunter Klein</u>	<u>                    </u>		2/13/23	2:15
Date:	Time:	Relinquished by:	Received by:	Via:	Date:	Time
2/23/23	1:00	<u>                    </u>	<u>                    </u>		2/23/23	7:50

Turn-Around Time:

☐ Standard ☒ Rush 48 hr

Project Name:

East Pecos

Project #:

22E-03982

Project Manager:

Monica Peppin

Sampler:

Hunter KleinOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 5.4-1.2 = 5.2 (°C)

Analysis Request

8081 Pesticides/8082 PCB's

TPH:8015D(GRO / DRO / MRO)

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

8270 (Semi-VOA)

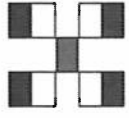
8260 (VOA)

Cd, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

Total Coliform (Present/Absent)

BTEX / MTBE / TMB's (8021)

Remarks:

CC Monica PeppinHALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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





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 28, 2023

Kent Stallings

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: East Pecos Pipeline Spill

OrderNo.: 2303A37

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 11 sample(s) on 3/21/2023 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 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 30'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 8:45:00 AM

Lab ID: 2303A37-001

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/22/2023 4:36:42 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/22/2023 4:36:42 PM
Surr: DNOP	88.7	69-147		%Rec	1	3/22/2023 4:36:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2023 5:06:31 PM
Surr: BFB	101	37.7-212		%Rec	1	3/22/2023 5:06:31 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/22/2023 5:06:31 PM
Toluene	ND	0.049		mg/Kg	1	3/22/2023 5:06:31 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2023 5:06:31 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/22/2023 5:06:31 PM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	3/22/2023 5:06:31 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	2200	150		mg/Kg	50	3/22/2023 2:19:19 PM

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

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

## Analytical Report

Lab Order 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 40'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 9:00:00 AM

Lab ID: 2303A37-002

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/22/2023 4:47:37 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	3/22/2023 4:47:37 PM
Surr: DNOP	89.8	69-147		%Rec	1	3/22/2023 4:47:37 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2023 5:30:16 PM
Surr: BFB	103	37.7-212		%Rec	1	3/22/2023 5:30:16 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/22/2023 5:30:16 PM
Toluene	ND	0.048		mg/Kg	1	3/22/2023 5:30:16 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2023 5:30:16 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/22/2023 5:30:16 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	3/22/2023 5:30:16 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	400	60		mg/Kg	20	3/21/2023 8:32:56 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	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.		

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## Analytical Report

Lab Order 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 45'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 9:30:00 AM

Lab ID: 2303A37-003

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/22/2023 4:58:30 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	3/22/2023 4:58:30 PM
Surr: DNOP	90.7	69-147		%Rec	1	3/22/2023 4:58:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2023 5:54:04 PM
Surr: BFB	100	37.7-212		%Rec	1	3/22/2023 5:54:04 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/22/2023 5:54:04 PM
Toluene	ND	0.049		mg/Kg	1	3/22/2023 5:54:04 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2023 5:54:04 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/22/2023 5:54:04 PM
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	3/22/2023 5:54:04 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	450	60		mg/Kg	20	3/21/2023 8:45:21 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	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 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 50'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 10:00:00 AM

Lab ID: 2303A37-004

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/22/2023 5:09:22 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/22/2023 5:09:22 PM
Surr: DNOP	91.4	69-147		%Rec	1	3/22/2023 5:09:22 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/22/2023 6:17:48 PM
Surr: BFB	101	37.7-212		%Rec	1	3/22/2023 6:17:48 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/22/2023 6:17:48 PM
Toluene	ND	0.047		mg/Kg	1	3/22/2023 6:17:48 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/22/2023 6:17:48 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/22/2023 6:17:48 PM
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	3/22/2023 6:17:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	290	60		mg/Kg	20	3/21/2023 8:57:46 PM

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

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

## Analytical Report

Lab Order 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 54 '

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 10:00:00 AM

Lab ID: 2303A37-005

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/22/2023 5:20:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/22/2023 5:20:12 PM
Surr: DNOP	91.4	69-147		%Rec	1	3/22/2023 5:20:12 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2023 6:41:28 PM
Surr: BFB	100	37.7-212		%Rec	1	3/22/2023 6:41:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/22/2023 6:41:28 PM
Toluene	ND	0.049		mg/Kg	1	3/22/2023 6:41:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2023 6:41:28 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/22/2023 6:41:28 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	3/22/2023 6:41:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	300	60		mg/Kg	20	3/21/2023 9:59:48 PM

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

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

## Analytical Report

Lab Order 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 56'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 10:25:00 AM

Lab ID: 2303A37-006

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/22/2023 5:31:02 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/22/2023 5:31:02 PM
Surr: DNOP	92.2	69-147		%Rec	1	3/22/2023 5:31:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2023 7:05:10 PM
Surr: BFB	101	37.7-212		%Rec	1	3/22/2023 7:05:10 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	3/22/2023 7:05:10 PM
Toluene	ND	0.049		mg/Kg	1	3/22/2023 7:05:10 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2023 7:05:10 PM
Xylenes, Total	ND	0.099		mg/Kg	1	3/22/2023 7:05:10 PM
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	3/22/2023 7:05:10 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	290	60		mg/Kg	20	3/21/2023 10:12:13 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	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 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 59'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 10:25:00 AM

Lab ID: 2303A37-007

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/23/2023 10:26:07 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/23/2023 10:26:07 AM
Surr: DNOP	94.0	69-147		%Rec	1	3/23/2023 10:26:07 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/22/2023 6:39:00 PM
Surr: BFB	85.7	37.7-212		%Rec	1	3/22/2023 6:39:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	3/22/2023 6:39:00 PM
Toluene	ND	0.050		mg/Kg	1	3/22/2023 6:39:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/22/2023 6:39:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	3/22/2023 6:39:00 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	3/22/2023 6:39:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	270	60		mg/Kg	20	3/22/2023 3:21:22 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	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.		

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## Analytical Report

Lab Order 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 64'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 10:50:00 AM

Lab ID: 2303A37-008

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>PRD</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/23/2023 10:36:31 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/23/2023 10:36:31 AM
Surr: DNOP	97.2	69-147		%Rec	1	3/23/2023 10:36:31 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/22/2023 7:44:00 PM
Surr: BFB	89.0	37.7-212		%Rec	1	3/22/2023 7:44:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	3/22/2023 7:44:00 PM
Toluene	ND	0.050		mg/Kg	1	3/22/2023 7:44:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/22/2023 7:44:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	3/22/2023 7:44:00 PM
Surr: 4-Bromofluorobenzene	88.2	70-130		%Rec	1	3/22/2023 7:44:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>SNS</b>
Chloride	270	61		mg/Kg	20	3/22/2023 3:33:47 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	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 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 69'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 10:50:00 AM

Lab ID: 2303A37-009

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/23/2023 10:47:00 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/23/2023 10:47:00 AM
Surr: DNOP	87.6	69-147		%Rec	1	3/23/2023 10:47:00 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/22/2023 8:49:00 PM
Surr: BFB	86.4	37.7-212		%Rec	1	3/22/2023 8:49:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	3/22/2023 8:49:00 PM
Toluene	ND	0.050		mg/Kg	1	3/22/2023 8:49:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/22/2023 8:49:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	3/22/2023 8:49:00 PM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	3/22/2023 8:49:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	220	60		mg/Kg	20	3/22/2023 3:46:12 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	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 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 74'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 11:20:00 AM

Lab ID: 2303A37-010

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/23/2023 10:57:27 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/23/2023 10:57:27 AM
Surr: DNOP	84.4	69-147		%Rec	1	3/23/2023 10:57:27 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2023 9:11:00 PM
Surr: BFB	88.7	37.7-212		%Rec	1	3/22/2023 9:11:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	3/22/2023 9:11:00 PM
Toluene	ND	0.049		mg/Kg	1	3/22/2023 9:11:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2023 9:11:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/22/2023 9:11:00 PM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	3/22/2023 9:11:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	210	60		mg/Kg	20	3/22/2023 3:58:36 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	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 2303A37

Date Reported: 3/28/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH22-141 79'

Project: East Pecos Pipeline Spill

Collection Date: 3/17/2023 11:20:00 AM

Lab ID: 2303A37-011

Matrix: SOIL

Received Date: 3/21/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/23/2023 11:07:54 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/23/2023 11:07:54 AM
Surr: DNOP	88.7	69-147		%Rec	1	3/23/2023 11:07:54 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2023 9:32:00 PM
Surr: BFB	88.6	37.7-212		%Rec	1	3/22/2023 9:32:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	3/22/2023 9:32:00 PM
Toluene	ND	0.049		mg/Kg	1	3/22/2023 9:32:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2023 9:32:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/22/2023 9:32:00 PM
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	3/22/2023 9:32:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SNS
Chloride	180	60		mg/Kg	20	3/22/2023 4:11:00 PM

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

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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2303A37

28-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-73849</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73849</b>		RunNo: <b>95467</b>							
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/21/2023</b>		SeqNo: <b>3453504</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.1	90	110			

Sample ID: <b>MB-73870</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73870</b>		RunNo: <b>95466</b>							
Prep Date: <b>3/22/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3454460</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-73870</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73870</b>		RunNo: <b>95466</b>							
Prep Date: <b>3/22/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3454461</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.2	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 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#: 2303A37

28-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>MB-73838</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73838</b>	RunNo: <b>95454</b>								
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>	SeqNo: <b>3453576</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	8.5		10.00		85.2	69	147			

Sample ID: <b>LCS-73838</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73838</b>	RunNo: <b>95454</b>								
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>	SeqNo: <b>3453578</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.1	61.9	130			
Surr: DNOP	4.3		5.000		86.3	69	147			

Sample ID: <b>MB-73862</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>73862</b>	RunNo: <b>95507</b>								
Prep Date: <b>3/22/2023</b>	Analysis Date: <b>3/23/2023</b>	SeqNo: <b>3454629</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	9.6		10.00		96.2	69	147			

Sample ID: <b>LCS-73862</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>73862</b>	RunNo: <b>95507</b>								
Prep Date: <b>3/22/2023</b>	Analysis Date: <b>3/23/2023</b>	SeqNo: <b>3454630</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	119	61.9	130			
Surr: DNOP	6.2		5.000		124	69	147			

Sample ID: <b>2303A37-007AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH22-141 59'</b>	Batch ID: <b>73862</b>	RunNo: <b>95507</b>								
Prep Date: <b>3/22/2023</b>	Analysis Date: <b>3/23/2023</b>	SeqNo: <b>3454632</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	9.4	47.08	0	90.4	54.2	135			
Surr: DNOP	4.2		4.708		89.9	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#: 2303A37

28-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: 2303A37-007AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH22-141 59'	Batch ID: 73862	RunNo: 95507								
Prep Date: 3/22/2023	Analysis Date: 3/23/2023	SeqNo: 3454633 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.3	46.25	0	92.0	54.2	135	0.0736	29.2	
Surr: DNOP	4.3		4.625		94.0	69	147	0	0	

Sample ID: MB-73880	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73880	RunNo: 95507								
Prep Date: 3/22/2023	Analysis Date: 3/23/2023	SeqNo: 3455424 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		100	69	147			

Sample ID: MB-73881	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 73881	RunNo: 95507								
Prep Date: 3/22/2023	Analysis Date: 3/23/2023	SeqNo: 3455426 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	69	147			

Sample ID: LCS-73880	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73880	RunNo: 95507								
Prep Date: 3/22/2023	Analysis Date: 3/23/2023	SeqNo: 3455488 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		106	69	147			

Sample ID: LCS-73881	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 73881	RunNo: 95507								
Prep Date: 3/22/2023	Analysis Date: 3/24/2023	SeqNo: 3455489 Units: %Rec								
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#: 2303A37

28-Mar-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: <b>lcs-73832</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73832</b>		RunNo: <b>95464</b>							
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3453426</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	70	130			
Surr: BFB	2100		1000		213	37.7	212			S

Sample ID: <b>mb-73832</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73832</b>		RunNo: <b>95464</b>							
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3453427</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	1100		1000		105	37.7	212			

Sample ID: <b>lcs-73834</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>73834</b>		RunNo: <b>95490</b>							
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3454506</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	95.4	70	130			
Surr: BFB	2100		1000		207	37.7	212			

Sample ID: <b>mb-73834</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>73834</b>		RunNo: <b>95490</b>							
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3454507</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	870		1000		87.4	37.7	212			

Sample ID: <b>2303A37-007ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-141 59'</b>	Batch ID: <b>73834</b>		RunNo: <b>95490</b>							
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3454509</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	4.9	24.68	0	103	70	130			
Surr: BFB	2000		987.2		205	37.7	212			

Sample ID: <b>2303A37-007amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>BH22-141 59'</b>	Batch ID: <b>73834</b>		RunNo: <b>95490</b>							
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>		SeqNo: <b>3454510</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	4.9	24.68	0	103	70	130			
Surr: BFB	2000		987.2		205	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#: 2303A37

28-Mar-23

Client: Vertex Resources Services, Inc.

Project: East Pecos Pipeline Spill

Sample ID: 2303A37-007amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH22-141 59'		Batch ID: 73834		RunNo: 95490						
Prep Date: 3/21/2023		Analysis Date: 3/22/2023		SeqNo: 3454510		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.73	0	93.8	70	130	9.23	20	
Surr: BFB	2000		989.1		201	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 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#: 2303A37

28-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: <b>LCS-73832</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73832</b>			RunNo: <b>95464</b>						
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>			SeqNo: <b>3453431</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.7	80	120			
Toluene	0.91	0.050	1.000	0	91.5	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: <b>mb-73832</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73832</b>			RunNo: <b>95464</b>						
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>			SeqNo: <b>3453432</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	0.94		1.000		93.7	70	130			

Sample ID: <b>lcs-73834</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>73834</b>			RunNo: <b>95490</b>						
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>			SeqNo: <b>3454533</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.8	80	120			
Toluene	0.90	0.050	1.000	0	90.4	80	120			
Ethylbenzene	0.89	0.050	1.000	0	88.6	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.7	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.1	70	130			

Sample ID: <b>mb-73834</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>73834</b>			RunNo: <b>95490</b>						
Prep Date: <b>3/21/2023</b>	Analysis Date: <b>3/22/2023</b>			SeqNo: <b>3454534</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	0.88		1.000		87.7	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#: 2303A37

28-Mar-23

**Client:** Vertex Resources Services, Inc.**Project:** East Pecos Pipeline Spill

Sample ID: 2303A37-008ams		SampType: MS			TestCode: EPA Method 8021B: Volatiles					
Client ID: BH22-141 64'		Batch ID: 73834			RunNo: 95490					
Prep Date: 3/21/2023		Analysis Date: 3/22/2023			SeqNo: 3454537		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9662	0	91.9	68.8	120			
Toluene	0.90	0.048	0.9662	0	93.5	73.6	124			
Ethylbenzene	0.90	0.048	0.9662	0	93.0	72.7	129			
Xylenes, Total	2.7	0.097	2.899	0	91.8	75.7	126			
Surr: 4-Bromofluorobenzene	0.86		0.9662		89.1	70	130			

Sample ID: 2303A37-008amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: BH22-141 64'	Batch ID: 73834			RunNo: 95490						
Prep Date: 3/21/2023	Analysis Date: 3/22/2023			SeqNo: 3454538			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9785	0	93.1	68.8	120	2.56	20	
Toluene	0.93	0.049	0.9785	0	94.8	73.6	124	2.65	20	
Ethylbenzene	0.92	0.049	0.9785	0	94.0	72.7	129	2.29	20	
Xylenes, Total	2.7	0.098	2.935	0	93.0	75.7	126	2.57	20	
Surr: 4-Bromofluorobenzene	0.88		0.9785		90.0	70	130	0	0	

**Qualifiers:**

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



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

## Sample Log-In Check List

Client Name: Vertex Resources  
Services, Inc.

Work Order Number: 2303A37

RcptNo: 1

Received By: Cheyenne Cason 3/21/2023 7:30:00 AM

Completed By: Tracy Casarrubias 3/21/2023 7:48:41 AM

Reviewed By: *JS* 3-21-23

*Chad*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *JS* 3/21/23

### 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: \_\_\_\_\_

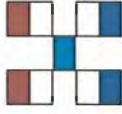
Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good	Yes	Yogi		
2	0.2	Good	Yes	<i>Yogi</i>		

*3/21/23*

**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Turn-Around Time:		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush 48-hr	
Project Name:		East Pecos Pipeline Spill	
Project #:		22E-03982	
Project Manager:		Kent Stallings	
QA/QC Package:		<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	
Accreditation:		<input type="checkbox"/> Az Compliance <input type="checkbox"/> Other	
NELAC			
EDD (Type)			
Sampler:		L. Pullman	
On Ice:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
# of Coolers:		2 0.8 + 0.1 = 0.9	
Cooler Temp (including CFI):		0.1 + 0.1 = 0.2	
Date	Time	Matrix	Sample Name
03/17/23	8:45	Soil	BH22-141 30'
03/17/23	9:00	Soil	BH22-141 40'
03/17/23	9:30	Soil	BH22-141 45'
03/17/23	10:00	Soil	BH22-141 50'
03/17/23	10:00	Soil	BH22-141 54'
03/17/23	10:25	Soil	BH22-141 56'
03/17/23	10:25	Soil	BH22-141 59'
03/17/23	10:50	Soil	BH22-141 64'
03/17/23	10:50	Soil	BH22-141 69'
03/17/23	11:20	Soil	BH22-141 74'
03/17/23	11:20	Soil	BH22-141 79'
Date:	Time:	Relinquished by:	Relinquished by:
3-20-23	07:00	John F. [Signature]	John F. [Signature]
Date:	Time:	Relinquished by:	Relinquished by:
3/20/23	10:00	[Signature]	[Signature]
Received by:		Via:	Date Time
[Signature]			3/20/23 7:00
Received by:		Via:	Date Time
Cmc [Signature]			3/21/23 0730

**Remarks:**Direct bill to Devon, Jim Raley  
cc. kstallings@vertex.ca and mpeppin@vertex.ca for Final Report

V1

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 noted on the analytical report.



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 8/23/2024 5:04:29 PM

## JOB DESCRIPTION

East Pecos Pipeline Spill

## JOB NUMBER

885-9563-1

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  
8/23/2024 5:04:29 PM

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Laboratory Job ID: 885-9563-1

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Definitions/Glossary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: East Pecos Pipeline Spill

Job ID: 885-9563-1

**Job ID: 885-9563-1**

**Eurofins Albuquerque**

### Job Narrative 885-9563-1

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 8/9/2024 8:15 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 2.6°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

Method 8015D\_DRO: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 885-10058 and analytical batch 885-10092 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 laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 885-10121 and analytical batch 885-10172 recovered outside control limits for the following analytes: Diesel Range Organics [C10-C28]. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 0'

Lab Sample ID: 885-9563-1

Date Collected: 08/05/24 11:40

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/09/24 17:40	08/14/24 06:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		35 - 166			08/09/24 17:40	08/14/24 06:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/09/24 17:40	08/14/24 06:26	1
Ethylbenzene	ND		0.047	mg/Kg		08/09/24 17:40	08/14/24 06:26	1
Toluene	ND		0.047	mg/Kg		08/09/24 17:40	08/14/24 06:26	1
Xylenes, Total	ND		0.095	mg/Kg		08/09/24 17:40	08/14/24 06:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145			08/09/24 17:40	08/14/24 06:26	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		08/12/24 09:23	08/12/24 14:44	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		08/12/24 09:23	08/12/24 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			08/12/24 09:23	08/12/24 14:44	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		60	mg/Kg		08/12/24 11:17	08/12/24 18:14	20

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## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 4'

Lab Sample ID: 885-9563-2

Date Collected: 08/05/24 13:05

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/09/24 17:40	08/14/24 06:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			08/09/24 17:40	08/14/24 06:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/09/24 17:40	08/14/24 06:48	1
Ethylbenzene	ND		0.049	mg/Kg		08/09/24 17:40	08/14/24 06:48	1
Toluene	ND		0.049	mg/Kg		08/09/24 17:40	08/14/24 06:48	1
Xylenes, Total	ND		0.098	mg/Kg		08/09/24 17:40	08/14/24 06:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		48 - 145			08/09/24 17:40	08/14/24 06:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		08/12/24 09:23	08/12/24 14:55	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/12/24 09:23	08/12/24 14:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			08/12/24 09:23	08/12/24 14:55	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/12/24 11:17	08/12/24 19:18	20

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## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 10'

Lab Sample ID: 885-9563-3

Date Collected: 08/05/24 13:30

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/09/24 17:40	08/14/24 07:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		35 - 166			08/09/24 17:40	08/14/24 07:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/09/24 17:40	08/14/24 07:10	1
Ethylbenzene	ND		0.048	mg/Kg		08/09/24 17:40	08/14/24 07:10	1
Toluene	ND		0.048	mg/Kg		08/09/24 17:40	08/14/24 07:10	1
Xylenes, Total	ND		0.096	mg/Kg		08/09/24 17:40	08/14/24 07:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		48 - 145			08/09/24 17:40	08/14/24 07:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		08/12/24 09:23	08/12/24 15:05	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/24 09:23	08/12/24 15:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			08/12/24 09:23	08/12/24 15:05	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/12/24 11:17	08/12/24 19:31	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 15'

Lab Sample ID: 885-9563-4

Date Collected: 08/05/24 14:05

Matrix: Solid

Date Received: 08/09/24 08:15

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		08/09/24 17:40	08/14/24 07:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		35 - 166			08/09/24 17:40	08/14/24 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		08/09/24 17:40	08/14/24 07:31	1	
Ethylbenzene	ND		0.048	mg/Kg		08/09/24 17:40	08/14/24 07:31	1	
Toluene	ND		0.048	mg/Kg		08/09/24 17:40	08/14/24 07:31	1	
Xylenes, Total	ND		0.096	mg/Kg		08/09/24 17:40	08/14/24 07:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		48 - 145			08/09/24 17:40	08/14/24 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		9.8	mg/Kg		08/12/24 09:23	08/12/24 15:16	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/12/24 09:23	08/12/24 15:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			08/12/24 09:23	08/12/24 15:16	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		08/12/24 11:17	08/12/24 19:44	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 30'      Lab Sample ID: 885-9563-5  
Date Collected: 08/05/24 15:10      Matrix: Solid  
Date Received: 08/09/24 08:15

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		08/09/24 17:40	08/14/24 07:53		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	111		35 - 166			08/09/24 17:40	08/14/24 07:53		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/09/24 17:40	08/14/24 07:53		1
Ethylbenzene	ND		0.047	mg/Kg		08/09/24 17:40	08/14/24 07:53		1
Toluene	ND		0.047	mg/Kg		08/09/24 17:40	08/14/24 07:53		1
Xylenes, Total	ND		0.094	mg/Kg		08/09/24 17:40	08/14/24 07:53		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		48 - 145			08/09/24 17:40	08/14/24 07:53		1
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		08/12/24 09:23	08/12/24 15:27		1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/12/24 09:23	08/12/24 15:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	103		62 - 134			08/12/24 09:23	08/12/24 15:27		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		08/12/24 11:17	08/12/24 19:57		20

## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 40'

Lab Sample ID: 885-9563-6

Date Collected: 08/05/24 15:45

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/09/24 17:40	08/14/24 08:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			08/09/24 17:40	08/14/24 08:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/09/24 17:40	08/14/24 08:15	1
Ethylbenzene	ND		0.048	mg/Kg		08/09/24 17:40	08/14/24 08:15	1
Toluene	ND		0.048	mg/Kg		08/09/24 17:40	08/14/24 08:15	1
Xylenes, Total	ND		0.097	mg/Kg		08/09/24 17:40	08/14/24 08:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		48 - 145			08/09/24 17:40	08/14/24 08:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		08/12/24 09:23	08/12/24 15:38	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		08/12/24 09:23	08/12/24 15:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			08/12/24 09:23	08/12/24 15:38	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/12/24 11:17	08/12/24 20:10	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 45 '

Lab Sample ID: 885-9563-7

Date Collected: 08/05/24 16:00

Matrix: Solid

Date Received: 08/09/24 08:15

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		08/09/24 17:40	08/14/24 08:37		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		35 - 166			08/09/24 17:40	08/14/24 08:37		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/09/24 17:40	08/14/24 08:37		1
Ethylbenzene	ND		0.049	mg/Kg		08/09/24 17:40	08/14/24 08:37		1
Toluene	ND		0.049	mg/Kg		08/09/24 17:40	08/14/24 08:37		1
Xylenes, Total	ND		0.098	mg/Kg		08/09/24 17:40	08/14/24 08:37		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		48 - 145			08/09/24 17:40	08/14/24 08:37		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		9.8	mg/Kg		08/12/24 09:23	08/12/24 15:49		1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/12/24 09:23	08/12/24 15:49		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	95		62 - 134			08/12/24 09:23	08/12/24 15:49		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	72		60	mg/Kg		08/12/24 11:17	08/12/24 20:23		20

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 0'

Lab Sample ID: 885-9563-8

Date Collected: 08/06/24 08:15

Matrix: Solid

Date Received: 08/09/24 08:15

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		08/09/24 17:40	08/14/24 09:42	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		35 - 166			08/09/24 17:40	08/14/24 09:42	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/09/24 17:40	08/14/24 09:42	1	
Ethylbenzene	ND		0.047	mg/Kg		08/09/24 17:40	08/14/24 09:42	1	
Toluene	ND		0.047	mg/Kg		08/09/24 17:40	08/14/24 09:42	1	
Xylenes, Total	ND		0.093	mg/Kg		08/09/24 17:40	08/14/24 09:42	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		48 - 145			08/09/24 17:40	08/14/24 09:42	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		08/12/24 09:23	08/12/24 16:00	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/12/24 09:23	08/12/24 16:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	97		62 - 134			08/12/24 09:23	08/12/24 16:00	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	190		60	mg/Kg		08/12/24 11:17	08/12/24 20:36	20	

## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 4'

Lab Sample ID: 885-9563-9

Date Collected: 08/06/24 09:00

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/12/24 08:43	08/15/24 03:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			08/12/24 08:43	08/15/24 03:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/12/24 08:43	08/15/24 03:05	1
Ethylbenzene	ND		0.048	mg/Kg		08/12/24 08:43	08/15/24 03:05	1
Toluene	ND		0.048	mg/Kg		08/12/24 08:43	08/15/24 03:05	1
Xylenes, Total	ND		0.096	mg/Kg		08/12/24 08:43	08/15/24 03:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145			08/12/24 08:43	08/15/24 03:05	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		8.9	mg/Kg		08/12/24 13:30	08/13/24 14:29	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		08/12/24 13:30	08/13/24 14:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			08/12/24 13:30	08/13/24 14:29	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/13/24 09:35	08/13/24 12:58	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 10'  
Date Collected: 08/06/24 09:15  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-10  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/12/24 08:43	08/15/24 03:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		35 - 166			08/12/24 08:43	08/15/24 03:27		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/12/24 08:43	08/15/24 03:27		1
Ethylbenzene	ND		0.049	mg/Kg		08/12/24 08:43	08/15/24 03:27		1
Toluene	ND		0.049	mg/Kg		08/12/24 08:43	08/15/24 03:27		1
Xylenes, Total	ND		0.098	mg/Kg		08/12/24 08:43	08/15/24 03:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		48 - 145			08/12/24 08:43	08/15/24 03:27		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		10	mg/Kg		08/12/24 13:30	08/13/24 14:42		1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/24 13:30	08/13/24 14:42		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	68		62 - 134			08/12/24 13:30	08/13/24 14:42		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		08/13/24 09:35	08/13/24 13:35		20



## Client Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

Client Sample ID: WS24-G 14'

Lab Sample ID: 885-9563-11

Date Collected: 08/06/24 09:25

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/12/24 08:43	08/15/24 03:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			08/12/24 08:43	08/15/24 03:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/12/24 08:43	08/15/24 03:48	1
Ethylbenzene	ND		0.049	mg/Kg		08/12/24 08:43	08/15/24 03:48	1
Toluene	ND		0.049	mg/Kg		08/12/24 08:43	08/15/24 03:48	1
Xylenes, Total	ND		0.097	mg/Kg		08/12/24 08:43	08/15/24 03:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		48 - 145			08/12/24 08:43	08/15/24 03:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/12/24 13:30	08/13/24 14:55	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/24 13:30	08/13/24 14:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			08/12/24 13:30	08/13/24 14:55	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/13/24 09:35	08/13/24 13:48	20

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## Client Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

Client Sample ID: WS24-G 19'

Lab Sample ID: 885-9563-12

Date Collected: 08/06/24 09:30

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/12/24 08:43	08/15/24 04:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		35 - 166			08/12/24 08:43	08/15/24 04:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/12/24 08:43	08/15/24 04:10	1
Ethylbenzene	ND		0.050	mg/Kg		08/12/24 08:43	08/15/24 04:10	1
Toluene	ND		0.050	mg/Kg		08/12/24 08:43	08/15/24 04:10	1
Xylenes, Total	ND		0.099	mg/Kg		08/12/24 08:43	08/15/24 04:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		48 - 145			08/12/24 08:43	08/15/24 04:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		08/12/24 13:30	08/13/24 15:08	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		08/12/24 13:30	08/13/24 15:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			08/12/24 13:30	08/13/24 15:08	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/13/24 09:35	08/13/24 14:00	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 25'  
Date Collected: 08/06/24 09:35  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-13  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/12/24 08:43	08/15/24 04:32	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	108		35 - 166			08/12/24 08:43	08/15/24 04:32	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/12/24 08:43	08/15/24 04:32	1	
Ethylbenzene	ND		0.048	mg/Kg		08/12/24 08:43	08/15/24 04:32	1	
Toluene	ND		0.048	mg/Kg		08/12/24 08:43	08/15/24 04:32	1	
Xylenes, Total	ND		0.097	mg/Kg		08/12/24 08:43	08/15/24 04:32	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		48 - 145			08/12/24 08:43	08/15/24 04:32	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		08/12/24 13:30	08/13/24 15:21	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/12/24 13:30	08/13/24 15:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	85		62 - 134			08/12/24 13:30	08/13/24 15:21	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		08/13/24 09:35	08/13/24 14:37	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 29'  
Date Collected: 08/06/24 09:45  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-14  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/12/24 08:43	08/15/24 04:54		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	121		35 - 166			08/12/24 08:43	08/15/24 04:54		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/12/24 08:43	08/15/24 04:54		1
Ethylbenzene	ND		0.050	mg/Kg		08/12/24 08:43	08/15/24 04:54		1
Toluene	ND		0.050	mg/Kg		08/12/24 08:43	08/15/24 04:54		1
Xylenes, Total	ND		0.099	mg/Kg		08/12/24 08:43	08/15/24 04:54		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		48 - 145			08/12/24 08:43	08/15/24 04:54		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		8.6	mg/Kg		08/12/24 13:30	08/13/24 15:34		1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		08/12/24 13:30	08/13/24 15:34		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	85		62 - 134			08/12/24 13:30	08/13/24 15:34		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	200		60	mg/Kg		08/13/24 09:35	08/13/24 14:50		20

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 34'

Lab Sample ID: 885-9563-15

Date Collected: 08/06/24 09:50

Matrix: Solid

Date Received: 08/09/24 08:15

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		08/12/24 10:39	08/14/24 02:40	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	96		35 - 166			08/12/24 10:39	08/14/24 02:40	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/12/24 10:39	08/14/24 02:40	1	
Ethylbenzene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 02:40	1	
Toluene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 02:40	1	
Xylenes, Total	ND		0.097	mg/Kg		08/12/24 10:39	08/14/24 02:40	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		48 - 145			08/12/24 10:39	08/14/24 02:40	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	*+	8.8	mg/Kg		08/12/24 15:45	08/13/24 14:06	1	
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		08/12/24 15:45	08/13/24 14:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	98		62 - 134			08/12/24 15:45	08/13/24 14:06	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	320		60	mg/Kg		08/12/24 17:05	08/13/24 20:15	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 39'  
Date Collected: 08/06/24 09:55  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-16  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/12/24 10:39	08/14/24 03:04	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		35 - 166			08/12/24 10:39	08/14/24 03:04	1	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/12/24 10:39	08/14/24 03:04	1	
Ethylbenzene	ND		0.046	mg/Kg		08/12/24 10:39	08/14/24 03:04	1	
Toluene	ND		0.046	mg/Kg		08/12/24 10:39	08/14/24 03:04	1	
Xylenes, Total	ND		0.093	mg/Kg		08/12/24 10:39	08/14/24 03:04	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	85		48 - 145			08/12/24 10:39	08/14/24 03:04	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	*+	8.5	mg/Kg		08/12/24 15:45	08/13/24 14:17	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		08/12/24 15:45	08/13/24 14:17	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	95		62 - 134			08/12/24 15:45	08/13/24 14:17	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	400		60	mg/Kg		08/12/24 17:05	08/13/24 20:30	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 45'  
Date Collected: 08/06/24 10:15  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-17  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/12/24 10:39	08/14/24 03:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		35 - 166			08/12/24 10:39	08/14/24 03:27		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/12/24 10:39	08/14/24 03:27		1
Ethylbenzene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 03:27		1
Toluene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 03:27		1
Xylenes, Total	ND		0.099	mg/Kg		08/12/24 10:39	08/14/24 03:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	87		48 - 145			08/12/24 10:39	08/14/24 03:27		1
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND	+	9.1	mg/Kg		08/12/24 15:45	08/13/24 14:27		1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/12/24 15:45	08/13/24 14:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	112		62 - 134			08/12/24 15:45	08/13/24 14:27		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	2100		60	mg/Kg		08/12/24 17:05	08/13/24 20:45		20



## Client Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

Client Sample ID: WS24-G 50'

Lab Sample ID: 885-9563-18

Date Collected: 08/06/24 10:30

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/12/24 10:39	08/14/24 03:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		35 - 166			08/12/24 10:39	08/14/24 03:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/12/24 10:39	08/14/24 03:51	1
Ethylbenzene	ND		0.048	mg/Kg		08/12/24 10:39	08/14/24 03:51	1
Toluene	ND		0.048	mg/Kg		08/12/24 10:39	08/14/24 03:51	1
Xylenes, Total	ND		0.097	mg/Kg		08/12/24 10:39	08/14/24 03:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		48 - 145			08/12/24 10:39	08/14/24 03:51	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	*+	8.6	mg/Kg		08/12/24 15:45	08/13/24 14:38	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		08/12/24 15:45	08/13/24 14:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	140	S1+	62 - 134			08/12/24 15:45	08/13/24 14:38	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2500		150	mg/Kg		08/12/24 17:05	08/14/24 11:16	50

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 59'  
Date Collected: 08/06/24 11:00  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-19  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/12/24 10:39	08/14/24 04:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		35 - 166			08/12/24 10:39	08/14/24 04:14	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/12/24 10:39	08/14/24 04:14	1	
Ethylbenzene	ND		0.048	mg/Kg		08/12/24 10:39	08/14/24 04:14	1	
Toluene	ND		0.048	mg/Kg		08/12/24 10:39	08/14/24 04:14	1	
Xylenes, Total	ND		0.096	mg/Kg		08/12/24 10:39	08/14/24 04:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	87		48 - 145			08/12/24 10:39	08/14/24 04:14	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	*+	8.4	mg/Kg		08/12/24 15:45	08/13/24 14:49	1	
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		08/12/24 15:45	08/13/24 14:49	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	153	S1+	62 - 134			08/12/24 15:45	08/13/24 14:49	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1800		60	mg/Kg		08/12/24 17:05	08/13/24 21:15	20	

## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 0'

Lab Sample ID: 885-9563-20

Date Collected: 08/06/24 11:40

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/12/24 10:39	08/14/24 04:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			08/12/24 10:39	08/14/24 04:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/12/24 10:39	08/14/24 04:37	1
Ethylbenzene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 04:37	1
Toluene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 04:37	1
Xylenes, Total	ND		0.097	mg/Kg		08/12/24 10:39	08/14/24 04:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		48 - 145			08/12/24 10:39	08/14/24 04:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		08/16/24 15:56	08/16/24 21:00	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/16/24 15:56	08/16/24 21:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			08/16/24 15:56	08/16/24 21:00	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/12/24 17:05	08/13/24 21:30	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 4'

Lab Sample ID: 885-9563-21

Date Collected: 08/06/24 12:00

Matrix: Solid

Date Received: 08/09/24 08:15

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		08/12/24 10:39	08/14/24 05:01		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		35 - 166			08/12/24 10:39	08/14/24 05:01		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/12/24 10:39	08/14/24 05:01		1
Ethylbenzene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 05:01		1
Toluene	ND		0.049	mg/Kg		08/12/24 10:39	08/14/24 05:01		1
Xylenes, Total	ND		0.098	mg/Kg		08/12/24 10:39	08/14/24 05:01		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	85		48 - 145			08/12/24 10:39	08/14/24 05:01		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		08/16/24 15:56	08/16/24 21:11		1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/16/24 15:56	08/16/24 21:11		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	103		62 - 134			08/16/24 15:56	08/16/24 21:11		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	160		60	mg/Kg		08/12/24 17:05	08/13/24 23:18		20

## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 10'

Lab Sample ID: 885-9563-22

Date Collected: 08/06/24 12:10

Matrix: Solid

Date Received: 08/09/24 08:15

## 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		08/12/24 10:39	08/14/24 05:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			08/12/24 10:39	08/14/24 05:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/12/24 10:39	08/14/24 05:24	1
Ethylbenzene	ND		0.050	mg/Kg		08/12/24 10:39	08/14/24 05:24	1
Toluene	ND		0.050	mg/Kg		08/12/24 10:39	08/14/24 05:24	1
Xylenes, Total	ND		0.099	mg/Kg		08/12/24 10:39	08/14/24 05:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		48 - 145			08/12/24 10:39	08/14/24 05:24	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	*+	9.2	mg/Kg		08/12/24 15:45	08/13/24 15:22	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/12/24 15:45	08/13/24 15:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			08/12/24 15:45	08/13/24 15:22	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		60	mg/Kg		08/12/24 17:05	08/13/24 23:33	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 20'  
Date Collected: 08/07/24 08:45  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-23  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/12/24 10:39	08/14/24 05:48	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		35 - 166			08/12/24 10:39	08/14/24 05:48	1	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/12/24 10:39	08/14/24 05:48	1	
Ethylbenzene	ND		0.050	mg/Kg		08/12/24 10:39	08/14/24 05:48	1	
Toluene	ND		0.050	mg/Kg		08/12/24 10:39	08/14/24 05:48	1	
Xylenes, Total	ND		0.099	mg/Kg		08/12/24 10:39	08/14/24 05:48	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		48 - 145			08/12/24 10:39	08/14/24 05:48	1	

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		08/16/24 15:56	08/16/24 21:22	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/16/24 15:56	08/16/24 21:22	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		62 - 134			08/16/24 15:56	08/16/24 21:22	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	200		60	mg/Kg		08/12/24 17:05	08/13/24 23:48	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 29'  
Date Collected: 08/07/24 09:05  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-24  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/12/24 10:39	08/14/24 06:11	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		35 - 166			08/12/24 10:39	08/14/24 06:11	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/12/24 10:39	08/14/24 06:11	1	
Ethylbenzene	ND		0.047	mg/Kg		08/12/24 10:39	08/14/24 06:11	1	
Toluene	ND		0.047	mg/Kg		08/12/24 10:39	08/14/24 06:11	1	
Xylenes, Total	ND		0.093	mg/Kg		08/12/24 10:39	08/14/24 06:11	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		48 - 145			08/12/24 10:39	08/14/24 06:11	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	+	8.5	mg/Kg		08/12/24 15:45	08/13/24 15:55	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		08/12/24 15:45	08/13/24 15:55	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	78		62 - 134			08/12/24 15:45	08/13/24 15:55	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	130		60	mg/Kg		08/12/24 17:05	08/14/24 00:04	20	



Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 39'

Lab Sample ID: 885-9563-25

Date Collected: 08/07/24 09:45

Matrix: Solid

Date Received: 08/09/24 08:15

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		08/14/24 16:54	08/15/24 18:01	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		35 - 166			08/14/24 16:54	08/15/24 18:01	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/14/24 16:54	08/15/24 18:01	1	
Ethylbenzene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 18:01	1	
Toluene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 18:01	1	
Xylenes, Total	ND		0.10	mg/Kg		08/14/24 16:54	08/15/24 18:01	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		48 - 145			08/14/24 16:54	08/15/24 18:01	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		9.7	mg/Kg		08/13/24 15:19	08/14/24 17:16	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/13/24 15:19	08/14/24 17:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	84		62 - 134			08/13/24 15:19	08/14/24 17:16	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	110		60	mg/Kg		08/13/24 16:25	08/13/24 19:09	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 50'  
Date Collected: 08/07/24 11:05  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-26  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/14/24 16:54	08/15/24 19:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		35 - 166			08/14/24 16:54	08/15/24 19:06	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/14/24 16:54	08/15/24 19:06	1	
Ethylbenzene	ND		0.048	mg/Kg		08/14/24 16:54	08/15/24 19:06	1	
Toluene	ND		0.048	mg/Kg		08/14/24 16:54	08/15/24 19:06	1	
Xylenes, Total	ND		0.096	mg/Kg		08/14/24 16:54	08/15/24 19:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		48 - 145			08/14/24 16:54	08/15/24 19:06	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		08/13/24 15:19	08/14/24 19:52	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/24 15:19	08/14/24 19:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	98		62 - 134			08/13/24 15:19	08/14/24 19:52	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	110		60	mg/Kg		08/13/24 16:25	08/13/24 19:21	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 59'  
Date Collected: 08/07/24 11:40  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-27  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/14/24 16:54	08/15/24 20:12	1
Surrogate								
4-Bromofluorobenzene (Surr)	106		35 - 166			08/14/24 16:54	08/15/24 20:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/14/24 16:54	08/15/24 20:12	1
Ethylbenzene	ND		0.046	mg/Kg		08/14/24 16:54	08/15/24 20:12	1
Toluene	ND		0.046	mg/Kg		08/14/24 16:54	08/15/24 20:12	1
Xylenes, Total	ND		0.093	mg/Kg		08/14/24 16:54	08/15/24 20:12	1
Surrogate								
4-Bromofluorobenzene (Surr)	100		48 - 145			08/14/24 16:54	08/15/24 20:12	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		08/13/24 15:19	08/14/24 17:27	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/13/24 15:19	08/14/24 17:27	1
Surrogate								
Di-n-octyl phthalate (Surr)	98		62 - 134			08/13/24 15:19	08/14/24 17:27	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		61	mg/Kg		08/13/24 16:25	08/13/24 19:34	20

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 64'  
Date Collected: 08/07/24 12:05  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-28  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/14/24 16:54	08/15/24 20:55		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		35 - 166			08/14/24 16:54	08/15/24 20:55		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/14/24 16:54	08/15/24 20:55		1
Ethylbenzene	ND		0.049	mg/Kg		08/14/24 16:54	08/15/24 20:55		1
Toluene	ND		0.049	mg/Kg		08/14/24 16:54	08/15/24 20:55		1
Xylenes, Total	ND		0.097	mg/Kg		08/14/24 16:54	08/15/24 20:55		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		48 - 145			08/14/24 16:54	08/15/24 20:55		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		08/13/24 15:19	08/14/24 17:38		1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/13/24 15:19	08/14/24 17:38		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	122		62 - 134			08/13/24 15:19	08/14/24 17:38		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	110		60	mg/Kg		08/13/24 16:25	08/13/24 19:46		20

## QC Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-10033/1-A

Matrix: Solid

Analysis Batch: 10268

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10033

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/09/24 17:40	08/13/24 23:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		35 - 166			08/09/24 17:40	08/13/24 23:54	1

Lab Sample ID: LCS 885-10033/2-A

Matrix: Solid

Analysis Batch: 10268

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10033

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	28.7		mg/Kg		115	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	220		35 - 166				

Lab Sample ID: MB 885-10051/1-A

Matrix: Solid

Analysis Batch: 10323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10051

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/12/24 08:43	08/14/24 19:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			08/12/24 08:43	08/14/24 19:50	1

Lab Sample ID: LCS 885-10051/2-A

Matrix: Solid

Analysis Batch: 10323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	26.4		mg/Kg		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	219		35 - 166				

Lab Sample ID: MB 885-10075/1-A

Matrix: Solid

Analysis Batch: 10255

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10075

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/12/24 10:39	08/13/24 19:39	1

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## QC Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-10075/1-A

Matrix: Solid

Analysis Batch: 10255

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10075

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166	08/12/24 10:39	08/13/24 19:39	1

Lab Sample ID: LCS 885-10075/2-A

Matrix: Solid

Analysis Batch: 10255

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	25.0		mg/Kg		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	207		35 - 166				

Lab Sample ID: MB 885-10295/1-A

Matrix: Solid

Analysis Batch: 10404

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10295

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/14/24 16:54	08/15/24 17:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		35 - 166			08/14/24 16:54	08/15/24 17:39	1

Lab Sample ID: LCS 885-10295/2-A

Matrix: Solid

Analysis Batch: 10404

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	27.5		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	224		35 - 166				

Lab Sample ID: 885-9563-25 MS

Matrix: Solid

Analysis Batch: 10404

Client Sample ID: WS24-E 39'

Prep Type: Total/NA

Prep Batch: 10295

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	30.0		mg/Kg		121	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	245		35 - 166						

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## QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

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

**Lab Sample ID: 885-9563-25 MSD**

**Matrix: Solid**

Analysis Batch: 10404

**Client Sample ID: WS24-E 39'**

Prep Type: Total/NA

Prep Batch: 10295

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	28.5		mg/Kg		115	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	230		35 - 166								

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

**Lab Sample ID: MB 885-10033/1-A**

**Matrix: Solid**

Analysis Batch: 10269

**Client Sample ID: Method Blank**

Prep Type: Total/NA

**Prep Batch: 10033**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	ND		0.025	mg/Kg		08/09/24 17:40	08/13/24 23:54	1
Ethylbenzene	ND		0.050	mg/Kg		08/09/24 17:40	08/13/24 23:54	1
Toluene	ND		0.050	mg/Kg		08/09/24 17:40	08/13/24 23:54	1
Xylenes, Total	ND		0.10	mg/Kg		08/09/24 17:40	08/13/24 23:54	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac
%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	99		48 - 145			08/09/24 17:40	08/13/24 23:54	1

**Lab Sample ID: LCS 885-10033/3-A**

**Matrix: Solid**

**Analysis Batch: 10269**

**Client Sample ID: Lab Control Sample**

Prep Type: Total/NA

**Prep Batch: 10033**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.01		mg/Kg		101	70 - 130
Ethylbenzene	1.00	1.02		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	2.00	2.00		mg/Kg		100	70 - 130
o-Xylene	1.00	0.996		mg/Kg		100	70 - 130
Toluene	1.00	1.01		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		48 - 145				

**Lab Sample ID: MB 885-10051/1-A**

**Matrix: Solid**

**Analysis Batch: 10325**

**Client Sample ID: Method Blank**

Prep Type: Total/NA

Prep Batch: 10051

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	ND		0.025	mg/Kg		08/12/24 08:43	08/14/24 19:50	1
Ethylbenzene	ND		0.050	mg/Kg		08/12/24 08:43	08/14/24 19:50	1
Toluene	ND		0.050	mg/Kg		08/12/24 08:43	08/14/24 19:50	1
Xylenes, Total	ND		0.10	mg/Kg		08/12/24 08:43	08/14/24 19:50	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac
%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	97		48 - 145			08/12/24 08:43	08/14/24 19:50	1

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QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

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

Lab Sample ID: LCS 885-10051/3-A

Matrix: Solid

Analysis Batch: 10325

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10051

Analyte	Spike		LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits	
Benzene	1.00	0.992			mg/Kg		99	70 - 130
Ethylbenzene	1.00	1.00			mg/Kg		100	70 - 130
m-Xylene & p-Xylene	2.00	1.98			mg/Kg		99	70 - 130
o-Xylene	1.00	0.998			mg/Kg		100	70 - 130
Toluene	1.00	0.999			mg/Kg		100	70 - 130
		LCS	LCS					
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	99		48 - 145					

Lab Sample ID: MB 885-10075/1-A  
Matrix: Solid  
Analysis Batch: 10256

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 10075

Analyte	MB		RL	Unit	D	Prepared	MB		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Benzene	ND		0.025	mg/Kg		08/12/24 10:39	08/13/24 19:39		1
Ethylbenzene	ND		0.050	mg/Kg		08/12/24 10:39	08/13/24 19:39		1
Toluene	ND		0.050	mg/Kg		08/12/24 10:39	08/13/24 19:39		1
Xylenes, Total	ND		0.10	mg/Kg		08/12/24 10:39	08/13/24 19:39		1
		MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared		Analyzed		Dil Fac	
4-Bromofluorobenzene (Surr)	87		48 - 145	08/12/24 10:39		08/13/24 19:39		1	

Lab Sample ID: LCS 885-10075/3-A

Matrix: Solid

Analysis Batch: 10256

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10075

Analyte	Spike		LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits	
Benzene	1.00	0.841			mg/Kg		84	70 - 130
Ethylbenzene	1.00	0.783			mg/Kg		78	70 - 130
m-Xylene & p-Xylene	2.00	1.56			mg/Kg		78	70 - 130
o-Xylene	1.00	0.752			mg/Kg		75	70 - 130
Toluene	1.00	0.791			mg/Kg		79	70 - 130
		LCS	LCS					
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	89		48 - 145					

Lab Sample ID: MB 885-10295/1-A  
Matrix: Solid  
Analysis Batch: 10399

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 10295

Analyte	MB		RL	Unit	D	Prepared	MB		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Benzene	ND		0.025	mg/Kg		08/14/24 16:54	08/15/24 17:39		1
Ethylbenzene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 17:39		1
Toluene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 17:39		1
Xylenes, Total	ND		0.10	mg/Kg		08/14/24 16:54	08/15/24 17:39		1

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## QC Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-10295/1-A

Matrix: Solid

Analysis Batch: 10399

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10295

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac		
4-Bromofluorobenzene (Surr)	104		48 - 145	08/14/24 16:54	08/15/24 17:39	1			

Lab Sample ID: LCS 885-10295/3-A

Matrix: Solid

Analysis Batch: 10399

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10295

	Spike	LCS	LCS						%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	1.00	1.05		mg/Kg		105	70 - 130		
Ethylbenzene	1.00	1.06		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene	2.00	2.10		mg/Kg		105	70 - 130		
o-Xylene	1.00	1.04		mg/Kg		104	70 - 130		
Toluene	1.00	1.05		mg/Kg		105	70 - 130		

	LCS	LCS		
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	104		48 - 145	

Lab Sample ID: 885-9563-26 MS

Matrix: Solid

Analysis Batch: 10399

Client Sample ID: WS24-E 50'

Prep Type: Total/NA

Prep Batch: 10295

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ND		0.963	1.07		mg/Kg		111	70 - 130
Ethylbenzene	ND		0.963	1.11		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	ND		1.93	2.21		mg/Kg		115	70 - 130
o-Xylene	ND		0.963	1.11		mg/Kg		115	70 - 130
Toluene	ND		0.963	1.08		mg/Kg		112	70 - 130

	MS	MS		
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	102		48 - 145	

Lab Sample ID: 885-9563-26 MSD

Matrix: Solid

Analysis Batch: 10399

Client Sample ID: WS24-E 50'

Prep Type: Total/NA

Prep Batch: 10295

	Sample	Sample	Spike	MSD	MSD				%Rec	RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.968	1.07		mg/Kg		111	70 - 130	0	20
Ethylbenzene	ND		0.968	1.10		mg/Kg		114	70 - 130	1	20
m-Xylene & p-Xylene	ND		1.94	2.18		mg/Kg		112	70 - 130	2	20
o-Xylene	ND		0.968	1.09		mg/Kg		112	70 - 130	2	20
Toluene	ND		0.968	1.08		mg/Kg		111	70 - 130	1	20

	MSD	MSD		
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	100		48 - 145	

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## QC Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-10058/1-A

Matrix: Solid

Analysis Batch: 10092

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10058

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/12/24 09:23	08/12/24 14:22	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/24 09:23	08/12/24 14:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			08/12/24 09:23	08/12/24 14:22	1

Lab Sample ID: LCS 885-10058/2-A

Matrix: Solid

Analysis Batch: 10092

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10058

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	43.4		mg/Kg		87	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	95		62 - 134				

Lab Sample ID: MB 885-10100/1-A

Matrix: Solid

Analysis Batch: 10162

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10100

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/12/24 13:30	08/13/24 13:10	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/24 13:30	08/13/24 13:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	74		62 - 134			08/12/24 13:30	08/13/24 13:10	1

Lab Sample ID: LCS 885-10100/2-A

Matrix: Solid

Analysis Batch: 10162

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	50.4		mg/Kg		101	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	71		62 - 134				

Lab Sample ID: MB 885-10121/1-A

Matrix: Solid

Analysis Batch: 10172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10121

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/12/24 15:45	08/13/24 12:07	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/24 15:45	08/13/24 12:07	1

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## QC Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-10121/1-A

Matrix: Solid

Analysis Batch: 10172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10121

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	128		62 - 134	08/12/24 15:45	08/13/24 12:07	1

Lab Sample ID: LCS 885-10121/2-A

Matrix: Solid

Analysis Batch: 10172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	74.4	*+	mg/Kg		149	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	161	S1+	62 - 134				

Lab Sample ID: MB 885-10205/1-A

Matrix: Solid

Analysis Batch: 10279

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10205

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/13/24 15:19	08/14/24 16:43	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/13/24 15:19	08/14/24 16:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			08/13/24 15:19	08/14/24 16:43	1

Lab Sample ID: LCS 885-10205/2-A

Matrix: Solid

Analysis Batch: 10279

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	48.5		mg/Kg		97	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	108		62 - 134				

Lab Sample ID: MB 885-10448/1-A

Matrix: Solid

Analysis Batch: 10409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10448

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/16/24 15:56	08/16/24 20:37	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/16/24 15:56	08/16/24 20:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			08/16/24 15:56	08/16/24 20:37	1

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## QC Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: LCS 885-10448/2-A

Matrix: Solid

Analysis Batch: 10409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10448

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits			
Diesel Range Organics [C10-C28]			50.0	54.1		mg/Kg		108	60 - 135		
Surrogate	LCS	LCS	Limits								
	%Recovery	Qualifier									
Di-n-octyl phthalate (Surr)	115		62 - 134								

Lab Sample ID: 885-9563-23 MS

Matrix: Solid

Analysis Batch: 10409

Client Sample ID: WS24-E 20'

Prep Type: Total/NA

Prep Batch: 10448

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier				Limits		
Diesel Range Organics [C10-C28]	ND		49.2	46.2		mg/Kg		94	44 - 136		
Surrogate	MS	MS									
	%Recovery	Qualifier	Limits								
Di-n-octyl phthalate (Surr)	101		62 - 134								

Lab Sample ID: 885-9563-23 MSD

Matrix: Solid

Analysis Batch: 10409

Client Sample ID: WS24-E 20'

Prep Type: Total/NA

Prep Batch: 10448

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	ND		47.8	43.9		mg/Kg		92	44 - 136	5	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	99		62 - 134								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-10080/1-A

Matrix: Solid

Analysis Batch: 10156

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10080

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/12/24 11:17	08/12/24 17:48	1

Lab Sample ID: LCS 885-10080/2-A

Matrix: Solid

Analysis Batch: 10156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10080

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	31.7		mg/Kg		106	90 - 110

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## QC Sample Results

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-10129/1-A

Matrix: Solid

Analysis Batch: 10165

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10129

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/12/24 17:05	08/13/24 16:12	1

Lab Sample ID: LCS 885-10129/2-A

Matrix: Solid

Analysis Batch: 10165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	30.7		mg/Kg		102	90 - 110

Lab Sample ID: MB 885-10167/1-A

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10167

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/13/24 09:35	08/13/24 12:09	1

Lab Sample ID: LCS 885-10167/2-A

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10167

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.4		mg/Kg		95	90 - 110

Lab Sample ID: MB 885-10228/1-A

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10228

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/13/24 16:25	08/13/24 18:07	1

Lab Sample ID: LCS 885-10228/2-A

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	29.1		mg/Kg		97	90 - 110

Lab Sample ID: MB 885-10237/4

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			08/13/24 08:14	1

Lab Sample ID: MRL 885-10237/3

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.510		mg/L		102	50 - 150

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QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-10576/12					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 10576									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		0.50	mg/Kg			08/14/24 11:41	1	

Lab Sample ID: MRL 885-10576/11					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 10576									
Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	0.500	0.521		mg/L		104	50 - 150		



## QC Association Summary

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

## GC VOA

## Prep Batch: 10033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-1	WS24-D 0'	Total/NA	Solid	5030C	
885-9563-2	WS24-D 4'	Total/NA	Solid	5030C	
885-9563-3	WS24-D 10'	Total/NA	Solid	5030C	
885-9563-4	WS24-D 15'	Total/NA	Solid	5030C	
885-9563-5	WS24-D 30'	Total/NA	Solid	5030C	
885-9563-6	WS24-D 40'	Total/NA	Solid	5030C	
885-9563-7	WS24-D 45'	Total/NA	Solid	5030C	
885-9563-8	WS24-G 0'	Total/NA	Solid	5030C	
MB 885-10033/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10033/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10033/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Prep Batch: 10051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-9	WS24-G 4'	Total/NA	Solid	5030C	
885-9563-10	WS24-G 10'	Total/NA	Solid	5030C	
885-9563-11	WS24-G 14'	Total/NA	Solid	5030C	
885-9563-12	WS24-G 19'	Total/NA	Solid	5030C	
885-9563-13	WS24-G 25'	Total/NA	Solid	5030C	
885-9563-14	WS24-G 29'	Total/NA	Solid	5030C	
MB 885-10051/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10051/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10051/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Prep Batch: 10075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-15	WS24-G 34'	Total/NA	Solid	5030C	
885-9563-16	WS24-G 39'	Total/NA	Solid	5030C	
885-9563-17	WS24-G 45'	Total/NA	Solid	5030C	
885-9563-18	WS24-G 50'	Total/NA	Solid	5030C	
885-9563-19	WS24-G 59'	Total/NA	Solid	5030C	
885-9563-20	WS24-E 0'	Total/NA	Solid	5030C	
885-9563-21	WS24-E 4'	Total/NA	Solid	5030C	
885-9563-22	WS24-E 10'	Total/NA	Solid	5030C	
885-9563-23	WS24-E 20'	Total/NA	Solid	5030C	
885-9563-24	WS24-E 29'	Total/NA	Solid	5030C	
MB 885-10075/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10075/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10075/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Analysis Batch: 10255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-15	WS24-G 34'	Total/NA	Solid	8015M/D	10075
885-9563-16	WS24-G 39'	Total/NA	Solid	8015M/D	10075
885-9563-17	WS24-G 45'	Total/NA	Solid	8015M/D	10075
885-9563-18	WS24-G 50'	Total/NA	Solid	8015M/D	10075
885-9563-19	WS24-G 59'	Total/NA	Solid	8015M/D	10075
885-9563-20	WS24-E 0'	Total/NA	Solid	8015M/D	10075
885-9563-21	WS24-E 4'	Total/NA	Solid	8015M/D	10075
885-9563-22	WS24-E 10'	Total/NA	Solid	8015M/D	10075
885-9563-23	WS24-E 20'	Total/NA	Solid	8015M/D	10075

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QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

GC VOA (Continued)

Analysis Batch: 10255 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-24	WS24-E 29'	Total/NA	Solid	8015M/D	10075
MB 885-10075/1-A	Method Blank	Total/NA	Solid	8015M/D	10075
LCS 885-10075/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10075

Analysis Batch: 10256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-15	WS24-G 34'	Total/NA	Solid	8021B	10075
885-9563-16	WS24-G 39'	Total/NA	Solid	8021B	10075
885-9563-17	WS24-G 45'	Total/NA	Solid	8021B	10075
885-9563-18	WS24-G 50'	Total/NA	Solid	8021B	10075
885-9563-19	WS24-G 59'	Total/NA	Solid	8021B	10075
885-9563-20	WS24-E 0'	Total/NA	Solid	8021B	10075
885-9563-21	WS24-E 4'	Total/NA	Solid	8021B	10075
885-9563-22	WS24-E 10'	Total/NA	Solid	8021B	10075
885-9563-23	WS24-E 20'	Total/NA	Solid	8021B	10075
885-9563-24	WS24-E 29'	Total/NA	Solid	8021B	10075
MB 885-10075/1-A	Method Blank	Total/NA	Solid	8021B	10075
LCS 885-10075/3-A	Lab Control Sample	Total/NA	Solid	8021B	10075

Analysis Batch: 10268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-1	WS24-D 0'	Total/NA	Solid	8015M/D	10033
885-9563-2	WS24-D 4'	Total/NA	Solid	8015M/D	10033
885-9563-3	WS24-D 10'	Total/NA	Solid	8015M/D	10033
885-9563-4	WS24-D 15'	Total/NA	Solid	8015M/D	10033
885-9563-5	WS24-D 30'	Total/NA	Solid	8015M/D	10033
885-9563-6	WS24-D 40'	Total/NA	Solid	8015M/D	10033
885-9563-7	WS24-D 45 '	Total/NA	Solid	8015M/D	10033
885-9563-8	WS24-G 0'	Total/NA	Solid	8015M/D	10033
MB 885-10033/1-A	Method Blank	Total/NA	Solid	8015M/D	10033
LCS 885-10033/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10033

Analysis Batch: 10269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-1	WS24-D 0'	Total/NA	Solid	8021B	10033
885-9563-2	WS24-D 4'	Total/NA	Solid	8021B	10033
885-9563-3	WS24-D 10'	Total/NA	Solid	8021B	10033
885-9563-4	WS24-D 15'	Total/NA	Solid	8021B	10033
885-9563-5	WS24-D 30'	Total/NA	Solid	8021B	10033
885-9563-6	WS24-D 40'	Total/NA	Solid	8021B	10033
885-9563-7	WS24-D 45 '	Total/NA	Solid	8021B	10033
885-9563-8	WS24-G 0'	Total/NA	Solid	8021B	10033
MB 885-10033/1-A	Method Blank	Total/NA	Solid	8021B	10033
LCS 885-10033/3-A	Lab Control Sample	Total/NA	Solid	8021B	10033

Prep Batch: 10295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-25	WS24-E 39'	Total/NA	Solid	5030C	
885-9563-26	WS24-E 50'	Total/NA	Solid	5030C	
885-9563-27	WS24-E 59'	Total/NA	Solid	5030C	
885-9563-28	WS24-E 64'	Total/NA	Solid	5030C	

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QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

GC VOA (Continued)

Prep Batch: 10295 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-10295/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10295/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10295/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-9563-25 MS	WS24-E 39'	Total/NA	Solid	5030C	
885-9563-25 MSD	WS24-E 39'	Total/NA	Solid	5030C	
885-9563-26 MS	WS24-E 50'	Total/NA	Solid	5030C	
885-9563-26 MSD	WS24-E 50'	Total/NA	Solid	5030C	

Analysis Batch: 10323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-9	WS24-G 4'	Total/NA	Solid	8015M/D	10051
885-9563-10	WS24-G 10'	Total/NA	Solid	8015M/D	10051
885-9563-11	WS24-G 14'	Total/NA	Solid	8015M/D	10051
885-9563-12	WS24-G 19'	Total/NA	Solid	8015M/D	10051
885-9563-13	WS24-G 25'	Total/NA	Solid	8015M/D	10051
885-9563-14	WS24-G 29'	Total/NA	Solid	8015M/D	10051
MB 885-10051/1-A	Method Blank	Total/NA	Solid	8015M/D	10051
LCS 885-10051/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10051

Analysis Batch: 10325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-9	WS24-G 4'	Total/NA	Solid	8021B	10051
885-9563-10	WS24-G 10'	Total/NA	Solid	8021B	10051
885-9563-11	WS24-G 14'	Total/NA	Solid	8021B	10051
885-9563-12	WS24-G 19'	Total/NA	Solid	8021B	10051
885-9563-13	WS24-G 25'	Total/NA	Solid	8021B	10051
885-9563-14	WS24-G 29'	Total/NA	Solid	8021B	10051
MB 885-10051/1-A	Method Blank	Total/NA	Solid	8021B	10051
LCS 885-10051/3-A	Lab Control Sample	Total/NA	Solid	8021B	10051

Analysis Batch: 10399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-25	WS24-E 39'	Total/NA	Solid	8021B	10295
885-9563-26	WS24-E 50'	Total/NA	Solid	8021B	10295
885-9563-27	WS24-E 59'	Total/NA	Solid	8021B	10295
885-9563-28	WS24-E 64'	Total/NA	Solid	8021B	10295
MB 885-10295/1-A	Method Blank	Total/NA	Solid	8021B	10295
LCS 885-10295/3-A	Lab Control Sample	Total/NA	Solid	8021B	10295
885-9563-26 MS	WS24-E 50'	Total/NA	Solid	8021B	10295
885-9563-26 MSD	WS24-E 50'	Total/NA	Solid	8021B	10295

Analysis Batch: 10404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-25	WS24-E 39'	Total/NA	Solid	8015M/D	10295
885-9563-27	WS24-E 59'	Total/NA	Solid	8015M/D	10295
885-9563-28	WS24-E 64'	Total/NA	Solid	8015M/D	10295
MB 885-10295/1-A	Method Blank	Total/NA	Solid	8015M/D	10295
LCS 885-10295/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10295
885-9563-25 MS	WS24-E 39'	Total/NA	Solid	8015M/D	10295
885-9563-25 MSD	WS24-E 39'	Total/NA	Solid	8015M/D	10295

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QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

GC VOA

Analysis Batch: 10635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-26	WS24-E 50'	Total/NA	Solid	8015M/D	10295

GC Semi VOA

Prep Batch: 10058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-1	WS24-D 0'	Total/NA	Solid	SHAKE	
885-9563-2	WS24-D 4'	Total/NA	Solid	SHAKE	
885-9563-3	WS24-D 10'	Total/NA	Solid	SHAKE	
885-9563-4	WS24-D 15'	Total/NA	Solid	SHAKE	
885-9563-5	WS24-D 30'	Total/NA	Solid	SHAKE	
885-9563-6	WS24-D 40'	Total/NA	Solid	SHAKE	
885-9563-7	WS24-D 45 '	Total/NA	Solid	SHAKE	
885-9563-8	WS24-G 0'	Total/NA	Solid	SHAKE	
MB 885-10058/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10058/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 10092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-1	WS24-D 0'	Total/NA	Solid	8015M/D	10058
885-9563-2	WS24-D 4'	Total/NA	Solid	8015M/D	10058
885-9563-3	WS24-D 10'	Total/NA	Solid	8015M/D	10058
885-9563-4	WS24-D 15'	Total/NA	Solid	8015M/D	10058
885-9563-5	WS24-D 30'	Total/NA	Solid	8015M/D	10058
885-9563-6	WS24-D 40'	Total/NA	Solid	8015M/D	10058
885-9563-7	WS24-D 45 '	Total/NA	Solid	8015M/D	10058
885-9563-8	WS24-G 0'	Total/NA	Solid	8015M/D	10058
MB 885-10058/1-A	Method Blank	Total/NA	Solid	8015M/D	10058
LCS 885-10058/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10058

Prep Batch: 10100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-9	WS24-G 4'	Total/NA	Solid	SHAKE	
885-9563-10	WS24-G 10'	Total/NA	Solid	SHAKE	
885-9563-11	WS24-G 14'	Total/NA	Solid	SHAKE	
885-9563-12	WS24-G 19'	Total/NA	Solid	SHAKE	
885-9563-13	WS24-G 25'	Total/NA	Solid	SHAKE	
885-9563-14	WS24-G 29'	Total/NA	Solid	SHAKE	
MB 885-10100/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10100/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 10121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-15	WS24-G 34'	Total/NA	Solid	SHAKE	
885-9563-16	WS24-G 39'	Total/NA	Solid	SHAKE	
885-9563-17	WS24-G 45'	Total/NA	Solid	SHAKE	
885-9563-18	WS24-G 50'	Total/NA	Solid	SHAKE	
885-9563-19	WS24-G 59'	Total/NA	Solid	SHAKE	
885-9563-22	WS24-E 10'	Total/NA	Solid	SHAKE	
885-9563-24	WS24-E 29'	Total/NA	Solid	SHAKE	
MB 885-10121/1-A	Method Blank	Total/NA	Solid	SHAKE	

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## QC Association Summary

Client: Vertex

Job ID: 885-9563-1

## GC Semi VOA (Continued)

## Prep Batch: 10121 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-10121/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 10162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-9	WS24-G 4'	Total/NA	Solid	8015M/D	10100
885-9563-10	WS24-G 10'	Total/NA	Solid	8015M/D	10100
885-9563-11	WS24-G 14'	Total/NA	Solid	8015M/D	10100
885-9563-12	WS24-G 19'	Total/NA	Solid	8015M/D	10100
885-9563-13	WS24-G 25'	Total/NA	Solid	8015M/D	10100
885-9563-14	WS24-G 29'	Total/NA	Solid	8015M/D	10100
MB 885-10100/1-A	Method Blank	Total/NA	Solid	8015M/D	10100
LCS 885-10100/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10100

## Analysis Batch: 10172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-15	WS24-G 34'	Total/NA	Solid	8015M/D	10121
885-9563-16	WS24-G 39'	Total/NA	Solid	8015M/D	10121
885-9563-17	WS24-G 45'	Total/NA	Solid	8015M/D	10121
885-9563-18	WS24-G 50'	Total/NA	Solid	8015M/D	10121
885-9563-19	WS24-G 59'	Total/NA	Solid	8015M/D	10121
885-9563-22	WS24-E 10'	Total/NA	Solid	8015M/D	10121
885-9563-24	WS24-E 29'	Total/NA	Solid	8015M/D	10121
MB 885-10121/1-A	Method Blank	Total/NA	Solid	8015M/D	10121
LCS 885-10121/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10121

## Prep Batch: 10205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-25	WS24-E 39'	Total/NA	Solid	SHAKE	
885-9563-26	WS24-E 50'	Total/NA	Solid	SHAKE	
885-9563-27	WS24-E 59'	Total/NA	Solid	SHAKE	
885-9563-28	WS24-E 64'	Total/NA	Solid	SHAKE	
MB 885-10205/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10205/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 10279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-25	WS24-E 39'	Total/NA	Solid	8015M/D	10205
885-9563-26	WS24-E 50'	Total/NA	Solid	8015M/D	10205
885-9563-27	WS24-E 59'	Total/NA	Solid	8015M/D	10205
885-9563-28	WS24-E 64'	Total/NA	Solid	8015M/D	10205
MB 885-10205/1-A	Method Blank	Total/NA	Solid	8015M/D	10205
LCS 885-10205/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10205

## Analysis Batch: 10409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-20	WS24-E 0'	Total/NA	Solid	8015M/D	10448
885-9563-21	WS24-E 4'	Total/NA	Solid	8015M/D	10448
885-9563-23	WS24-E 20'	Total/NA	Solid	8015M/D	10448
MB 885-10448/1-A	Method Blank	Total/NA	Solid	8015M/D	10448
LCS 885-10448/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10448
885-9563-23 MS	WS24-E 20'	Total/NA	Solid	8015M/D	10448

Eurofins Albuquerque

QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

GC Semi VOA (Continued)

Analysis Batch: 10409 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-23 MSD	WS24-E 20'	Total/NA	Solid	8015M/D	10448

Prep Batch: 10448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-20	WS24-E 0'	Total/NA	Solid	SHAKE	
885-9563-21	WS24-E 4'	Total/NA	Solid	SHAKE	
885-9563-23	WS24-E 20'	Total/NA	Solid	SHAKE	
MB 885-10448/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10448/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-9563-23 MS	WS24-E 20'	Total/NA	Solid	SHAKE	
885-9563-23 MSD	WS24-E 20'	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 10080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-1	WS24-D 0'	Total/NA	Solid	300_Prep	
885-9563-2	WS24-D 4'	Total/NA	Solid	300_Prep	
885-9563-3	WS24-D 10'	Total/NA	Solid	300_Prep	
885-9563-4	WS24-D 15'	Total/NA	Solid	300_Prep	
885-9563-5	WS24-D 30'	Total/NA	Solid	300_Prep	
885-9563-6	WS24-D 40'	Total/NA	Solid	300_Prep	
885-9563-7	WS24-D 45 '	Total/NA	Solid	300_Prep	
885-9563-8	WS24-G 0'	Total/NA	Solid	300_Prep	
MB 885-10080/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10080/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 10129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-15	WS24-G 34'	Total/NA	Solid	300_Prep	
885-9563-16	WS24-G 39'	Total/NA	Solid	300_Prep	
885-9563-17	WS24-G 45'	Total/NA	Solid	300_Prep	
885-9563-18	WS24-G 50'	Total/NA	Solid	300_Prep	
885-9563-19	WS24-G 59'	Total/NA	Solid	300_Prep	
885-9563-20	WS24-E 0'	Total/NA	Solid	300_Prep	
885-9563-21	WS24-E 4'	Total/NA	Solid	300_Prep	
885-9563-22	WS24-E 10'	Total/NA	Solid	300_Prep	
885-9563-23	WS24-E 20'	Total/NA	Solid	300_Prep	
885-9563-24	WS24-E 29'	Total/NA	Solid	300_Prep	
MB 885-10129/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10129/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 10156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-1	WS24-D 0'	Total/NA	Solid	300.0	10080
885-9563-2	WS24-D 4'	Total/NA	Solid	300.0	10080
885-9563-3	WS24-D 10'	Total/NA	Solid	300.0	10080
885-9563-4	WS24-D 15'	Total/NA	Solid	300.0	10080
885-9563-5	WS24-D 30'	Total/NA	Solid	300.0	10080
885-9563-6	WS24-D 40'	Total/NA	Solid	300.0	10080
885-9563-7	WS24-D 45 '	Total/NA	Solid	300.0	10080

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## QC Association Summary

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

## HPLC/IC (Continued)

## Analysis Batch: 10156 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-8	WS24-G 0'	Total/NA	Solid	300.0	10080
MB 885-10080/1-A	Method Blank	Total/NA	Solid	300.0	10080
LCS 885-10080/2-A	Lab Control Sample	Total/NA	Solid	300.0	10080

## Analysis Batch: 10165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-15	WS24-G 34'	Total/NA	Solid	300.0	10129
885-9563-16	WS24-G 39'	Total/NA	Solid	300.0	10129
885-9563-17	WS24-G 45'	Total/NA	Solid	300.0	10129
885-9563-19	WS24-G 59'	Total/NA	Solid	300.0	10129
885-9563-20	WS24-E 0'	Total/NA	Solid	300.0	10129
885-9563-21	WS24-E 4'	Total/NA	Solid	300.0	10129
885-9563-22	WS24-E 10'	Total/NA	Solid	300.0	10129
885-9563-23	WS24-E 20'	Total/NA	Solid	300.0	10129
885-9563-24	WS24-E 29'	Total/NA	Solid	300.0	10129
MB 885-10129/1-A	Method Blank	Total/NA	Solid	300.0	10129
LCS 885-10129/2-A	Lab Control Sample	Total/NA	Solid	300.0	10129

## Prep Batch: 10167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-9	WS24-G 4'	Total/NA	Solid	300_Prep	
885-9563-10	WS24-G 10'	Total/NA	Solid	300_Prep	
885-9563-11	WS24-G 14'	Total/NA	Solid	300_Prep	
885-9563-12	WS24-G 19'	Total/NA	Solid	300_Prep	
885-9563-13	WS24-G 25'	Total/NA	Solid	300_Prep	
885-9563-14	WS24-G 29'	Total/NA	Solid	300_Prep	
MB 885-10167/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10167/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

## Prep Batch: 10228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-25	WS24-E 39'	Total/NA	Solid	300_Prep	
885-9563-26	WS24-E 50'	Total/NA	Solid	300_Prep	
885-9563-27	WS24-E 59'	Total/NA	Solid	300_Prep	
885-9563-28	WS24-E 64'	Total/NA	Solid	300_Prep	
MB 885-10228/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10228/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

## Analysis Batch: 10237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-9	WS24-G 4'	Total/NA	Solid	300.0	10167
885-9563-10	WS24-G 10'	Total/NA	Solid	300.0	10167
885-9563-11	WS24-G 14'	Total/NA	Solid	300.0	10167
885-9563-12	WS24-G 19'	Total/NA	Solid	300.0	10167
885-9563-13	WS24-G 25'	Total/NA	Solid	300.0	10167
885-9563-14	WS24-G 29'	Total/NA	Solid	300.0	10167
885-9563-25	WS24-E 39'	Total/NA	Solid	300.0	10228
885-9563-26	WS24-E 50'	Total/NA	Solid	300.0	10228
885-9563-27	WS24-E 59'	Total/NA	Solid	300.0	10228
885-9563-28	WS24-E 64'	Total/NA	Solid	300.0	10228
MB 885-10167/1-A	Method Blank	Total/NA	Solid	300.0	10167

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QC Association Summary

Client: Vertex

Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

HPLC/IC (Continued)

Analysis Batch: 10237 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-10228/1-A	Method Blank	Total/NA	Solid	300.0	10228
MB 885-10237/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-10167/2-A	Lab Control Sample	Total/NA	Solid	300.0	10167
LCS 885-10228/2-A	Lab Control Sample	Total/NA	Solid	300.0	10228
MRL 885-10237/3	Lab Control Sample	Total/NA	Solid	300.0	

Analysis Batch: 10576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9563-18	WS24-G 50'	Total/NA	Solid	300.0	10129
MB 885-10576/12	Method Blank	Total/NA	Solid	300.0	
MRL 885-10576/11	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 0'

Date Collected: 08/05/24 11:40

Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 06:26
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 06:26
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 14:44
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 18:14

Client Sample ID: WS24-D 4'

Date Collected: 08/05/24 13:05

Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 06:48
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 06:48
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 14:55
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 19:18

Client Sample ID: WS24-D 10'

Date Collected: 08/05/24 13:30

Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 07:10
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 07:10
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 15:05
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 19:31

Client Sample ID: WS24-D 15'

Date Collected: 08/05/24 14:05

Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 07:31

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## Lab Chronicle

Client: Vertex

Job ID: 885-9563-1

Project/Site: East Pecos Pipeline Spill

Client Sample ID: WS24-D 15'

Lab Sample ID: 885-9563-4

Date Collected: 08/05/24 14:05

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 07:31
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 15:16
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 19:44

Client Sample ID: WS24-D 30'

Lab Sample ID: 885-9563-5

Date Collected: 08/05/24 15:10

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 07:53
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 07:53
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 15:27
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 19:57

Client Sample ID: WS24-D 40'

Lab Sample ID: 885-9563-6

Date Collected: 08/05/24 15:45

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 08:15
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 08:15
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 15:38
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 20:10

Client Sample ID: WS24-D 45 '

Lab Sample ID: 885-9563-7

Date Collected: 08/05/24 16:00

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 08:37
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 08:37

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-D 45 '  
Date Collected: 08/05/24 16:00  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 15:49
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 20:23

Client Sample ID: WS24-G 0'  
Date Collected: 08/06/24 08:15  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-8  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8015M/D		1	10268	AT	EET ALB	08/14/24 09:42
Total/NA	Prep	5030C			10033	JP	EET ALB	08/09/24 17:40
Total/NA	Analysis	8021B		1	10269	AT	EET ALB	08/14/24 09:42
Total/NA	Prep	SHAKE			10058	EM	EET ALB	08/12/24 09:23
Total/NA	Analysis	8015M/D		1	10092	EM	EET ALB	08/12/24 16:00
Total/NA	Prep	300_Prep			10080	EH	EET ALB	08/12/24 11:17
Total/NA	Analysis	300.0		20	10156	EH	EET ALB	08/12/24 20:36

Client Sample ID: WS24-G 4'  
Date Collected: 08/06/24 09:00  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-9  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8015M/D		1	10323	AT	EET ALB	08/15/24 03:05
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8021B		1	10325	AT	EET ALB	08/15/24 03:05
Total/NA	Prep	SHAKE			10100	KR	EET ALB	08/12/24 13:30
Total/NA	Analysis	8015M/D		1	10162	KR	EET ALB	08/13/24 14:29
Total/NA	Prep	300_Prep			10167	RC	EET ALB	08/13/24 09:35
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 12:58

Client Sample ID: WS24-G 10'  
Date Collected: 08/06/24 09:15  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8015M/D		1	10323	AT	EET ALB	08/15/24 03:27
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8021B		1	10325	AT	EET ALB	08/15/24 03:27
Total/NA	Prep	SHAKE			10100	KR	EET ALB	08/12/24 13:30
Total/NA	Analysis	8015M/D		1	10162	KR	EET ALB	08/13/24 14:42

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 10'

Lab Sample ID: 885-9563-10

Date Collected: 08/06/24 09:15

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			10167	RC	EET ALB	08/13/24 09:35
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 13:35

Client Sample ID: WS24-G 14'

Lab Sample ID: 885-9563-11

Date Collected: 08/06/24 09:25

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8015M/D		1	10323	AT	EET ALB	08/15/24 03:48
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8021B		1	10325	AT	EET ALB	08/15/24 03:48
Total/NA	Prep	SHAKE			10100	KR	EET ALB	08/12/24 13:30
Total/NA	Analysis	8015M/D		1	10162	KR	EET ALB	08/13/24 14:55
Total/NA	Prep	300_Prep			10167	RC	EET ALB	08/13/24 09:35
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 13:48

Client Sample ID: WS24-G 19'

Lab Sample ID: 885-9563-12

Date Collected: 08/06/24 09:30

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8015M/D		1	10323	AT	EET ALB	08/15/24 04:10
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8021B		1	10325	AT	EET ALB	08/15/24 04:10
Total/NA	Prep	SHAKE			10100	KR	EET ALB	08/12/24 13:30
Total/NA	Analysis	8015M/D		1	10162	KR	EET ALB	08/13/24 15:08
Total/NA	Prep	300_Prep			10167	RC	EET ALB	08/13/24 09:35
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 14:00

Client Sample ID: WS24-G 25'

Lab Sample ID: 885-9563-13

Date Collected: 08/06/24 09:35

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8015M/D		1	10323	AT	EET ALB	08/15/24 04:32
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8021B		1	10325	AT	EET ALB	08/15/24 04:32
Total/NA	Prep	SHAKE			10100	KR	EET ALB	08/12/24 13:30
Total/NA	Analysis	8015M/D		1	10162	KR	EET ALB	08/13/24 15:21
Total/NA	Prep	300_Prep			10167	RC	EET ALB	08/13/24 09:35
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 14:37

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 29'  
Date Collected: 08/06/24 09:45  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-14  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8015M/D		1	10323	AT	EET ALB	08/15/24 04:54
Total/NA	Prep	5030C			10051	AT	EET ALB	08/12/24 08:43
Total/NA	Analysis	8021B		1	10325	AT	EET ALB	08/15/24 04:54
Total/NA	Prep	SHAKE			10100	KR	EET ALB	08/12/24 13:30
Total/NA	Analysis	8015M/D		1	10162	KR	EET ALB	08/13/24 15:34
Total/NA	Prep	300_Prep			10167	RC	EET ALB	08/13/24 09:35
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 14:50

Client Sample ID: WS24-G 34'  
Date Collected: 08/06/24 09:50  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-15  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 02:40
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 02:40
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 14:06
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 20:15

Client Sample ID: WS24-G 39'  
Date Collected: 08/06/24 09:55  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-16  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 03:04
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 03:04
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 14:17
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 20:30

Client Sample ID: WS24-G 45'  
Date Collected: 08/06/24 10:15  
Date Received: 08/09/24 08:15

Lab Sample ID: 885-9563-17  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 03:27

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-G 45'

Lab Sample ID: 885-9563-17

Date Collected: 08/06/24 10:15

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 03:27
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 14:27
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 20:45

Client Sample ID: WS24-G 50'

Lab Sample ID: 885-9563-18

Date Collected: 08/06/24 10:30

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 03:51
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 03:51
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 14:38
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		50	10576	MA	EET ALB	08/14/24 11:16

Client Sample ID: WS24-G 59'

Lab Sample ID: 885-9563-19

Date Collected: 08/06/24 11:00

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 04:14
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 04:14
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 14:49
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 21:15

Client Sample ID: WS24-E 0'

Lab Sample ID: 885-9563-20

Date Collected: 08/06/24 11:40

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 04:37
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 04:37

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 0'

Lab Sample ID: 885-9563-20

Date Collected: 08/06/24 11:40

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			10448	EM	EET ALB	08/16/24 15:56
Total/NA	Analysis	8015M/D		1	10409	DH	EET ALB	08/16/24 21:00
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 21:30

Client Sample ID: WS24-E 4'

Lab Sample ID: 885-9563-21

Date Collected: 08/06/24 12:00

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 05:01
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 05:01
Total/NA	Prep	SHAKE			10448	EM	EET ALB	08/16/24 15:56
Total/NA	Analysis	8015M/D		1	10409	DH	EET ALB	08/16/24 21:11
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 23:18

Client Sample ID: WS24-E 10'

Lab Sample ID: 885-9563-22

Date Collected: 08/06/24 12:10

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 05:24
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 05:24
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 15:22
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 23:33

Client Sample ID: WS24-E 20'

Lab Sample ID: 885-9563-23

Date Collected: 08/07/24 08:45

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 05:48
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 05:48
Total/NA	Prep	SHAKE			10448	EM	EET ALB	08/16/24 15:56
Total/NA	Analysis	8015M/D		1	10409	DH	EET ALB	08/16/24 21:22

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 20'

Lab Sample ID: 885-9563-23

Date Collected: 08/07/24 08:45

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/13/24 23:48

Client Sample ID: WS24-E 29'

Lab Sample ID: 885-9563-24

Date Collected: 08/07/24 09:05

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8015M/D		1	10255	JP	EET ALB	08/14/24 06:11
Total/NA	Prep	5030C			10075	AT	EET ALB	08/12/24 10:39
Total/NA	Analysis	8021B		1	10256	JP	EET ALB	08/14/24 06:11
Total/NA	Prep	SHAKE			10121	EM	EET ALB	08/12/24 15:45
Total/NA	Analysis	8015M/D		1	10172	EM	EET ALB	08/13/24 15:55
Total/NA	Prep	300_Prep			10129	KB	EET ALB	08/12/24 17:05
Total/NA	Analysis	300.0		20	10165	RC	EET ALB	08/14/24 00:04

Client Sample ID: WS24-E 39'

Lab Sample ID: 885-9563-25

Date Collected: 08/07/24 09:45

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 18:01
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 18:01
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 17:16
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:25
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 19:09

Client Sample ID: WS24-E 50'

Lab Sample ID: 885-9563-26

Date Collected: 08/07/24 11:05

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10635	AT	EET ALB	08/15/24 19:06
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 19:06
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 19:52
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:25
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 19:21

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

Client Sample ID: WS24-E 59'

Lab Sample ID: 885-9563-27

Date Collected: 08/07/24 11:40

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 20:12
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 20:12
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 17:27
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:25
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 19:34

Client Sample ID: WS24-E 64'

Lab Sample ID: 885-9563-28

Date Collected: 08/07/24 12:05

Matrix: Solid

Date Received: 08/09/24 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 20:55
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 20:55
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 17:38
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:25
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 19:46

Laboratory References:  
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9563-1

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	02-26-25
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	02-26-25











## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-9563-1

Login Number: 9563

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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 <6mm (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: Mr. Kent Stallings  
Vertex  
3101 Boyd Dr  
Carlsbad, New Mexico 88220

Generated 8/21/2024 12:54:15 PM

## JOB DESCRIPTION

East Pecos Pipeline Spill

## JOB NUMBER

885-9708-1

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  
8/21/2024 12:54:15 PM

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Laboratory Job ID: 885-9708-1

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Definitions/Glossary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: East Pecos Pipeline Spill

Job ID: 885-9708-1

Job ID: 885-9708-1Eurofins Albuquerque

## Job Narrative 885-9708-1

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 8/13/2024 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 1.4°C.

### Gasoline Range Organics

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

### GC VOA

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

### Diesel Range Organics

Method 8015D\_DRO: Surrogate Di-n-octyl phthalate (Surr) recovery for the following sample was outside the upper control limit: MW24-B 49' (885-9708-7). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

Job ID: 885-9708-1

Project/Site: East Pecos Pipeline Spill

Client Sample ID: MW24-B 0'

Lab Sample ID: 885-9708-1

Date Collected: 08/07/24 15:30

Matrix: Solid

Date Received: 08/13/24 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		08/14/24 16:54	08/15/24 21:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			08/14/24 16:54	08/15/24 21:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/14/24 16:54	08/15/24 21:39	1
Ethylbenzene	ND		0.049	mg/Kg		08/14/24 16:54	08/15/24 21:39	1
Toluene	ND		0.049	mg/Kg		08/14/24 16:54	08/15/24 21:39	1
Xylenes, Total	ND		0.097	mg/Kg		08/14/24 16:54	08/15/24 21:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145			08/14/24 16:54	08/15/24 21:39	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		08/13/24 15:19	08/14/24 17:49	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/13/24 15:19	08/14/24 17:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	66		62 - 134			08/13/24 15:19	08/14/24 17:49	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		08/13/24 16:29	08/13/24 20:23	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Client Sample ID: MW24-B 4'

Lab Sample ID: 885-9708-2

Date Collected: 08/07/24 16:35

Matrix: Solid

Date Received: 08/13/24 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		4.6	mg/Kg		08/14/24 16:54	08/15/24 22:01		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	118		35 - 166			08/14/24 16:54	08/15/24 22:01		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/14/24 16:54	08/15/24 22:01		1
Ethylbenzene	ND		0.046	mg/Kg		08/14/24 16:54	08/15/24 22:01		1
Toluene	ND		0.046	mg/Kg		08/14/24 16:54	08/15/24 22:01		1
Xylenes, Total	ND		0.093	mg/Kg		08/14/24 16:54	08/15/24 22:01		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		48 - 145			08/14/24 16:54	08/15/24 22:01		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		9.0	mg/Kg		08/13/24 15:19	08/14/24 18:00		1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		08/13/24 15:19	08/14/24 18:00		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	115		62 - 134			08/13/24 15:19	08/14/24 18:00		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		08/13/24 16:29	08/13/24 20:35		20

## Client Sample Results

Client: Vertex

Job ID: 885-9708-1

Project/Site: East Pecos Pipeline Spill

Client Sample ID: MW24-B 10'

Lab Sample ID: 885-9708-3

Date Collected: 08/07/24 16:45

Matrix: Solid

Date Received: 08/13/24 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		08/14/24 16:54	08/15/24 22:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		35 - 166			08/14/24 16:54	08/15/24 22:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/14/24 16:54	08/15/24 22:23	1
Ethylbenzene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 22:23	1
Toluene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 22:23	1
Xylenes, Total	ND		0.10	mg/Kg		08/14/24 16:54	08/15/24 22:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		48 - 145			08/14/24 16:54	08/15/24 22:23	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		08/13/24 15:19	08/14/24 18:11	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/13/24 15:19	08/14/24 18:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	125		62 - 134			08/13/24 15:19	08/14/24 18:11	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/13/24 16:29	08/13/24 20:48	20

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## Client Sample Results

Client: Vertex

Job ID: 885-9708-1

Project/Site: East Pecos Pipeline Spill

Client Sample ID: MW24-B 19<sup>a</sup>

Lab Sample ID: 885-9708-4

Date Collected: 08/07/24 17:00

Matrix: Solid

Date Received: 08/13/24 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		08/14/24 16:54	08/15/24 22:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			08/14/24 16:54	08/15/24 22:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/14/24 16:54	08/15/24 22:44	1
Ethylbenzene	ND		0.049	mg/Kg		08/14/24 16:54	08/15/24 22:44	1
Toluene	ND		0.049	mg/Kg		08/14/24 16:54	08/15/24 22:44	1
Xylenes, Total	ND		0.097	mg/Kg		08/14/24 16:54	08/15/24 22:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		48 - 145			08/14/24 16:54	08/15/24 22:44	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		9.8	mg/Kg		08/13/24 15:19	08/14/24 18:22	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/13/24 15:19	08/14/24 18:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			08/13/24 15:19	08/14/24 18:22	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/13/24 16:29	08/13/24 21:00	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Client Sample ID: MW24-B 29<sup>1</sup>

Lab Sample ID: 885-9708-5

Date Collected: 08/07/24 17:10

Matrix: Solid

Date Received: 08/13/24 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		08/14/24 16:54	08/15/24 23:28	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	105		35 - 166			08/14/24 16:54	08/15/24 23:28	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/14/24 16:54	08/15/24 23:28	1	
Ethylbenzene	ND		0.047	mg/Kg		08/14/24 16:54	08/15/24 23:28	1	
Toluene	ND		0.047	mg/Kg		08/14/24 16:54	08/15/24 23:28	1	
Xylenes, Total	ND		0.093	mg/Kg		08/14/24 16:54	08/15/24 23:28	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		48 - 145			08/14/24 16:54	08/15/24 23:28	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		08/13/24 15:19	08/14/24 18:33	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/24 15:19	08/14/24 18:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	80		62 - 134			08/13/24 15:19	08/14/24 18:33	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		08/13/24 16:29	08/13/24 21:12	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Client Sample ID: MW24-B 39<sup>1</sup>      Lab Sample ID: 885-9708-6  
Date Collected: 08/07/24 17:25      Matrix: Solid  
Date Received: 08/13/24 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		08/14/24 16:54	08/15/24 23:50	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		35 - 166			08/14/24 16:54	08/15/24 23:50	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/14/24 16:54	08/15/24 23:50	1	
Ethylbenzene	ND		0.047	mg/Kg		08/14/24 16:54	08/15/24 23:50	1	
Toluene	ND		0.047	mg/Kg		08/14/24 16:54	08/15/24 23:50	1	
Xylenes, Total	ND		0.093	mg/Kg		08/14/24 16:54	08/15/24 23:50	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		48 - 145			08/14/24 16:54	08/15/24 23:50	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		08/13/24 15:19	08/14/24 18:56	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/24 15:19	08/14/24 18:56	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	77		62 - 134			08/13/24 15:19	08/14/24 18:56	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		08/13/24 16:29	08/13/24 21:25	20	

## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Client Sample ID: MW24-B 49<sup>+</sup>

Lab Sample ID: 885-9708-7

Date Collected: 08/08/24 09:10

Matrix: Solid

Date Received: 08/13/24 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		08/14/24 16:54	08/16/24 00:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		35 - 166			08/14/24 16:54	08/16/24 00:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/14/24 16:54	08/16/24 00:11	1
Ethylbenzene	ND		0.048	mg/Kg		08/14/24 16:54	08/16/24 00:11	1
Toluene	ND		0.048	mg/Kg		08/14/24 16:54	08/16/24 00:11	1
Xylenes, Total	ND		0.095	mg/Kg		08/14/24 16:54	08/16/24 00:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		48 - 145			08/14/24 16:54	08/16/24 00:11	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		08/13/24 15:19	08/14/24 19:07	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/13/24 15:19	08/14/24 19:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	138	S1+	62 - 134			08/13/24 15:19	08/14/24 19:07	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/13/24 16:29	08/13/24 22:02	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Client Sample ID: MW24-B 59<sup>+</sup>

Lab Sample ID: 885-9708-8

Date Collected: 08/08/24 09:35

Matrix: Solid

Date Received: 08/13/24 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		08/14/24 16:54	08/16/24 00:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		35 - 166			08/14/24 16:54	08/16/24 00:33	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/14/24 16:54	08/16/24 00:33	1	
Ethylbenzene	ND		0.048	mg/Kg		08/14/24 16:54	08/16/24 00:33	1	
Toluene	ND		0.048	mg/Kg		08/14/24 16:54	08/16/24 00:33	1	
Xylenes, Total	ND		0.095	mg/Kg		08/14/24 16:54	08/16/24 00:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		48 - 145			08/14/24 16:54	08/16/24 00:33	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		08/13/24 15:19	08/14/24 19:19	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/24 15:19	08/14/24 19:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	105		62 - 134			08/13/24 15:19	08/14/24 19:19	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	84		60	mg/Kg		08/13/24 16:29	08/13/24 22:14	20	



## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Client Sample ID: MW24-B 64<sup>1</sup>

Lab Sample ID: 885-9708-9

Date Collected: 08/08/24 10:25

Matrix: Solid

Date Received: 08/13/24 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		08/14/24 16:54	08/16/24 01:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		35 - 166			08/14/24 16:54	08/16/24 01:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/14/24 16:54	08/16/24 01:16	1
Ethylbenzene	ND		0.049	mg/Kg		08/14/24 16:54	08/16/24 01:16	1
Toluene	ND		0.049	mg/Kg		08/14/24 16:54	08/16/24 01:16	1
Xylenes, Total	ND		0.097	mg/Kg		08/14/24 16:54	08/16/24 01:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		48 - 145			08/14/24 16:54	08/16/24 01:16	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		9.2	mg/Kg		08/13/24 15:19	08/14/24 19:30	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/13/24 15:19	08/14/24 19:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			08/13/24 15:19	08/14/24 19:30	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		60	mg/Kg		08/13/24 16:29	08/13/24 22:51	20

Eurofins Albuquerque

## QC Sample Results

Client: Vertex

Job ID: 885-9708-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-10295/1-A

Matrix: Solid

Analysis Batch: 10404

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10295

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/14/24 16:54	08/15/24 17:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		35 - 166			08/14/24 16:54	08/15/24 17:39	1

Lab Sample ID: LCS 885-10295/2-A

Matrix: Solid

Analysis Batch: 10404

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	27.5		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	224		35 - 166				

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

Lab Sample ID: MB 885-10295/1-A

Matrix: Solid

Analysis Batch: 10399

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10295

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/14/24 16:54	08/15/24 17:39	1
Ethylbenzene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 17:39	1
Toluene	ND		0.050	mg/Kg		08/14/24 16:54	08/15/24 17:39	1
Xylenes, Total	ND		0.10	mg/Kg		08/14/24 16:54	08/15/24 17:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		48 - 145			08/14/24 16:54	08/15/24 17:39	1

Lab Sample ID: LCS 885-10295/3-A

Matrix: Solid

Analysis Batch: 10399

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.05		mg/Kg		105	70 - 130
Ethylbenzene	1.00	1.06		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	2.00	2.10		mg/Kg		105	70 - 130
o-Xylene	1.00	1.04		mg/Kg		104	70 - 130
Toluene	1.00	1.05		mg/Kg		105	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	104		48 - 145				

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## QC Sample Results

Client: Vertex

Job ID: 885-9708-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-10205/1-A

Matrix: Solid

Analysis Batch: 10279

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10205

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/13/24 15:19	08/14/24 16:43	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/13/24 15:19	08/14/24 16:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			08/13/24 15:19	08/14/24 16:43	1

Lab Sample ID: LCS 885-10205/2-A

Matrix: Solid

Analysis Batch: 10279

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Diesel Range Organics [C10-C28]	50.0	48.5		mg/Kg		97	60 - 135	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	108		62 - 134					

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-10228/1-A

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10228

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/13/24 16:25	08/13/24 18:07	1

Lab Sample ID: LCS 885-10228/2-A

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	30.0	29.1		mg/Kg		97	90 - 110	

Lab Sample ID: MB 885-10237/4

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			08/13/24 08:14	1

Lab Sample ID: MRL 885-10237/3

Matrix: Solid

Analysis Batch: 10237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	0.500	0.510		mg/L		102	50 - 150	

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## QC Association Summary

Client: Vertex

Job ID: 885-9708-1

Project/Site: East Pecos Pipeline Spill

## GC VOA

## Prep Batch: 10295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-1	MW24-B 0'	Total/NA	Solid	5030C	
885-9708-2	MW24-B 4'	Total/NA	Solid	5030C	
885-9708-3	MW24-B 10'	Total/NA	Solid	5030C	
885-9708-4	MW24-B 19'	Total/NA	Solid	5030C	
885-9708-5	MW24-B 29'	Total/NA	Solid	5030C	
885-9708-6	MW24-B 39'	Total/NA	Solid	5030C	
885-9708-7	MW24-B 49'	Total/NA	Solid	5030C	
885-9708-8	MW24-B 59'	Total/NA	Solid	5030C	
885-9708-9	MW24-B 64'	Total/NA	Solid	5030C	
MB 885-10295/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10295/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10295/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Analysis Batch: 10399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-1	MW24-B 0'	Total/NA	Solid	8021B	10295
885-9708-2	MW24-B 4'	Total/NA	Solid	8021B	10295
885-9708-3	MW24-B 10'	Total/NA	Solid	8021B	10295
885-9708-4	MW24-B 19'	Total/NA	Solid	8021B	10295
885-9708-5	MW24-B 29'	Total/NA	Solid	8021B	10295
885-9708-6	MW24-B 39'	Total/NA	Solid	8021B	10295
885-9708-7	MW24-B 49'	Total/NA	Solid	8021B	10295
885-9708-8	MW24-B 59'	Total/NA	Solid	8021B	10295
885-9708-9	MW24-B 64'	Total/NA	Solid	8021B	10295
MB 885-10295/1-A	Method Blank	Total/NA	Solid	8021B	10295
LCS 885-10295/3-A	Lab Control Sample	Total/NA	Solid	8021B	10295

## Analysis Batch: 10404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-1	MW24-B 0'	Total/NA	Solid	8015M/D	10295
885-9708-2	MW24-B 4'	Total/NA	Solid	8015M/D	10295
885-9708-3	MW24-B 10'	Total/NA	Solid	8015M/D	10295
885-9708-4	MW24-B 19'	Total/NA	Solid	8015M/D	10295
885-9708-5	MW24-B 29'	Total/NA	Solid	8015M/D	10295
885-9708-6	MW24-B 39'	Total/NA	Solid	8015M/D	10295
885-9708-7	MW24-B 49'	Total/NA	Solid	8015M/D	10295
885-9708-8	MW24-B 59'	Total/NA	Solid	8015M/D	10295
885-9708-9	MW24-B 64'	Total/NA	Solid	8015M/D	10295
MB 885-10295/1-A	Method Blank	Total/NA	Solid	8015M/D	10295
LCS 885-10295/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10295

## GC Semi VOA

## Prep Batch: 10205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-1	MW24-B 0'	Total/NA	Solid	SHAKE	
885-9708-2	MW24-B 4'	Total/NA	Solid	SHAKE	
885-9708-3	MW24-B 10'	Total/NA	Solid	SHAKE	
885-9708-4	MW24-B 19'	Total/NA	Solid	SHAKE	
885-9708-5	MW24-B 29'	Total/NA	Solid	SHAKE	
885-9708-6	MW24-B 39'	Total/NA	Solid	SHAKE	

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## QC Association Summary

Client: Vertex

Job ID: 885-9708-1

Project/Site: East Pecos Pipeline Spill

## GC Semi VOA (Continued)

## Prep Batch: 10205 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-7	MW24-B 49'	Total/NA	Solid	SHAKE	
885-9708-8	MW24-B 59'	Total/NA	Solid	SHAKE	
885-9708-9	MW24-B 64'	Total/NA	Solid	SHAKE	
MB 885-10205/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10205/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 10279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-1	MW24-B 0'	Total/NA	Solid	8015M/D	10205
885-9708-2	MW24-B 4'	Total/NA	Solid	8015M/D	10205
885-9708-3	MW24-B 10'	Total/NA	Solid	8015M/D	10205
885-9708-4	MW24-B 19'	Total/NA	Solid	8015M/D	10205
885-9708-5	MW24-B 29'	Total/NA	Solid	8015M/D	10205
885-9708-6	MW24-B 39'	Total/NA	Solid	8015M/D	10205
885-9708-7	MW24-B 49'	Total/NA	Solid	8015M/D	10205
885-9708-8	MW24-B 59'	Total/NA	Solid	8015M/D	10205
885-9708-9	MW24-B 64'	Total/NA	Solid	8015M/D	10205
MB 885-10205/1-A	Method Blank	Total/NA	Solid	8015M/D	10205
LCS 885-10205/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10205

## HPLC/IC

## Prep Batch: 10228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-1	MW24-B 0'	Total/NA	Solid	300_Prep	
885-9708-2	MW24-B 4'	Total/NA	Solid	300_Prep	
885-9708-3	MW24-B 10'	Total/NA	Solid	300_Prep	
885-9708-4	MW24-B 19'	Total/NA	Solid	300_Prep	
885-9708-5	MW24-B 29'	Total/NA	Solid	300_Prep	
885-9708-6	MW24-B 39'	Total/NA	Solid	300_Prep	
885-9708-7	MW24-B 49'	Total/NA	Solid	300_Prep	
885-9708-8	MW24-B 59'	Total/NA	Solid	300_Prep	
885-9708-9	MW24-B 64'	Total/NA	Solid	300_Prep	
MB 885-10228/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10228/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

## Analysis Batch: 10237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9708-1	MW24-B 0'	Total/NA	Solid	300.0	10228
885-9708-2	MW24-B 4'	Total/NA	Solid	300.0	10228
885-9708-3	MW24-B 10'	Total/NA	Solid	300.0	10228
885-9708-4	MW24-B 19'	Total/NA	Solid	300.0	10228
885-9708-5	MW24-B 29'	Total/NA	Solid	300.0	10228
885-9708-6	MW24-B 39'	Total/NA	Solid	300.0	10228
885-9708-7	MW24-B 49'	Total/NA	Solid	300.0	10228
885-9708-8	MW24-B 59'	Total/NA	Solid	300.0	10228
885-9708-9	MW24-B 64'	Total/NA	Solid	300.0	10228
MB 885-10228/1-A	Method Blank	Total/NA	Solid	300.0	10228
MB 885-10237/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-10228/2-A	Lab Control Sample	Total/NA	Solid	300.0	10228
MRL 885-10237/3	Lab Control Sample	Total/NA	Solid	300.0	

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

**Client Sample ID: MW24-B 0'**  
**Date Collected: 08/07/24 15:30**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 21:39
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 21:39
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 17:49
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 20:23

**Client Sample ID: MW24-B 4'**  
**Date Collected: 08/07/24 16:35**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-2**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 22:01
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 22:01
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 18:00
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 20:35

**Client Sample ID: MW24-B 10'**  
**Date Collected: 08/07/24 16:45**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-3**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 22:23
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 22:23
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 18:11
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 20:48

**Client Sample ID: MW24-B 19'**  
**Date Collected: 08/07/24 17:00**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 22:44

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

**Client Sample ID: MW24-B 19'**  
**Date Collected: 08/07/24 17:00**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 22:44
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 18:22
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 21:00

**Client Sample ID: MW24-B 29'**  
**Date Collected: 08/07/24 17:10**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-5**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 23:28
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 23:28
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 18:33
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 21:12

**Client Sample ID: MW24-B 39'**  
**Date Collected: 08/07/24 17:25**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-6**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/15/24 23:50
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/15/24 23:50
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 18:56
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 21:25

**Client Sample ID: MW24-B 49'**  
**Date Collected: 08/08/24 09:10**  
**Date Received: 08/13/24 07:45**

**Lab Sample ID: 885-9708-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/16/24 00:11
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/16/24 00:11

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

Client Sample ID: MW24-B 49<sup>+</sup>  
Date Collected: 08/08/24 09:10  
Date Received: 08/13/24 07:45

Lab Sample ID: 885-9708-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 19:07
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 22:02

Client Sample ID: MW24-B 59<sup>+</sup>  
Date Collected: 08/08/24 09:35  
Date Received: 08/13/24 07:45

Lab Sample ID: 885-9708-8  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/16/24 00:33
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/16/24 00:33
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 19:19
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 22:14

Client Sample ID: MW24-B 64<sup>+</sup>  
Date Collected: 08/08/24 10:25  
Date Received: 08/13/24 07:45

Lab Sample ID: 885-9708-9  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8015M/D		1	10404	AT	EET ALB	08/16/24 01:16
Total/NA	Prep	5030C			10295	JP	EET ALB	08/14/24 16:54
Total/NA	Analysis	8021B		1	10399	AT	EET ALB	08/16/24 01:16
Total/NA	Prep	SHAKE			10205	KR	EET ALB	08/13/24 15:19
Total/NA	Analysis	8015M/D		1	10279	EM	EET ALB	08/14/24 19:30
Total/NA	Prep	300_Prep			10228	EH	EET ALB	08/13/24 16:29
Total/NA	Analysis	300.0		20	10237	JT	EET ALB	08/13/24 22:51

Laboratory References:  
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-9708-1

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	02-26-25
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	02-26-25



## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-9708-1

Login Number: 9708

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (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: Mr. Kent Stallings  
Vertex  
3101 Boyd Dr  
Carlsbad, New Mexico 88220

Generated 9/3/2024 2:59:03 PM

## JOB DESCRIPTION

East Pecos Pipeline

## JOB NUMBER

885-10040-1

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



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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: East Pecos Pipeline

Laboratory Job ID: 885-10040-1

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Definitions/Glossary

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: East Pecos Pipeline

Job ID: 885-10040-1

**Job ID: 885-10040-1**

**Eurofins Albuquerque**

### Job Narrative 885-10040-1

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 8/16/2024 8:20 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 5.0°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

Method 8015D\_DRO: The continuing calibration verification (CCV) associated with batch 885-10594 recovered outside acceptance criteria, low biased, for Di-n-octyl phthalate (Surr). Samples with low surrogate will be re-ran. The following samples are associated MW24-F 3.5' (885-10040-2), MW24-F 9-11' (885-10040-3), MW24-F 19' (885-10040-4), MW24-F 30.0' (885-10040-5), MW24-F 40.0' (885-10040-6), MW24-F 50.0' (885-10040-7), MW24-F 65.0' (885-10040-8), MW24-F 60.0' (885-10040-9), (CCV 885-10594/26), (CCV 885-10594/38), (CCV 885-10594/48), (LCS 885-10566/2-A), (MB 885-10566/1-A) and (885-10040-A-9-E MS).

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

Job ID: 885-10040-1

Project/Site: East Pecos Pipeline

Client Sample ID: MW24-F 0.0'

Lab Sample ID: 885-10040-1

Date Collected: 08/12/24 09:00

Matrix: Solid

Date Received: 08/16/24 08:20

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		08/16/24 17:33	08/20/24 06:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		35 - 166			08/16/24 17:33	08/20/24 06:16	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 17:33	08/20/24 06:16	1	
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 17:33	08/20/24 06:16	1	
Toluene	ND		0.050	mg/Kg		08/16/24 17:33	08/20/24 06:16	1	
Xylenes, Total	ND		0.099	mg/Kg		08/16/24 17:33	08/20/24 06:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		48 - 145			08/16/24 17:33	08/20/24 06:16	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]	96		9.7	mg/Kg		08/20/24 08:28	08/20/24 18:02	1	
Motor Oil Range Organics [C28-C40]	82		49	mg/Kg		08/20/24 08:28	08/20/24 18:02	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	89		62 - 134			08/20/24 08:28	08/20/24 18:02	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	67000		3000	mg/Kg		08/20/24 09:45	08/21/24 22:41	1000	

## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 3.5'

Lab Sample ID: 885-10040-2

Date Collected: 08/12/24 09:20

Matrix: Solid

Date Received: 08/16/24 08:20

## 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		08/16/24 17:33	08/20/24 06:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			08/16/24 17:33	08/20/24 06:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/16/24 17:33	08/20/24 06:38	1
Ethylbenzene	ND		0.048	mg/Kg		08/16/24 17:33	08/20/24 06:38	1
Toluene	ND		0.048	mg/Kg		08/16/24 17:33	08/20/24 06:38	1
Xylenes, Total	ND		0.097	mg/Kg		08/16/24 17:33	08/20/24 06:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		48 - 145			08/16/24 17:33	08/20/24 06:38	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		9.7	mg/Kg		08/20/24 08:28	08/20/24 22:42	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/20/24 08:28	08/20/24 22:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	70		62 - 134			08/20/24 08:28	08/20/24 22:42	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15000		600	mg/Kg		08/20/24 09:45	08/21/24 22:53	200

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## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 9-11'

Lab Sample ID: 885-10040-3

Date Collected: 08/12/24 09:40

Matrix: Solid

Date Received: 08/16/24 08:20

## 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		08/16/24 17:33	08/20/24 07:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			08/16/24 17:33	08/20/24 07:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/16/24 17:33	08/20/24 07:00	1
Ethylbenzene	ND		0.048	mg/Kg		08/16/24 17:33	08/20/24 07:00	1
Toluene	ND		0.048	mg/Kg		08/16/24 17:33	08/20/24 07:00	1
Xylenes, Total	ND		0.095	mg/Kg		08/16/24 17:33	08/20/24 07:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			08/16/24 17:33	08/20/24 07:00	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		08/20/24 08:28	08/20/24 22:56	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/20/24 08:28	08/20/24 22:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	70		62 - 134			08/20/24 08:28	08/20/24 22:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18000		1500	mg/Kg		08/20/24 09:45	08/21/24 23:06	500

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 19'  
Date Collected: 08/12/24 10:20  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-4  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/16/24 17:33	08/20/24 07:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	112		35 - 166			08/16/24 17:33	08/20/24 07:21	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/16/24 17:33	08/20/24 07:21	1	
Ethylbenzene	ND		0.046	mg/Kg		08/16/24 17:33	08/20/24 07:21	1	
Toluene	ND		0.046	mg/Kg		08/16/24 17:33	08/20/24 07:21	1	
Xylenes, Total	ND		0.092	mg/Kg		08/16/24 17:33	08/20/24 07:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		48 - 145			08/16/24 17:33	08/20/24 07:21	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		08/20/24 08:28	08/20/24 23:09	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/20/24 08:28	08/20/24 23:09	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	74		62 - 134			08/20/24 08:28	08/20/24 23:09	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	16000		600	mg/Kg		08/20/24 09:45	08/21/24 23:18	200	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 30.0'      Lab Sample ID: 885-10040-5  
Date Collected: 08/12/24 10:50      Matrix: Solid  
Date Received: 08/16/24 08:20

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		08/16/24 17:33	08/20/24 07:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	116		35 - 166			08/16/24 17:33	08/20/24 07:43	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/16/24 17:33	08/20/24 07:43	1	
Ethylbenzene	ND		0.047	mg/Kg		08/16/24 17:33	08/20/24 07:43	1	
Toluene	ND		0.047	mg/Kg		08/16/24 17:33	08/20/24 07:43	1	
Xylenes, Total	ND		0.093	mg/Kg		08/16/24 17:33	08/20/24 07:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		48 - 145			08/16/24 17:33	08/20/24 07:43	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		08/20/24 08:28	08/20/24 23:36	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/20/24 08:28	08/20/24 23:36	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	75		62 - 134			08/20/24 08:28	08/20/24 23:36	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	16000		600	mg/Kg		08/20/24 09:45	08/21/24 23:30	200	



## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 40.0'

Lab Sample ID: 885-10040-6

Date Collected: 08/12/24 11:35

Matrix: Solid

Date Received: 08/16/24 08:20

## 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		08/16/24 17:33	08/20/24 08:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			08/16/24 17:33	08/20/24 08:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/16/24 17:33	08/20/24 08:05	1
Ethylbenzene	ND		0.048	mg/Kg		08/16/24 17:33	08/20/24 08:05	1
Toluene	ND		0.048	mg/Kg		08/16/24 17:33	08/20/24 08:05	1
Xylenes, Total	ND		0.095	mg/Kg		08/16/24 17:33	08/20/24 08:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		48 - 145			08/16/24 17:33	08/20/24 08:05	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		9.4	mg/Kg		08/20/24 08:28	08/20/24 23:50	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/20/24 08:28	08/20/24 23:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			08/20/24 08:28	08/20/24 23:50	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11000		600	mg/Kg		08/20/24 09:45	08/21/24 23:43	200

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## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 50.0'

Lab Sample ID: 885-10040-7

Date Collected: 08/12/24 12:04

Matrix: Solid

Date Received: 08/16/24 08:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/16/24 17:33	08/20/24 08:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		35 - 166			08/16/24 17:33	08/20/24 08:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/16/24 17:33	08/20/24 08:27	1
Ethylbenzene	ND		0.046	mg/Kg		08/16/24 17:33	08/20/24 08:27	1
Toluene	ND		0.046	mg/Kg		08/16/24 17:33	08/20/24 08:27	1
Xylenes, Total	ND		0.091	mg/Kg		08/16/24 17:33	08/20/24 08:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		48 - 145			08/16/24 17:33	08/20/24 08:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		08/20/24 08:28	08/21/24 00:04	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/20/24 08:28	08/21/24 00:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			08/20/24 08:28	08/21/24 00:04	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6300		300	mg/Kg		08/20/24 09:45	08/21/24 23:55	100

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 65.0'      Lab Sample ID: 885-10040-8  
Date Collected: 08/12/24 13:20      Matrix: Solid  
Date Received: 08/16/24 08:20

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		08/16/24 17:33	08/20/24 08:49	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	114		35 - 166			08/16/24 17:33	08/20/24 08:49	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/16/24 17:33	08/20/24 08:49	1	
Ethylbenzene	ND		0.047	mg/Kg		08/16/24 17:33	08/20/24 08:49	1	
Toluene	ND		0.047	mg/Kg		08/16/24 17:33	08/20/24 08:49	1	
Xylenes, Total	ND		0.095	mg/Kg		08/16/24 17:33	08/20/24 08:49	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	108		48 - 145			08/16/24 17:33	08/20/24 08:49	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		9.5	mg/Kg		08/20/24 08:28	08/21/24 00:17	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/20/24 08:28	08/21/24 00:17	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	72		62 - 134			08/20/24 08:28	08/21/24 00:17	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	5700		300	mg/Kg		08/20/24 14:02	08/28/24 09:22	100	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 60.0'      Lab Sample ID: 885-10040-9  
Date Collected: 08/12/24 12:57      Matrix: Solid  
Date Received: 08/16/24 08:20

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		08/16/24 18:36	08/20/24 13:53	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	113		35 - 166			08/16/24 18:36	08/20/24 13:53	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/16/24 18:36	08/20/24 13:53	1	
Ethylbenzene	ND		0.048	mg/Kg		08/16/24 18:36	08/20/24 13:53	1	
Toluene	ND		0.048	mg/Kg		08/16/24 18:36	08/20/24 13:53	1	
Xylenes, Total	ND		0.095	mg/Kg		08/16/24 18:36	08/20/24 13:53	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		48 - 145			08/16/24 18:36	08/20/24 13:53	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		08/20/24 08:28	08/21/24 00:31	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 08:28	08/21/24 00:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	82		62 - 134			08/20/24 08:28	08/21/24 00:31	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	7300		300	mg/Kg		08/20/24 14:02	08/28/24 09:37	100	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 3.5'      Lab Sample ID: 885-10040-10  
Date Collected: 08/12/24 14:30      Matrix: Solid  
Date Received: 08/16/24 08:20

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		08/16/24 18:36	08/20/24 14:59	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	113		35 - 166			08/16/24 18:36	08/20/24 14:59	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 14:59	1	
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 14:59	1	
Toluene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 14:59	1	
Xylenes, Total	ND		0.10	mg/Kg		08/16/24 18:36	08/20/24 14:59	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	114		48 - 145			08/16/24 18:36	08/20/24 14:59	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		08/20/24 11:05	08/21/24 05:41	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/20/24 11:05	08/21/24 05:41	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	87		62 - 134			08/20/24 11:05	08/21/24 05:41	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	510		60	mg/Kg		08/20/24 14:02	08/21/24 00:09	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 9.0'      Lab Sample ID: 885-10040-11  
Date Collected: 08/12/24 14:36      Matrix: Solid  
Date Received: 08/16/24 08:20

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/16/24 18:36	08/20/24 16:04	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	113		35 - 166			08/16/24 18:36	08/20/24 16:04	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/16/24 18:36	08/20/24 16:04	1	
Ethylbenzene	ND		0.046	mg/Kg		08/16/24 18:36	08/20/24 16:04	1	
Toluene	ND		0.046	mg/Kg		08/16/24 18:36	08/20/24 16:04	1	
Xylenes, Total	ND		0.093	mg/Kg		08/16/24 18:36	08/20/24 16:04	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		48 - 145			08/16/24 18:36	08/20/24 16:04	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		08/20/24 11:05	08/21/24 05:55	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 11:05	08/21/24 05:55	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	88		62 - 134			08/20/24 11:05	08/21/24 05:55	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1700		60	mg/Kg		08/20/24 14:02	08/21/24 00:22	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 20.0'  
Date Collected: 08/12/24 14:54  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-12  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/16/24 18:36	08/20/24 16:26	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		35 - 166			08/16/24 18:36	08/20/24 16:26	1	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 16:26	1	
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 16:26	1	
Toluene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 16:26	1	
Xylenes, Total	ND		0.099	mg/Kg		08/16/24 18:36	08/20/24 16:26	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	112		48 - 145			08/16/24 18:36	08/20/24 16:26	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		08/20/24 11:05	08/21/24 06:07	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/20/24 11:05	08/21/24 06:07	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	89		62 - 134			08/20/24 11:05	08/21/24 06:07	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	440	F1	60	mg/Kg		08/20/24 15:09	08/20/24 17:07	20	



## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 30.0'

Lab Sample ID: 885-10040-13

Date Collected: 08/12/24 15:15

Matrix: Solid

Date Received: 08/16/24 08:20

## 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		08/16/24 18:36	08/20/24 16:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			08/16/24 18:36	08/20/24 16:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 16:48	1
Ethylbenzene	ND		0.049	mg/Kg		08/16/24 18:36	08/20/24 16:48	1
Toluene	ND		0.049	mg/Kg		08/16/24 18:36	08/20/24 16:48	1
Xylenes, Total	ND		0.098	mg/Kg		08/16/24 18:36	08/20/24 16:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		48 - 145			08/16/24 18:36	08/20/24 16:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		08/20/24 11:05	08/21/24 06:20	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/20/24 11:05	08/21/24 06:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			08/20/24 11:05	08/21/24 06:20	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		60	mg/Kg		08/20/24 15:09	08/20/24 17:46	20

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 40.0'      Lab Sample ID: 885-10040-14  
Date Collected: 08/12/24 15:33      Matrix: Solid  
Date Received: 08/16/24 08:20

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		08/16/24 18:36	08/20/24 17:10	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	111		35 - 166			08/16/24 18:36	08/20/24 17:10	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/16/24 18:36	08/20/24 17:10	1	
Ethylbenzene	ND		0.048	mg/Kg		08/16/24 18:36	08/20/24 17:10	1	
Toluene	ND		0.048	mg/Kg		08/16/24 18:36	08/20/24 17:10	1	
Xylenes, Total	ND		0.096	mg/Kg		08/16/24 18:36	08/20/24 17:10	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		48 - 145			08/16/24 18:36	08/20/24 17:10	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		08/20/24 12:52	08/21/24 14:08	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/20/24 12:52	08/21/24 14:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	104		62 - 134			08/20/24 12:52	08/21/24 14:08	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	230		60	mg/Kg		08/20/24 15:09	08/20/24 17:59	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 50.0'  
Date Collected: 08/13/24 08:05  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-15  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/16/24 18:36	08/20/24 17:32	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	116		35 - 166			08/16/24 18:36	08/20/24 17:32	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		08/16/24 18:36	08/20/24 17:32	1	
Ethylbenzene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 17:32	1	
Toluene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 17:32	1	
Xylenes, Total	ND		0.093	mg/Kg		08/16/24 18:36	08/20/24 17:32	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		48 - 145			08/16/24 18:36	08/20/24 17:32	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		08/20/24 12:52	08/21/24 14:19	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 12:52	08/21/24 14:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	101		62 - 134			08/20/24 12:52	08/21/24 14:19	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	250		60	mg/Kg		08/20/24 15:09	08/20/24 18:11	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 60.0'  
Date Collected: 08/13/24 08:41  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-16  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/16/24 18:36	08/20/24 17:54	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	115		35 - 166			08/16/24 18:36	08/20/24 17:54	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/16/24 18:36	08/20/24 17:54	1	
Ethylbenzene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 17:54	1	
Toluene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 17:54	1	
Xylenes, Total	ND		0.095	mg/Kg		08/16/24 18:36	08/20/24 17:54	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	111		48 - 145			08/16/24 18:36	08/20/24 17:54	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]	64		9.7	mg/Kg		08/20/24 12:52	08/21/24 14:30	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/20/24 12:52	08/21/24 14:30	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		62 - 134			08/20/24 12:52	08/21/24 14:30	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	61		60	mg/Kg		08/20/24 15:09	08/20/24 18:24	20	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 69.0'  
Date Collected: 08/13/24 09:07  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-17  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/16/24 18:36	08/20/24 18:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		35 - 166			08/16/24 18:36	08/20/24 18:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/16/24 18:36	08/20/24 18:16	1
Ethylbenzene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 18:16	1
Toluene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 18:16	1
Xylenes, Total	ND		0.093	mg/Kg		08/16/24 18:36	08/20/24 18:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		48 - 145			08/16/24 18:36	08/20/24 18:16	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		9.2	mg/Kg		08/20/24 12:52	08/21/24 14:41	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/20/24 12:52	08/21/24 14:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	103		62 - 134			08/20/24 12:52	08/21/24 14:41	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		60	mg/Kg		08/20/24 15:09	08/20/24 18:37	20

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 75.0'  
Date Collected: 08/13/24 09:26  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-18  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/16/24 18:36	08/20/24 18:38	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	120		35 - 166			08/16/24 18:36	08/20/24 18:38	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 18:38	1	
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 18:38	1	
Toluene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 18:38	1	
Xylenes, Total	ND		0.10	mg/Kg		08/16/24 18:36	08/20/24 18:38	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	111		48 - 145			08/16/24 18:36	08/20/24 18:38	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		8.5	mg/Kg		08/20/24 12:52	08/21/24 14:52	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		08/20/24 12:52	08/21/24 14:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	103		62 - 134			08/20/24 12:52	08/21/24 14:52	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	230		60	mg/Kg		08/20/24 15:09	08/20/24 19:16	20	

Client Sample Results

Client: Vertex

Job ID: 885-10040-1

Project/Site: East Pecos Pipeline

Client Sample ID: MW24-C 0.0'

Lab Sample ID: 885-10040-19

Date Collected: 08/13/24 10:45

Matrix: Solid

Date Received: 08/16/24 08:20

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		08/16/24 18:36	08/20/24 19:22	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		35 - 166			08/16/24 18:36	08/20/24 19:22	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 19:22	1	
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 19:22	1	
Toluene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 19:22	1	
Xylenes, Total	ND		0.099	mg/Kg		08/16/24 18:36	08/20/24 19:22	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		48 - 145			08/16/24 18:36	08/20/24 19:22	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		08/20/24 12:52	08/21/24 15:03	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 12:52	08/21/24 15:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			08/20/24 12:52	08/21/24 15:03	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	13000		600	mg/Kg		08/20/24 15:09	08/22/24 14:04	200	



Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 10.0'  
Date Collected: 08/13/24 10:56  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-20  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/16/24 18:36	08/20/24 19:44	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	117		35 - 166			08/16/24 18:36	08/20/24 19:44	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 19:44	1	
Ethylbenzene	ND		0.049	mg/Kg		08/16/24 18:36	08/20/24 19:44	1	
Toluene	ND		0.049	mg/Kg		08/16/24 18:36	08/20/24 19:44	1	
Xylenes, Total	ND		0.098	mg/Kg		08/16/24 18:36	08/20/24 19:44	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		48 - 145			08/16/24 18:36	08/20/24 19:44	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		9.3	mg/Kg		08/20/24 12:52	08/21/24 15:14	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/20/24 12:52	08/21/24 15:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		62 - 134			08/20/24 12:52	08/21/24 15:14	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	13000		600	mg/Kg		08/20/24 15:09	08/22/24 14:17	200	

## Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 19.0'

Lab Sample ID: 885-10040-21

Date Collected: 08/13/24 11:20

Matrix: Solid

Date Received: 08/16/24 08:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/16/24 18:36	08/20/24 20:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		35 - 166			08/16/24 18:36	08/20/24 20:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/16/24 18:36	08/20/24 20:06	1
Ethylbenzene	ND		0.046	mg/Kg		08/16/24 18:36	08/20/24 20:06	1
Toluene	ND		0.046	mg/Kg		08/16/24 18:36	08/20/24 20:06	1
Xylenes, Total	ND		0.092	mg/Kg		08/16/24 18:36	08/20/24 20:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		48 - 145			08/16/24 18:36	08/20/24 20:06	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]	13		9.3	mg/Kg		08/20/24 12:52	08/21/24 15:25	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/20/24 12:52	08/21/24 15:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			08/20/24 12:52	08/21/24 15:25	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9700		600	mg/Kg		08/20/24 15:09	08/22/24 14:30	200

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Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 30.0'  
Date Collected: 08/13/24 11:37  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-22  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/16/24 18:36	08/20/24 20:27	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	115		35 - 166			08/16/24 18:36	08/20/24 20:27	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 20:27	1	
Ethylbenzene	ND		0.049	mg/Kg		08/16/24 18:36	08/20/24 20:27	1	
Toluene	ND		0.049	mg/Kg		08/16/24 18:36	08/20/24 20:27	1	
Xylenes, Total	ND		0.098	mg/Kg		08/16/24 18:36	08/20/24 20:27	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		48 - 145			08/16/24 18:36	08/20/24 20:27	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]	10		9.8	mg/Kg		08/20/24 12:52	08/21/24 15:47	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 12:52	08/21/24 15:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	105		62 - 134			08/20/24 12:52	08/21/24 15:47	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	4600		150	mg/Kg		08/20/24 15:09	08/22/24 14:43	50	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 40.0'

Lab Sample ID: 885-10040-23

Date Collected: 08/13/24 12:53

Matrix: Solid

Date Received: 08/16/24 08:20

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		08/16/24 18:36	08/20/24 20:49	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	116		35 - 166			08/16/24 18:36	08/20/24 20:49	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/16/24 18:36	08/20/24 20:49	1	
Ethylbenzene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 20:49	1	
Toluene	ND		0.047	mg/Kg		08/16/24 18:36	08/20/24 20:49	1	
Xylenes, Total	ND		0.094	mg/Kg		08/16/24 18:36	08/20/24 20:49	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	111		48 - 145			08/16/24 18:36	08/20/24 20:49	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]	18		9.6	mg/Kg		08/20/24 12:52	08/21/24 15:57	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/20/24 12:52	08/21/24 15:57	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	110		62 - 134			08/20/24 12:52	08/21/24 15:57	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	10000		600	mg/Kg		08/20/24 15:09	08/22/24 15:21	200	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 50.0'  
Date Collected: 08/13/24 13:15  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-24  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/16/24 18:36	08/20/24 21:11	1
Surrogate								
4-Bromofluorobenzene (Surr)	118		35 - 166			08/16/24 18:36	08/20/24 21:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/16/24 18:36	08/20/24 21:11	1
Ethylbenzene	ND		0.046	mg/Kg		08/16/24 18:36	08/20/24 21:11	1
Toluene	ND		0.046	mg/Kg		08/16/24 18:36	08/20/24 21:11	1
Xylenes, Total	ND		0.093	mg/Kg		08/16/24 18:36	08/20/24 21:11	1
Surrogate								
4-Bromofluorobenzene (Surr)	113		48 - 145			08/16/24 18:36	08/20/24 21:11	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		08/20/24 12:52	08/21/24 16:08	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 12:52	08/21/24 16:08	1
Surrogate								
Di-n-octyl phthalate (Surr)	109		62 - 134			08/20/24 12:52	08/21/24 16:08	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8900		300	mg/Kg		08/20/24 15:09	08/22/24 15:34	100

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 60.0'  
Date Collected: 08/13/24 13:57  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-25  
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/16/24 18:36	08/20/24 21:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	114		35 - 166			08/16/24 18:36	08/20/24 21:33	1	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/16/24 18:36	08/20/24 21:33	1	
Ethylbenzene	ND		0.048	mg/Kg		08/16/24 18:36	08/20/24 21:33	1	
Toluene	ND		0.048	mg/Kg		08/16/24 18:36	08/20/24 21:33	1	
Xylenes, Total	ND		0.096	mg/Kg		08/16/24 18:36	08/20/24 21:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	116		48 - 145			08/16/24 18:36	08/20/24 21:33	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]	84		9.9	mg/Kg		08/20/24 12:52	08/21/24 16:19	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 12:52	08/21/24 16:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	118		62 - 134			08/20/24 12:52	08/21/24 16:19	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	7700		300	mg/Kg		08/20/24 15:09	08/22/24 15:47	100	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 70.0'      Lab Sample ID: 885-10040-26  
Date Collected: 08/13/24 14:10      Matrix: Solid  
Date Received: 08/16/24 08:20

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		08/16/24 18:36	08/20/24 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		35 - 166			08/16/24 18:36	08/20/24 21:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 21:55	1
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 21:55	1
Toluene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 21:55	1
Xylenes, Total	ND		0.10	mg/Kg		08/16/24 18:36	08/20/24 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		48 - 145			08/16/24 18:36	08/20/24 21:55	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		08/20/24 12:52	08/21/24 16:31	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/20/24 12:52	08/21/24 16:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	116		62 - 134			08/20/24 12:52	08/21/24 16:31	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2600		150	mg/Kg		08/20/24 15:09	08/22/24 16:00	50



QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

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

Lab Sample ID: MB 885-10456/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 10586						Prep Batch: 10456			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/16/24 17:33	08/19/24 23:45	1	
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		35 - 166				08/16/24 17:33	08/19/24 23:45	1

Lab Sample ID: LCS 885-10456/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 10586						Prep Batch: 10456			
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				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	223		35 - 166				08/16/24 17:33	08/19/24 23:45	1

Lab Sample ID: MB 885-10460/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 10658						Prep Batch: 10460			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/16/24 18:36	08/20/24 13:31	1	
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166				08/16/24 18:36	08/20/24 13:31	1

Lab Sample ID: LCS 885-10460/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 10658						Prep Batch: 10460			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			25.0	27.3		mg/Kg		109	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	219		35 - 166				08/16/24 18:36	08/20/24 13:31	1

Lab Sample ID: 885-10040-9 MS						Client Sample ID: MW24-F 60.0'			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 10658						Prep Batch: 10460			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		23.7	24.4		mg/Kg		103	70 - 130

QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

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

Lab Sample ID: 885-10040-9 MS  
Matrix: Solid  
Analysis Batch: 10658

Client Sample ID: MW24-F 60.0'  
Prep Type: Total/NA  
Prep Batch: 10460

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	227		35 - 166

Lab Sample ID: 885-10040-9 MSD  
Matrix: Solid  
Analysis Batch: 10658

Client Sample ID: MW24-F 60.0'  
Prep Type: Total/NA  
Prep Batch: 10460

	Sample	Sample	Spike	MSD	MSD				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	ND		23.7	26.2		mg/Kg		111	70 - 130	7
										Limit
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	236		35 - 166							

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-10456/1-A  
Matrix: Solid  
Analysis Batch: 10588

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 10456

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 17:33	08/19/24 23:45		1	
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 17:33	08/19/24 23:45		1	
Toluene	ND		0.050	mg/Kg		08/16/24 17:33	08/19/24 23:45		1	
Xylenes, Total	ND		0.10	mg/Kg		08/16/24 17:33	08/19/24 23:45		1	
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac			
4-Bromofluorobenzene (Surr)	101		48 - 145	08/16/24 17:33	08/19/24 23:45		1			

Lab Sample ID: LCS 885-10456/3-A  
Matrix: Solid  
Analysis Batch: 10588

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 10456

		Spike	LCS	LCS				%Rec	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene		1.00	1.05		mg/Kg		105	70 - 130	
Ethylbenzene		1.00	1.05		mg/Kg		105	70 - 130	
m-Xylene & p-Xylene		2.00	2.07		mg/Kg		103	70 - 130	
o-Xylene		1.00	1.03		mg/Kg		103	70 - 130	
Toluene		1.00	1.04		mg/Kg		104	70 - 130	
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	103		48 - 145						

Lab Sample ID: MB 885-10460/1-A  
Matrix: Solid  
Analysis Batch: 10659

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 10460

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac	
Benzene	ND		0.025	mg/Kg		08/16/24 18:36	08/20/24 13:31		1	

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QC Sample Results

Client: Vertex

Job ID: 885-10040-1

Project/Site: East Pecos Pipeline

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

Lab Sample ID: MB 885-10460/1-A

Matrix: Solid

Analysis Batch: 10659

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10460

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 13:31	1
Toluene	ND		0.050	mg/Kg		08/16/24 18:36	08/20/24 13:31	1
Xylenes, Total	ND		0.10	mg/Kg		08/16/24 18:36	08/20/24 13:31	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		48 - 145			08/16/24 18:36	08/20/24 13:31	1

Lab Sample ID: LCS 885-10460/3-A

Matrix: Solid

Analysis Batch: 10659

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10460

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.09		mg/Kg		109	70 - 130
Ethylbenzene	1.00	1.10		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	2.00	2.17		mg/Kg		109	70 - 130
o-Xylene	1.00	1.08		mg/Kg		108	70 - 130
Toluene	1.00	1.09		mg/Kg		109	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	109		48 - 145				

Lab Sample ID: 885-10040-10 MS

Matrix: Solid

Analysis Batch: 10659

Client Sample ID: MW24-A 3.5'

Prep Type: Total/NA

Prep Batch: 10460

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.996	1.03		mg/Kg		103	70 - 130
Ethylbenzene	ND		0.996	1.03		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	ND		1.99	2.05		mg/Kg		103	70 - 130
o-Xylene	ND		0.996	1.03		mg/Kg		103	70 - 130
Toluene	ND		0.996	1.03		mg/Kg		103	70 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	109		48 - 145						

Lab Sample ID: 885-10040-10 MSD

Matrix: Solid

Analysis Batch: 10659

Client Sample ID: MW24-A 3.5'

Prep Type: Total/NA

Prep Batch: 10460

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.994	1.05		mg/Kg		105	70 - 130	2	20
Ethylbenzene	ND		0.994	1.06		mg/Kg		106	70 - 130	2	20
m-Xylene & p-Xylene	ND		1.99	2.10		mg/Kg		106	70 - 130	2	20
o-Xylene	ND		0.994	1.05		mg/Kg		106	70 - 130	2	20
Toluene	ND		0.994	1.05		mg/Kg		106	70 - 130	2	20

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QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

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

Lab Sample ID: 885-10040-10 MSD  
Matrix: Solid  
Analysis Batch: 10659

Client Sample ID: MW24-A 3.5'  
Prep Type: Total/NA  
Prep Batch: 10460

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		48 - 145

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

Lab Sample ID: MB 885-10566/1-A  
Matrix: Solid  
Analysis Batch: 10594

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 10566

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/20/24 08:28	08/20/24 19:31	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/20/24 08:28	08/20/24 19:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			08/20/24 08:28	08/20/24 19:31	1

Lab Sample ID: LCS 885-10566/2-A  
Matrix: Solid  
Analysis Batch: 10666

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 10566

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	50.9		mg/Kg		102	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	84		62 - 134				

Lab Sample ID: 885-10040-9 MS  
Matrix: Solid  
Analysis Batch: 10594

Client Sample ID: MW24-F 60.0'  
Prep Type: Total/NA  
Prep Batch: 10566

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		46.4	44.5		mg/Kg		96	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	78		62 - 134						

Lab Sample ID: 885-10040-9 MSD  
Matrix: Solid  
Analysis Batch: 10594

Client Sample ID: MW24-F 60.0'  
Prep Type: Total/NA  
Prep Batch: 10566

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		48.0	45.0		mg/Kg		94	44 - 136	1	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	68		62 - 134								

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## QC Sample Results

Client: Vertex

Job ID: 885-10040-1

Project/Site: East Pecos Pipeline

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

Lab Sample ID: MB 885-10601/1-A

Matrix: Solid

Analysis Batch: 10594

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10601

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/20/24 11:05	08/21/24 01:26	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/20/24 11:05	08/21/24 01:26	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			08/20/24 11:05	08/21/24 01:26	1

Lab Sample ID: LCS 885-10601/2-A

Matrix: Solid

Analysis Batch: 10594

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10601

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	43.5		mg/Kg		87	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	67		62 - 134				

Lab Sample ID: 885-10040-13 MS

Matrix: Solid

Analysis Batch: 10594

Client Sample ID: MW24-A 30.0'

Prep Type: Total/NA

Prep Batch: 10601

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		46.9	40.7		mg/Kg		87	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	77		62 - 134						

Lab Sample ID: MB 885-10622/1-A

Matrix: Solid

Analysis Batch: 10682

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10622

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/20/24 12:52	08/21/24 13:36	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/20/24 12:52	08/21/24 13:36	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			08/20/24 12:52	08/21/24 13:36	1

Lab Sample ID: LCS 885-10622/2-A

Matrix: Solid

Analysis Batch: 10682

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10622

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	45.8		mg/Kg		92	60 - 135

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## QC Sample Results

Client: Vertex

Job ID: 885-10040-1

Project/Site: East Pecos Pipeline

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

Lab Sample ID: LCS 885-10622/2-A

Matrix: Solid

Analysis Batch: 10682

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10622

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	95		62 - 134

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-10583/1-A

Matrix: Solid

Analysis Batch: 10616

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10583

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/20/24 09:45	08/20/24 10:51	1

Lab Sample ID: LCS 885-10583/2-A

Matrix: Solid

Analysis Batch: 10616

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	29.8		mg/Kg		99	90 - 110

Lab Sample ID: MB 885-10630/1-A

Matrix: Solid

Analysis Batch: 10676

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10630

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/20/24 14:02	08/20/24 18:24	1

Lab Sample ID: LCS 885-10630/2-A

Matrix: Solid

Analysis Batch: 10676

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10630

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.2		mg/Kg		94	90 - 110

Lab Sample ID: MB 885-10638/1-A

Matrix: Solid

Analysis Batch: 10718

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10638

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/20/24 15:09	08/20/24 16:41	1

Lab Sample ID: LCS 885-10638/2-A

Matrix: Solid

Analysis Batch: 10718

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.7		mg/Kg		96	90 - 110

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## QC Sample Results

Client: Vertex

Job ID: 885-10040-1

Project/Site: East Pecos Pipeline

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-10040-12 MS

Matrix: Solid

Analysis Batch: 10718

Client Sample ID: MW24-A 20.0'

Prep Type: Total/NA

Prep Batch: 10638

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	440	F1	30.0	485	4	mg/Kg		148	50 - 150

Lab Sample ID: 885-10040-12 MSD

Matrix: Solid

Analysis Batch: 10718

Client Sample ID: MW24-A 20.0'

Prep Type: Total/NA

Prep Batch: 10638

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	440	F1	30.1	521	4	mg/Kg		269	50 - 150	7	20

Lab Sample ID: MB 885-10642/1-A

Matrix: Solid

Analysis Batch: 10841

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10642

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/21/24 16:07	08/22/24 07:38	1

Lab Sample ID: LCS 885-10642/2-A

Matrix: Solid

Analysis Batch: 10841

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.4		mg/Kg		95	90 - 110

Lab Sample ID: MB 885-10676/4

Matrix: Solid

Analysis Batch: 10676

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			08/20/24 10:59	1

Lab Sample ID: MRL 885-10676/3

Matrix: Solid

Analysis Batch: 10676

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.515		mg/L		103	50 - 150

Lab Sample ID: MB 885-10752/3

Matrix: Solid

Analysis Batch: 10752

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			08/21/24 11:22	1

Lab Sample ID: MRL 885-10752/4

Matrix: Solid

Analysis Batch: 10752

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.517		mg/L		103	50 - 150

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QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-11210/12					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 11210									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		0.50	mg/Kg			08/28/24 08:52	1	

Lab Sample ID: MRL 885-11210/11					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 11210									
Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	0.500	0.532		mg/L		106	50 - 150		

QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

GC VOA

Prep Batch: 10456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-1	MW24-F 0.0'	Total/NA	Solid	5030C	
885-10040-2	MW24-F 3.5'	Total/NA	Solid	5030C	
885-10040-3	MW24-F 9-11'	Total/NA	Solid	5030C	
885-10040-4	MW24-F 19'	Total/NA	Solid	5030C	
885-10040-5	MW24-F 30.0'	Total/NA	Solid	5030C	
885-10040-6	MW24-F 40.0'	Total/NA	Solid	5030C	
885-10040-7	MW24-F 50.0'	Total/NA	Solid	5030C	
885-10040-8	MW24-F 65.0'	Total/NA	Solid	5030C	
MB 885-10456/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10456/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10456/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 10460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-9	MW24-F 60.0'	Total/NA	Solid	5030C	
885-10040-10	MW24-A 3.5'	Total/NA	Solid	5030C	
885-10040-11	MW24-A 9.0'	Total/NA	Solid	5030C	
885-10040-12	MW24-A 20.0'	Total/NA	Solid	5030C	
885-10040-13	MW24-A 30.0'	Total/NA	Solid	5030C	
885-10040-14	MW24-A 40.0'	Total/NA	Solid	5030C	
885-10040-15	MW24-A 50.0'	Total/NA	Solid	5030C	
885-10040-16	MW24-A 60.0'	Total/NA	Solid	5030C	
885-10040-17	MW24-A 69.0'	Total/NA	Solid	5030C	
885-10040-18	MW24-A 75.0'	Total/NA	Solid	5030C	
885-10040-19	MW24-C 0.0'	Total/NA	Solid	5030C	
885-10040-20	MW24-C 10.0'	Total/NA	Solid	5030C	
885-10040-21	MW24-C 19.0'	Total/NA	Solid	5030C	
885-10040-22	MW24-C 30.0'	Total/NA	Solid	5030C	
885-10040-23	MW24-C 40.0'	Total/NA	Solid	5030C	
885-10040-24	MW24-C 50.0'	Total/NA	Solid	5030C	
885-10040-25	MW24-C 60.0'	Total/NA	Solid	5030C	
885-10040-26	MW24-C 70.0'	Total/NA	Solid	5030C	
MB 885-10460/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-10460/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-10460/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-10040-9 MS	MW24-F 60.0'	Total/NA	Solid	5030C	
885-10040-9 MSD	MW24-F 60.0'	Total/NA	Solid	5030C	
885-10040-10 MS	MW24-A 3.5'	Total/NA	Solid	5030C	
885-10040-10 MSD	MW24-A 3.5'	Total/NA	Solid	5030C	

Analysis Batch: 10586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-1	MW24-F 0.0'	Total/NA	Solid	8015M/D	10456
885-10040-2	MW24-F 3.5'	Total/NA	Solid	8015M/D	10456
885-10040-3	MW24-F 9-11'	Total/NA	Solid	8015M/D	10456
885-10040-4	MW24-F 19'	Total/NA	Solid	8015M/D	10456
885-10040-5	MW24-F 30.0'	Total/NA	Solid	8015M/D	10456
885-10040-6	MW24-F 40.0'	Total/NA	Solid	8015M/D	10456
885-10040-7	MW24-F 50.0'	Total/NA	Solid	8015M/D	10456
885-10040-8	MW24-F 65.0'	Total/NA	Solid	8015M/D	10456
MB 885-10456/1-A	Method Blank	Total/NA	Solid	8015M/D	10456

Eurofins Albuquerque

QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

GC VOA (Continued)

Analysis Batch: 10586 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-10456/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10456

Analysis Batch: 10588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-1	MW24-F 0.0'	Total/NA	Solid	8021B	10456
885-10040-2	MW24-F 3.5'	Total/NA	Solid	8021B	10456
885-10040-3	MW24-F 9-11'	Total/NA	Solid	8021B	10456
885-10040-4	MW24-F 19'	Total/NA	Solid	8021B	10456
885-10040-5	MW24-F 30.0'	Total/NA	Solid	8021B	10456
885-10040-6	MW24-F 40.0'	Total/NA	Solid	8021B	10456
885-10040-7	MW24-F 50.0'	Total/NA	Solid	8021B	10456
885-10040-8	MW24-F 65.0'	Total/NA	Solid	8021B	10456
MB 885-10456/1-A	Method Blank	Total/NA	Solid	8021B	10456
LCS 885-10456/3-A	Lab Control Sample	Total/NA	Solid	8021B	10456

Analysis Batch: 10658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-9	MW24-F 60.0'	Total/NA	Solid	8015M/D	10460
885-10040-10	MW24-A 3.5'	Total/NA	Solid	8015M/D	10460
885-10040-11	MW24-A 9.0'	Total/NA	Solid	8015M/D	10460
885-10040-12	MW24-A 20.0'	Total/NA	Solid	8015M/D	10460
885-10040-13	MW24-A 30.0'	Total/NA	Solid	8015M/D	10460
885-10040-14	MW24-A 40.0'	Total/NA	Solid	8015M/D	10460
885-10040-15	MW24-A 50.0'	Total/NA	Solid	8015M/D	10460
885-10040-16	MW24-A 60.0'	Total/NA	Solid	8015M/D	10460
885-10040-17	MW24-A 69.0'	Total/NA	Solid	8015M/D	10460
885-10040-18	MW24-A 75.0'	Total/NA	Solid	8015M/D	10460
885-10040-19	MW24-C 0.0'	Total/NA	Solid	8015M/D	10460
885-10040-20	MW24-C 10.0'	Total/NA	Solid	8015M/D	10460
885-10040-21	MW24-C 19.0'	Total/NA	Solid	8015M/D	10460
885-10040-22	MW24-C 30.0'	Total/NA	Solid	8015M/D	10460
885-10040-23	MW24-C 40.0'	Total/NA	Solid	8015M/D	10460
885-10040-24	MW24-C 50.0'	Total/NA	Solid	8015M/D	10460
885-10040-25	MW24-C 60.0'	Total/NA	Solid	8015M/D	10460
885-10040-26	MW24-C 70.0'	Total/NA	Solid	8015M/D	10460
MB 885-10460/1-A	Method Blank	Total/NA	Solid	8015M/D	10460
LCS 885-10460/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10460
885-10040-9 MS	MW24-F 60.0'	Total/NA	Solid	8015M/D	10460
885-10040-9 MSD	MW24-F 60.0'	Total/NA	Solid	8015M/D	10460

Analysis Batch: 10659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-9	MW24-F 60.0'	Total/NA	Solid	8021B	10460
885-10040-10	MW24-A 3.5'	Total/NA	Solid	8021B	10460
885-10040-11	MW24-A 9.0'	Total/NA	Solid	8021B	10460
885-10040-12	MW24-A 20.0'	Total/NA	Solid	8021B	10460
885-10040-13	MW24-A 30.0'	Total/NA	Solid	8021B	10460
885-10040-14	MW24-A 40.0'	Total/NA	Solid	8021B	10460
885-10040-15	MW24-A 50.0'	Total/NA	Solid	8021B	10460
885-10040-16	MW24-A 60.0'	Total/NA	Solid	8021B	10460
885-10040-17	MW24-A 69.0'	Total/NA	Solid	8021B	10460

Eurofins Albuquerque

## QC Association Summary

Client: Vertex

Job ID: 885-10040-1

## GC VOA (Continued)

## Analysis Batch: 10659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-18	MW24-A 75.0'	Total/NA	Solid	8021B	10460
885-10040-19	MW24-C 0.0'	Total/NA	Solid	8021B	10460
885-10040-20	MW24-C 10.0'	Total/NA	Solid	8021B	10460
885-10040-21	MW24-C 19.0'	Total/NA	Solid	8021B	10460
885-10040-22	MW24-C 30.0'	Total/NA	Solid	8021B	10460
885-10040-23	MW24-C 40.0'	Total/NA	Solid	8021B	10460
885-10040-24	MW24-C 50.0'	Total/NA	Solid	8021B	10460
885-10040-25	MW24-C 60.0'	Total/NA	Solid	8021B	10460
885-10040-26	MW24-C 70.0'	Total/NA	Solid	8021B	10460
MB 885-10460/1-A	Method Blank	Total/NA	Solid	8021B	10460
LCS 885-10460/3-A	Lab Control Sample	Total/NA	Solid	8021B	10460
885-10040-10 MS	MW24-A 3.5'	Total/NA	Solid	8021B	10460
885-10040-10 MSD	MW24-A 3.5'	Total/NA	Solid	8021B	10460

## GC Semi VOA

## Prep Batch: 10566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-1	MW24-F 0.0'	Total/NA	Solid	SHAKE	
885-10040-2	MW24-F 3.5'	Total/NA	Solid	SHAKE	
885-10040-3	MW24-F 9-11'	Total/NA	Solid	SHAKE	
885-10040-4	MW24-F 19'	Total/NA	Solid	SHAKE	
885-10040-5	MW24-F 30.0'	Total/NA	Solid	SHAKE	
885-10040-6	MW24-F 40.0'	Total/NA	Solid	SHAKE	
885-10040-7	MW24-F 50.0'	Total/NA	Solid	SHAKE	
885-10040-8	MW24-F 65.0'	Total/NA	Solid	SHAKE	
885-10040-9	MW24-F 60.0'	Total/NA	Solid	SHAKE	
MB 885-10566/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10566/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-10040-9 MS	MW24-F 60.0'	Total/NA	Solid	SHAKE	
885-10040-9 MSD	MW24-F 60.0'	Total/NA	Solid	SHAKE	

## Analysis Batch: 10594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-2	MW24-F 3.5'	Total/NA	Solid	8015M/D	10566
885-10040-3	MW24-F 9-11'	Total/NA	Solid	8015M/D	10566
885-10040-4	MW24-F 19'	Total/NA	Solid	8015M/D	10566
885-10040-5	MW24-F 30.0'	Total/NA	Solid	8015M/D	10566
885-10040-6	MW24-F 40.0'	Total/NA	Solid	8015M/D	10566
885-10040-7	MW24-F 50.0'	Total/NA	Solid	8015M/D	10566
885-10040-8	MW24-F 65.0'	Total/NA	Solid	8015M/D	10566
885-10040-9	MW24-F 60.0'	Total/NA	Solid	8015M/D	10566
885-10040-10	MW24-A 3.5'	Total/NA	Solid	8015M/D	10601
885-10040-11	MW24-A 9.0'	Total/NA	Solid	8015M/D	10601
885-10040-12	MW24-A 20.0'	Total/NA	Solid	8015M/D	10601
885-10040-13	MW24-A 30.0'	Total/NA	Solid	8015M/D	10601
MB 885-10566/1-A	Method Blank	Total/NA	Solid	8015M/D	10566
MB 885-10601/1-A	Method Blank	Total/NA	Solid	8015M/D	10601
LCS 885-10601/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10601
885-10040-9 MS	MW24-F 60.0'	Total/NA	Solid	8015M/D	10566
885-10040-9 MSD	MW24-F 60.0'	Total/NA	Solid	8015M/D	10566

Eurofins Albuquerque

QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

GC Semi VOA (Continued)

Analysis Batch: 10594 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-13 MS	MW24-A 30.0'	Total/NA	Solid	8015M/D	10601

Analysis Batch: 10596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-1	MW24-F 0.0'	Total/NA	Solid	8015M/D	10566

Prep Batch: 10601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-10	MW24-A 3.5'	Total/NA	Solid	SHAKE	
885-10040-11	MW24-A 9.0'	Total/NA	Solid	SHAKE	
885-10040-12	MW24-A 20.0'	Total/NA	Solid	SHAKE	
885-10040-13	MW24-A 30.0'	Total/NA	Solid	SHAKE	
MB 885-10601/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10601/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-10040-13 MS	MW24-A 30.0'	Total/NA	Solid	SHAKE	

Prep Batch: 10622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-14	MW24-A 40.0'	Total/NA	Solid	SHAKE	
885-10040-15	MW24-A 50.0'	Total/NA	Solid	SHAKE	
885-10040-16	MW24-A 60.0'	Total/NA	Solid	SHAKE	
885-10040-17	MW24-A 69.0'	Total/NA	Solid	SHAKE	
885-10040-18	MW24-A 75.0'	Total/NA	Solid	SHAKE	
885-10040-19	MW24-C 0.0'	Total/NA	Solid	SHAKE	
885-10040-20	MW24-C 10.0'	Total/NA	Solid	SHAKE	
885-10040-21	MW24-C 19.0'	Total/NA	Solid	SHAKE	
885-10040-22	MW24-C 30.0'	Total/NA	Solid	SHAKE	
885-10040-23	MW24-C 40.0'	Total/NA	Solid	SHAKE	
885-10040-24	MW24-C 50.0'	Total/NA	Solid	SHAKE	
885-10040-25	MW24-C 60.0'	Total/NA	Solid	SHAKE	
885-10040-26	MW24-C 70.0'	Total/NA	Solid	SHAKE	
MB 885-10622/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-10622/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 10666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-10566/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10566

Analysis Batch: 10682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-14	MW24-A 40.0'	Total/NA	Solid	8015M/D	10622
885-10040-15	MW24-A 50.0'	Total/NA	Solid	8015M/D	10622
885-10040-16	MW24-A 60.0'	Total/NA	Solid	8015M/D	10622
885-10040-17	MW24-A 69.0'	Total/NA	Solid	8015M/D	10622
885-10040-18	MW24-A 75.0'	Total/NA	Solid	8015M/D	10622
885-10040-19	MW24-C 0.0'	Total/NA	Solid	8015M/D	10622
885-10040-20	MW24-C 10.0'	Total/NA	Solid	8015M/D	10622
885-10040-21	MW24-C 19.0'	Total/NA	Solid	8015M/D	10622
885-10040-22	MW24-C 30.0'	Total/NA	Solid	8015M/D	10622
885-10040-23	MW24-C 40.0'	Total/NA	Solid	8015M/D	10622
885-10040-24	MW24-C 50.0'	Total/NA	Solid	8015M/D	10622

Eurofins Albuquerque

## QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

## GC Semi VOA (Continued)

## Analysis Batch: 10682 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-25	MW24-C 60.0'	Total/NA	Solid	8015M/D	10622
885-10040-26	MW24-C 70.0'	Total/NA	Solid	8015M/D	10622
MB 885-10622/1-A	Method Blank	Total/NA	Solid	8015M/D	10622
LCS 885-10622/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	10622

## HPLC/IC

## Prep Batch: 10583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-1	MW24-F 0.0'	Total/NA	Solid	300_Prep	
885-10040-2	MW24-F 3.5'	Total/NA	Solid	300_Prep	
885-10040-3	MW24-F 9-11'	Total/NA	Solid	300_Prep	
885-10040-4	MW24-F 19'	Total/NA	Solid	300_Prep	
885-10040-5	MW24-F 30.0'	Total/NA	Solid	300_Prep	
885-10040-6	MW24-F 40.0'	Total/NA	Solid	300_Prep	
885-10040-7	MW24-F 50.0'	Total/NA	Solid	300_Prep	
MB 885-10583/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10583/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

## Analysis Batch: 10616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-10583/1-A	Method Blank	Total/NA	Solid	300.0	10583
LCS 885-10583/2-A	Lab Control Sample	Total/NA	Solid	300.0	10583

## Prep Batch: 10630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-8	MW24-F 65.0'	Total/NA	Solid	300_Prep	
885-10040-9	MW24-F 60.0'	Total/NA	Solid	300_Prep	
885-10040-10	MW24-A 3.5'	Total/NA	Solid	300_Prep	
885-10040-11	MW24-A 9.0'	Total/NA	Solid	300_Prep	
MB 885-10630/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10630/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

## Prep Batch: 10638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-12	MW24-A 20.0'	Total/NA	Solid	300_Prep	
885-10040-13	MW24-A 30.0'	Total/NA	Solid	300_Prep	
885-10040-14	MW24-A 40.0'	Total/NA	Solid	300_Prep	
885-10040-15	MW24-A 50.0'	Total/NA	Solid	300_Prep	
885-10040-16	MW24-A 60.0'	Total/NA	Solid	300_Prep	
885-10040-17	MW24-A 69.0'	Total/NA	Solid	300_Prep	
885-10040-18	MW24-A 75.0'	Total/NA	Solid	300_Prep	
885-10040-19	MW24-C 0.0'	Total/NA	Solid	300_Prep	
885-10040-20	MW24-C 10.0'	Total/NA	Solid	300_Prep	
885-10040-21	MW24-C 19.0'	Total/NA	Solid	300_Prep	
885-10040-22	MW24-C 30.0'	Total/NA	Solid	300_Prep	
885-10040-23	MW24-C 40.0'	Total/NA	Solid	300_Prep	
885-10040-24	MW24-C 50.0'	Total/NA	Solid	300_Prep	
885-10040-25	MW24-C 60.0'	Total/NA	Solid	300_Prep	
885-10040-26	MW24-C 70.0'	Total/NA	Solid	300_Prep	
MB 885-10638/1-A	Method Blank	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

HPLC/IC (Continued)

Prep Batch: 10638 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-10638/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-10040-12 MS	MW24-A 20.0'	Total/NA	Solid	300_Prep	
885-10040-12 MSD	MW24-A 20.0'	Total/NA	Solid	300_Prep	

Prep Batch: 10642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-10642/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-10642/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 10676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-10	MW24-A 3.5'	Total/NA	Solid	300.0	10630
885-10040-11	MW24-A 9.0'	Total/NA	Solid	300.0	10630
MB 885-10630/1-A	Method Blank	Total/NA	Solid	300.0	10630
MB 885-10676/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-10630/2-A	Lab Control Sample	Total/NA	Solid	300.0	10630
MRL 885-10676/3	Lab Control Sample	Total/NA	Solid	300.0	

Analysis Batch: 10718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-12	MW24-A 20.0'	Total/NA	Solid	300.0	10638
885-10040-13	MW24-A 30.0'	Total/NA	Solid	300.0	10638
885-10040-14	MW24-A 40.0'	Total/NA	Solid	300.0	10638
885-10040-15	MW24-A 50.0'	Total/NA	Solid	300.0	10638
885-10040-16	MW24-A 60.0'	Total/NA	Solid	300.0	10638
885-10040-17	MW24-A 69.0'	Total/NA	Solid	300.0	10638
885-10040-18	MW24-A 75.0'	Total/NA	Solid	300.0	10638
MB 885-10638/1-A	Method Blank	Total/NA	Solid	300.0	10638
LCS 885-10638/2-A	Lab Control Sample	Total/NA	Solid	300.0	10638
885-10040-12 MS	MW24-A 20.0'	Total/NA	Solid	300.0	10638
885-10040-12 MSD	MW24-A 20.0'	Total/NA	Solid	300.0	10638

Analysis Batch: 10752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-1	MW24-F 0.0'	Total/NA	Solid	300.0	10583
885-10040-2	MW24-F 3.5'	Total/NA	Solid	300.0	10583
885-10040-3	MW24-F 9-11'	Total/NA	Solid	300.0	10583
885-10040-4	MW24-F 19'	Total/NA	Solid	300.0	10583
885-10040-5	MW24-F 30.0'	Total/NA	Solid	300.0	10583
885-10040-6	MW24-F 40.0'	Total/NA	Solid	300.0	10583
885-10040-7	MW24-F 50.0'	Total/NA	Solid	300.0	10583
MB 885-10752/3	Method Blank	Total/NA	Solid	300.0	
MRL 885-10752/4	Lab Control Sample	Total/NA	Solid	300.0	

Analysis Batch: 10841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-19	MW24-C 0.0'	Total/NA	Solid	300.0	10638
885-10040-20	MW24-C 10.0'	Total/NA	Solid	300.0	10638
885-10040-21	MW24-C 19.0'	Total/NA	Solid	300.0	10638
885-10040-22	MW24-C 30.0'	Total/NA	Solid	300.0	10638
885-10040-23	MW24-C 40.0'	Total/NA	Solid	300.0	10638

Eurofins Albuquerque



QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

HPLC/IC (Continued)

Analysis Batch: 10841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-24	MW24-C 50.0'	Total/NA	Solid	300.0	10638
885-10040-25	MW24-C 60.0'	Total/NA	Solid	300.0	10638
885-10040-26	MW24-C 70.0'	Total/NA	Solid	300.0	10638
MB 885-10642/1-A	Method Blank	Total/NA	Solid	300.0	10642
LCS 885-10642/2-A	Lab Control Sample	Total/NA	Solid	300.0	10642

Analysis Batch: 11210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10040-8	MW24-F 65.0'	Total/NA	Solid	300.0	10630
885-10040-9	MW24-F 60.0'	Total/NA	Solid	300.0	10630
MB 885-11210/12	Method Blank	Total/NA	Solid	300.0	
MRL 885-11210/11	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 0.0'  
Date Collected: 08/12/24 09:00  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 06:16
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 06:16
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10596	KR	EET ALB	08/20/24 18:02
Total/NA	Prep	300_Prep			10583	EH	EET ALB	08/20/24 09:45
Total/NA	Analysis	300.0		1000	10752	RC	EET ALB	08/21/24 22:41

Client Sample ID: MW24-F 3.5'  
Date Collected: 08/12/24 09:20  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 06:38
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 06:38
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/20/24 22:42
Total/NA	Prep	300_Prep			10583	EH	EET ALB	08/20/24 09:45
Total/NA	Analysis	300.0		200	10752	RC	EET ALB	08/21/24 22:53

Client Sample ID: MW24-F 9-11'  
Date Collected: 08/12/24 09:40  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 07:00
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 07:00
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/20/24 22:56
Total/NA	Prep	300_Prep			10583	EH	EET ALB	08/20/24 09:45
Total/NA	Analysis	300.0		500	10752	RC	EET ALB	08/21/24 23:06

Client Sample ID: MW24-F 19'  
Date Collected: 08/12/24 10:20  
Date Received: 08/16/24 08:20

Lab Sample ID: 885-10040-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 07:21

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 19'

Lab Sample ID: 885-10040-4

Date Collected: 08/12/24 10:20

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 07:21
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/20/24 23:09
Total/NA	Prep	300_Prep			10583	EH	EET ALB	08/20/24 09:45
Total/NA	Analysis	300.0		200	10752	RC	EET ALB	08/21/24 23:18

Client Sample ID: MW24-F 30.0'

Lab Sample ID: 885-10040-5

Date Collected: 08/12/24 10:50

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 07:43
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 07:43
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/20/24 23:36
Total/NA	Prep	300_Prep			10583	EH	EET ALB	08/20/24 09:45
Total/NA	Analysis	300.0		200	10752	RC	EET ALB	08/21/24 23:30

Client Sample ID: MW24-F 40.0'

Lab Sample ID: 885-10040-6

Date Collected: 08/12/24 11:35

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 08:05
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 08:05
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/20/24 23:50
Total/NA	Prep	300_Prep			10583	EH	EET ALB	08/20/24 09:45
Total/NA	Analysis	300.0		200	10752	RC	EET ALB	08/21/24 23:43

Client Sample ID: MW24-F 50.0'

Lab Sample ID: 885-10040-7

Date Collected: 08/12/24 12:04

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 08:27
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 08:27

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-F 50.0'

Lab Sample ID: 885-10040-7

Date Collected: 08/12/24 12:04

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/21/24 00:04
Total/NA	Prep	300_Prep			10583	EH	EET ALB	08/20/24 09:45
Total/NA	Analysis	300.0		100	10752	RC	EET ALB	08/21/24 23:55

Client Sample ID: MW24-F 65.0'

Lab Sample ID: 885-10040-8

Date Collected: 08/12/24 13:20

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8015M/D		1	10586	AT	EET ALB	08/20/24 08:49
Total/NA	Prep	5030C			10456	AT	EET ALB	08/16/24 17:33
Total/NA	Analysis	8021B		1	10588	AT	EET ALB	08/20/24 08:49
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/21/24 00:17
Total/NA	Prep	300_Prep			10630	KB	EET ALB	08/20/24 14:02
Total/NA	Analysis	300.0		100	11210	RC	EET ALB	08/28/24 09:22

Client Sample ID: MW24-F 60.0'

Lab Sample ID: 885-10040-9

Date Collected: 08/12/24 12:57

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 13:53
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 13:53
Total/NA	Prep	SHAKE			10566	KR	EET ALB	08/20/24 08:28
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/21/24 00:31
Total/NA	Prep	300_Prep			10630	KB	EET ALB	08/20/24 14:02
Total/NA	Analysis	300.0		100	11210	RC	EET ALB	08/28/24 09:37

Client Sample ID: MW24-A 3.5'

Lab Sample ID: 885-10040-10

Date Collected: 08/12/24 14:30

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 14:59
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 14:59
Total/NA	Prep	SHAKE			10601	KR	EET ALB	08/20/24 11:05
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/21/24 05:41

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

**Client Sample ID: MW24-A 3.5'**  
**Date Collected: 08/12/24 14:30**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-10**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			10630	KB	EET ALB	08/20/24 14:02
Total/NA	Analysis	300.0		20	10676	EH	EET ALB	08/21/24 00:09

**Client Sample ID: MW24-A 9.0'**  
**Date Collected: 08/12/24 14:36**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-11**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 16:04
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 16:04
Total/NA	Prep	SHAKE			10601	KR	EET ALB	08/20/24 11:05
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/21/24 05:55
Total/NA	Prep	300_Prep			10630	KB	EET ALB	08/20/24 14:02
Total/NA	Analysis	300.0		20	10676	EH	EET ALB	08/21/24 00:22

**Client Sample ID: MW24-A 20.0'**  
**Date Collected: 08/12/24 14:54**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-12**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 16:26
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 16:26
Total/NA	Prep	SHAKE			10601	KR	EET ALB	08/20/24 11:05
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/21/24 06:07
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		20	10718	EH	EET ALB	08/20/24 17:07

**Client Sample ID: MW24-A 30.0'**  
**Date Collected: 08/12/24 15:15**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-13**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 16:48
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 16:48
Total/NA	Prep	SHAKE			10601	KR	EET ALB	08/20/24 11:05
Total/NA	Analysis	8015M/D		1	10594	KR	EET ALB	08/21/24 06:20
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		20	10718	EH	EET ALB	08/20/24 17:46

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-A 40.0'

Lab Sample ID: 885-10040-14

Date Collected: 08/12/24 15:33

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 17:10
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 17:10
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 14:08
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		20	10718	EH	EET ALB	08/20/24 17:59

Client Sample ID: MW24-A 50.0'

Lab Sample ID: 885-10040-15

Date Collected: 08/13/24 08:05

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 17:32
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 17:32
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 14:19
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		20	10718	EH	EET ALB	08/20/24 18:11

Client Sample ID: MW24-A 60.0'

Lab Sample ID: 885-10040-16

Date Collected: 08/13/24 08:41

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 17:54
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 17:54
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 14:30
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		20	10718	EH	EET ALB	08/20/24 18:24

Client Sample ID: MW24-A 69.0'

Lab Sample ID: 885-10040-17

Date Collected: 08/13/24 09:07

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 18:16

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

**Client Sample ID: MW24-A 69.0'**  
**Date Collected: 08/13/24 09:07**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-17**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 18:16
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 14:41
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		20	10718	EH	EET ALB	08/20/24 18:37

**Client Sample ID: MW24-A 75.0'**  
**Date Collected: 08/13/24 09:26**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-18**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 18:38
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 18:38
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 14:52
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		20	10718	EH	EET ALB	08/20/24 19:16

**Client Sample ID: MW24-C 0.0'**  
**Date Collected: 08/13/24 10:45**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-19**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 19:22
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 19:22
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 15:03
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		200	10841	EH	EET ALB	08/22/24 14:04

**Client Sample ID: MW24-C 10.0'**  
**Date Collected: 08/13/24 10:56**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-20**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 19:44
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 19:44

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Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

**Client Sample ID: MW24-C 10.0'**  
**Date Collected: 08/13/24 10:56**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-20**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 15:14
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		200	10841	EH	EET ALB	08/22/24 14:17

**Client Sample ID: MW24-C 19.0'**  
**Date Collected: 08/13/24 11:20**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-21**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 20:06
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 20:06
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 15:25
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		200	10841	EH	EET ALB	08/22/24 14:30

**Client Sample ID: MW24-C 30.0'**  
**Date Collected: 08/13/24 11:37**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-22**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 20:27
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 20:27
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 15:47
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		50	10841	EH	EET ALB	08/22/24 14:43

**Client Sample ID: MW24-C 40.0'**  
**Date Collected: 08/13/24 12:53**  
**Date Received: 08/16/24 08:20**

**Lab Sample ID: 885-10040-23**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 20:49
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 20:49
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 15:57

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

Client Sample ID: MW24-C 40.0'

Lab Sample ID: 885-10040-23

Date Collected: 08/13/24 12:53

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		200	10841	EH	EET ALB	08/22/24 15:21

Client Sample ID: MW24-C 50.0'

Lab Sample ID: 885-10040-24

Date Collected: 08/13/24 13:15

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 21:11
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 21:11
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 16:08
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		100	10841	EH	EET ALB	08/22/24 15:34

Client Sample ID: MW24-C 60.0'

Lab Sample ID: 885-10040-25

Date Collected: 08/13/24 13:57

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 21:33
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 21:33
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 16:19
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		100	10841	EH	EET ALB	08/22/24 15:47

Client Sample ID: MW24-C 70.0'

Lab Sample ID: 885-10040-26

Date Collected: 08/13/24 14:10

Matrix: Solid

Date Received: 08/16/24 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8015M/D		1	10658	AT	EET ALB	08/20/24 21:55
Total/NA	Prep	5030C			10460	AT	EET ALB	08/16/24 18:36
Total/NA	Analysis	8021B		1	10659	AT	EET ALB	08/20/24 21:55
Total/NA	Prep	SHAKE			10622	EM	EET ALB	08/20/24 12:52
Total/NA	Analysis	8015M/D		1	10682	EM	EET ALB	08/21/24 16:31
Total/NA	Prep	300_Prep			10638	EH	EET ALB	08/20/24 15:09
Total/NA	Analysis	300.0		50	10841	EH	EET ALB	08/22/24 16:00

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline

Job ID: 885-10040-1

**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: East Pecos Pipeline

Job ID: 885-10040-1

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	02-26-25
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	02-26-25

Chain-of-Custody Record									
Client: <u>VerTex Resource Services</u>		Standard <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>5 days</u>		Project Name: <u>East Texas Pipeline</u>					
Mailing Address: <u>3101 Boyd</u>		Project #: <u>22E-03982</u>							
Phone #: <u>346-814-1413</u>		Project Manager: <u>Kent Stallings</u>							
email or Fax#: <u>Kstallings@vertexresources.com</u>		Sampler: <u>Austin Harris</u>							
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Accreditation: <input type="checkbox"/> AZ Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____		# of Coolers: <u>1/4</u> <u>1</u> <u>Checked</u>							
<input type="checkbox"/> EDD (Type) _____		Cooler Temp (including CF): <u>5.4-0.4=5.0 (°C)</u>							
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.			
0924	0900	Soil	MW24-F 0.0'	4102	ICE	1			
	0920		MW24-F 3.5'			2			
	0940		MW24-F 9-11'			3			
	1020		MW24-F 19.0'			4			
	1050		MW24-F 30.0'			5			
	1135		MW24-F 40.0'			6			
	1204		MW24-F 50.0'			7			
	1320		MW24-F 65.0'			8			
	1257		MW24-F 60.0'			9			
	1430		MW24-A 3.5'			10			
	1436		MW24-A 9.0'			11			
	1454		MW24-A 20.0'			12			
Date:	Time:	Relinquished by:		Via:		Date	Time		
09/15/24	1000	Manning				09/15/24	0915		
Date:	Time:	Relinquished by:		Via:		Date	Time		
09/15/24	1000	Manning				09/15/24	0920		

9/3/2024



**HALL ENVIRONMENTAL  
ANALYSIS LABO**

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

4901 Hawkins NE - Albuquerque, NM 87110

Tel 505-345-3975 Fax 505-345-410 885-10040 COC



## Analysis Request

[illegible]

Remarks:

B.11 to even energy

Q1 of 3

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.



<b>Chain-of-Custody Record</b>			
Client: <u>Vertex</u>		Turn-Around Time: <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>5 Days</u>	
Mailing Address:		Project Name: <u>East Pecos Pipeline</u>	
Phone #:		Project #: <u>22E-03982</u>	
email or Fax#:		Project Manager: <u>Kent Stallings</u>	
QA/QC Package:		Sampler: <u>AUSTW</u> <u>WARR</u>	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation: <input type="checkbox"/> Az Compliance		# of Coolers: <u>1</u> <u>CHUCKY</u>	
<input type="checkbox"/> NELAC <input type="checkbox"/> Other		Cooler Temp (including CF): <u>5.4 - 0.4 = 5.0 (°C)</u>	
<input type="checkbox"/> EDD (Type)			
Date	Time	Matrix	Sample Name
12-24	1515	Soil	MW24-A 30.0'
12-24	1533		MW24-A 40.0'
12-24	0805		MW24-A 50.0'
	0841		MW24-A 60.0'
	0907		MW24-A 69.0'
	0926		MW24-A 75.0'
	1045		MW24-C 0.0'
	1056		MW24-C 10.0'
	1120		MW24-C 19.0'
	1137		MW24-C 30.0'
	1253		MW24-C 40.0'
	1315		MW24-C 50.0'
Date:	Time:	Relinquished by:	Received by: Via: Date Time
12/24	1900	Customer	Customer 8/15/24 915
Date:	Time:	Relinquished by:	Received by: Via: Date Time
12/24	1900	Customer	SCM Cover 8/16/24 0820

9/3/2024



# 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

BTX / MTBE / TMB's (8021)	
TPH (8015D) (GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
CIT, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks:


B.11 to Devon Energy

pg 2 of 3

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.

[illegible]

<b>Turn-Around Time:</b>					
<input checked="" type="checkbox"/> Standard		<input checked="" type="checkbox"/> Rush    5 Days			
<b>Project Name:</b> East Pecan Pipeline					
<b>Project #:</b> 22E-03782					
<b>Project Manager:</b> Kent Stallings					
<b>Sampler:</b> Austin Harrell					
<b>On Ice:</b> <input checked="" type="checkbox"/>		<b>Yes</b> <input type="checkbox"/> No			
<b># of Coolers:</b> _____		<b>Cooler Temp</b> (including CFJ): CHUCKY <u>54 - 0.4 = 5.0 °C)</u>			
<b>Container Type and #</b>	<b>Preservative Type</b>	<b>HEAL No.</b>			
402	ICE-	95			
402	ICE-	96			
<b>Received by:</b>		<b>Via:</b>		<b>Date</b>	<b>Time</b>
Manning				8/5/24	915
<b>Received by:</b>		<b>Via:</b>		<b>Date</b>	<b>Time</b>
SEM COURIER				8/16/24	0420



**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

[illegible]

Remarks:	B, 11 to Devon	203023
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possibility. Any sub-contracted data will be clearly notated on the analytical report.



## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-10040-1

Login Number: 10040

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

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

Generated 9/18/2024 9:08:36 AM

## JOB DESCRIPTION

East Pecos Pipeline Spill

## JOB NUMBER

885-11123-1

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  
9/18/2024 9:08:36 AM

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: East Pecos Pipeline Spill

Laboratory Job ID: 885-11123-1

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Definitions/Glossary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

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: East Pecos Pipeline Spill

Job ID: 885-11123-1

**Job ID: 885-11123-1**

**Eurofins Albuquerque**

### Job Narrative 885-11123-1

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 9/4/2024 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 1.6°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: East Pecos Pipeline Spill

Job ID: 885-11123-1

Client Sample ID: MW24-A      Lab Sample ID: 885-11123-1  
Date Collected: 08/31/24 15:00      Matrix: Water  
Date Received: 09/04/24 07:45

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			09/06/24 14:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		15 - 270				09/06/24 14:24	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			09/06/24 14:24	1	
Ethylbenzene	ND		1.0	ug/L			09/06/24 14:24	1	
Toluene	ND		1.0	ug/L			09/06/24 14:24	1	
Xylenes, Total	ND		2.0	ug/L			09/06/24 14:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		43 - 158				09/06/24 14:24	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		09/06/24 08:16	09/06/24 13:18	1	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		09/06/24 08:16	09/06/24 13:18	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		46 - 159			09/06/24 08:16	09/06/24 13:18	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1800		100	mg/L			09/13/24 11:29	200	



Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

Client Sample ID: MW24-B      Lab Sample ID: 885-11123-2  
Date Collected: 08/31/24 12:20      Matrix: Water  
Date Received: 09/04/24 07:45

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			09/06/24 14:46	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	113		15 - 270				09/06/24 14:46	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			09/06/24 14:46	1	
Ethylbenzene	ND		1.0	ug/L			09/06/24 14:46	1	
Toluene	ND		1.0	ug/L			09/06/24 14:46	1	
Xylenes, Total	ND		2.0	ug/L			09/06/24 14:46	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		43 - 158				09/06/24 14:46	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		09/06/24 08:16	09/06/24 14:06	1	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		09/06/24 08:16	09/06/24 14:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	112		46 - 159			09/06/24 08:16	09/06/24 14:06	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	4200		250	mg/L			09/13/24 09:08	500	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

Client Sample ID: MW24-E      Lab Sample ID: 885-11123-3  
Date Collected: 08/31/24 18:35      Matrix: Water  
Date Received: 09/04/24 07:45

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			09/06/24 15:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	120		15 - 270				09/06/24 15:08	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			09/06/24 15:08	1	
Ethylbenzene	ND		1.0	ug/L			09/06/24 15:08	1	
Toluene	ND		1.0	ug/L			09/06/24 15:08	1	
Xylenes, Total	ND		2.0	ug/L			09/06/24 15:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		43 - 158				09/06/24 15:08	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		09/06/24 08:16	09/06/24 14:31	1	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		09/06/24 08:16	09/06/24 14:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	117		46 - 159			09/06/24 08:16	09/06/24 14:31	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	960		50	mg/L			09/13/24 11:42	100	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

Client Sample ID: MW24-D      Lab Sample ID: 885-11123-4  
Date Collected: 09/01/24 14:27      Matrix: Water  
Date Received: 09/04/24 07:45

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			09/06/24 15:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	108		15 - 270				09/06/24 15:29	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	3.8		1.0	ug/L			09/06/24 15:29	1	
Ethylbenzene	ND		1.0	ug/L			09/06/24 15:29	1	
Toluene	2.5		1.0	ug/L			09/06/24 15:29	1	
Xylenes, Total	ND		2.0	ug/L			09/06/24 15:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	111		43 - 158				09/06/24 15:29	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		09/06/24 08:16	09/06/24 14:55	1	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		09/06/24 08:16	09/06/24 14:55	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	115		46 - 159			09/06/24 08:16	09/06/24 14:55	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	25000		1000	mg/L			09/13/24 09:20	2000	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

Client Sample ID: MW24-F

Lab Sample ID: 885-11123-5

Date Collected: 09/01/24 13:46

Matrix: Water

Date Received: 09/04/24 07:45

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		0.10	mg/L			09/06/24 15:51	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	114		15 - 270				09/06/24 15:51	2	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		2.0	ug/L			09/06/24 15:51	2	
Ethylbenzene	ND		2.0	ug/L			09/06/24 15:51	2	
Toluene	ND		2.0	ug/L			09/06/24 15:51	2	
Xylenes, Total	ND		4.0	ug/L			09/06/24 15:51	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		43 - 158				09/06/24 15:51	2	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		09/06/24 08:16	09/06/24 15:20	1	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		09/06/24 08:16	09/06/24 15:20	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	110		46 - 159			09/06/24 08:16	09/06/24 15:20	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	59000		2500	mg/L			09/13/24 09:33	5000	

Client Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

Client Sample ID: MW24-G

Lab Sample ID: 885-11123-6

Date Collected: 09/01/24 10:30

Matrix: Water

Date Received: 09/04/24 07:45

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			09/06/24 16:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 270				09/06/24 16:13	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			09/06/24 16:13	1	
Ethylbenzene	ND		1.0	ug/L			09/06/24 16:13	1	
Toluene	ND		1.0	ug/L			09/06/24 16:13	1	
Xylenes, Total	ND		2.0	ug/L			09/06/24 16:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	108		43 - 158				09/06/24 16:13	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		09/06/24 08:16	09/06/24 15:44	1	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		09/06/24 08:16	09/06/24 15:44	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	116		46 - 159			09/06/24 08:16	09/06/24 15:44	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	18000		1000	mg/L			09/13/24 09:46	2000	

QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

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

Lab Sample ID: MB 885-11804/3					Client Sample ID: Method Blank				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 11804									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			09/06/24 11:07	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	108		15 - 270				09/06/24 11:07	1	

Lab Sample ID: LCS 885-11804/2					Client Sample ID: Lab Control Sample				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 11804									
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]			0.500	0.508		mg/L		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	219		15 - 270						

Lab Sample ID: 885-11123-1 MS					Client Sample ID: MW24-A				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 11804									
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		0.500	0.495		mg/L		99	41 - 148
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	224		15 - 270						

Lab Sample ID: 885-11123-1 MSD								Client Sample ID: MW24-A				
Matrix: Water								Prep Type: Total/NA				
Analysis Batch: 11804												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Gasoline Range Organics [C6 - C10]	ND		0.500	0.493		mg/L		99	41 - 148	0	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
4-Bromofluorobenzene (Surr)	212		15 - 270									

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-11807/3					Client Sample ID: Method Blank				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 11807									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			09/06/24 11:07	1	
Ethylbenzene	ND		1.0	ug/L			09/06/24 11:07	1	
Toluene	ND		1.0	ug/L			09/06/24 11:07	1	

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## QC Sample Results

Client: Vertex

Job ID: 885-11123-1

Project/Site: East Pecos Pipeline Spill

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

Lab Sample ID: MB 885-11807/3

Matrix: Water

Analysis Batch: 11807

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	ug/L			09/06/24 11:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		43 - 158				09/06/24 11:07	1

Lab Sample ID: LCS 885-11807/2

Matrix: Water

Analysis Batch: 11807

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	20.9		ug/L		104	70 - 130
Ethylbenzene	20.0	21.5		ug/L		107	70 - 130
m&p-Xylene	40.0	42.7		ug/L		107	70 - 130
o-Xylene	20.0	21.0		ug/L		105	70 - 130
Toluene	20.0	21.2		ug/L		106	70 - 130
Xylenes, Total	60.0	63.7		ug/L		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	111		43 - 158				

Lab Sample ID: 885-11123-2 MS

Matrix: Water

Analysis Batch: 11807

Client Sample ID: MW24-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		20.0	20.5		ug/L		101	70 - 130
Ethylbenzene	ND		20.0	21.1		ug/L		105	70 - 130
m&p-Xylene	ND		40.0	42.4		ug/L		104	70 - 130
o-Xylene	ND		20.0	21.2		ug/L		106	70 - 130
Toluene	ND		20.0	20.9		ug/L		103	70 - 130
Xylenes, Total	ND		60.0	63.6		ug/L		105	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	116		43 - 158						

Lab Sample ID: 885-11123-2 MSD

Matrix: Water

Analysis Batch: 11807

Client Sample ID: MW24-B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		20.0	19.9		ug/L		99	70 - 130	3	20
Ethylbenzene	ND		20.0	20.9		ug/L		104	70 - 130	1	20
m&p-Xylene	ND		40.0	41.8		ug/L		103	70 - 130	2	20
o-Xylene	ND		20.0	20.8		ug/L		104	70 - 130	2	20
Toluene	ND		20.0	20.6		ug/L		101	70 - 130	1	20
Xylenes, Total	ND		60.0	62.6		ug/L		103	70 - 130	2	20

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QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

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

Lab Sample ID: 885-11123-2 MSD  
Matrix: Water  
Analysis Batch: 11807

Client Sample ID: MW24-B  
Prep Type: Total/NA

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		43 - 158

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

Lab Sample ID: MB 885-11722/1-A  
Matrix: Water  
Analysis Batch: 11747

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 11722

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		09/06/24 08:16	09/06/24 10:53	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		09/06/24 08:16	09/06/24 10:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		46 - 159			09/06/24 08:16	09/06/24 10:53	1

Lab Sample ID: LCS 885-11722/2-A  
Matrix: Water  
Analysis Batch: 11747

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 11722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	2.50	3.27		mg/L		131	57 - 147
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	115		46 - 159				

Lab Sample ID: 885-11123-6 MS  
Matrix: Water  
Analysis Batch: 11747

Client Sample ID: MW24-G  
Prep Type: Total/NA  
Prep Batch: 11722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		2.50	3.20		mg/L		128	33 - 161
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	114		46 - 159						

Lab Sample ID: 885-11123-6 MSD  
Matrix: Water  
Analysis Batch: 11747

Client Sample ID: MW24-G  
Prep Type: Total/NA  
Prep Batch: 11722

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		2.50	3.17		mg/L		127	33 - 161	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	112		46 - 159								

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QC Sample Results

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

Method: 300.0 - Anions, Ion Chromatography

<div>Lab Sample ID: MB 885-11630/4</div> <div>Matrix: Water</div> <div>Analysis Batch: 11630</div>										<div>Client Sample ID: Method Blank</div> <div>Prep Type: Total/NA</div>	
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	ND		0.50	mg/L			09/04/24 10:56	1			
<div>Lab Sample ID: LCS 885-11630/5</div> <div>Matrix: Water</div> <div>Analysis Batch: 11630</div>										<div>Client Sample ID: Lab Control Sample</div> <div>Prep Type: Total/NA</div>	
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			5.00	4.70		mg/L		94	90 - 110		
<div>Lab Sample ID: MRL 885-11630/3</div> <div>Matrix: Water</div> <div>Analysis Batch: 11630</div>										<div>Client Sample ID: Lab Control Sample</div> <div>Prep Type: Total/NA</div>	
Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.520		mg/L		104	50 - 150		
<div>Lab Sample ID: MB 885-12237/23</div> <div>Matrix: Water</div> <div>Analysis Batch: 12237</div>										<div>Client Sample ID: Method Blank</div> <div>Prep Type: Total/NA</div>	
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	ND		0.50	mg/L			09/13/24 12:46	1			
<div>Lab Sample ID: MB 885-12237/4</div> <div>Matrix: Water</div> <div>Analysis Batch: 12237</div>										<div>Client Sample ID: Method Blank</div> <div>Prep Type: Total/NA</div>	
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	ND		0.50	mg/L			09/13/24 08:41	1			
<div>Lab Sample ID: LCS 885-12237/24</div> <div>Matrix: Water</div> <div>Analysis Batch: 12237</div>										<div>Client Sample ID: Lab Control Sample</div> <div>Prep Type: Total/NA</div>	
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			5.00	4.80		mg/L		96	90 - 110		
<div>Lab Sample ID: LCS 885-12237/5</div> <div>Matrix: Water</div> <div>Analysis Batch: 12237</div>										<div>Client Sample ID: Lab Control Sample</div> <div>Prep Type: Total/NA</div>	
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			5.00	4.89		mg/L		98	90 - 110		
<div>Lab Sample ID: MRL 885-12237/3</div> <div>Matrix: Water</div> <div>Analysis Batch: 12237</div>										<div>Client Sample ID: Lab Control Sample</div> <div>Prep Type: Total/NA</div>	
Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.526		mg/L		105	50 - 150		

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## QC Association Summary

Client: Vertex

Job ID: 885-11123-1

Project/Site: East Pecos Pipeline Spill

## GC VOA

## Analysis Batch: 11804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11123-1	MW24-A	Total/NA	Water	8015D	
885-11123-2	MW24-B	Total/NA	Water	8015D	
885-11123-3	MW24-E	Total/NA	Water	8015D	
885-11123-4	MW24-D	Total/NA	Water	8015D	
885-11123-5	MW24-F	Total/NA	Water	8015D	
885-11123-6	MW24-G	Total/NA	Water	8015D	
MB 885-11804/3	Method Blank	Total/NA	Water	8015D	
LCS 885-11804/2	Lab Control Sample	Total/NA	Water	8015D	
885-11123-1 MS	MW24-A	Total/NA	Water	8015D	
885-11123-1 MSD	MW24-A	Total/NA	Water	8015D	

## Analysis Batch: 11807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11123-1	MW24-A	Total/NA	Water	8021B	
885-11123-2	MW24-B	Total/NA	Water	8021B	
885-11123-3	MW24-E	Total/NA	Water	8021B	
885-11123-4	MW24-D	Total/NA	Water	8021B	
885-11123-5	MW24-F	Total/NA	Water	8021B	
885-11123-6	MW24-G	Total/NA	Water	8021B	
MB 885-11807/3	Method Blank	Total/NA	Water	8021B	
LCS 885-11807/2	Lab Control Sample	Total/NA	Water	8021B	
885-11123-2 MS	MW24-B	Total/NA	Water	8021B	
885-11123-2 MSD	MW24-B	Total/NA	Water	8021B	

## GC Semi VOA

## Prep Batch: 11722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11123-1	MW24-A	Total/NA	Water	3511	
885-11123-2	MW24-B	Total/NA	Water	3511	
885-11123-3	MW24-E	Total/NA	Water	3511	
885-11123-4	MW24-D	Total/NA	Water	3511	
885-11123-5	MW24-F	Total/NA	Water	3511	
885-11123-6	MW24-G	Total/NA	Water	3511	
MB 885-11722/1-A	Method Blank	Total/NA	Water	3511	
LCS 885-11722/2-A	Lab Control Sample	Total/NA	Water	3511	
885-11123-6 MS	MW24-G	Total/NA	Water	3511	
885-11123-6 MSD	MW24-G	Total/NA	Water	3511	

## Analysis Batch: 11747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11123-1	MW24-A	Total/NA	Water	8015D	11722
885-11123-2	MW24-B	Total/NA	Water	8015D	11722
885-11123-3	MW24-E	Total/NA	Water	8015D	11722
885-11123-4	MW24-D	Total/NA	Water	8015D	11722
885-11123-5	MW24-F	Total/NA	Water	8015D	11722
885-11123-6	MW24-G	Total/NA	Water	8015D	11722
MB 885-11722/1-A	Method Blank	Total/NA	Water	8015D	11722
LCS 885-11722/2-A	Lab Control Sample	Total/NA	Water	8015D	11722
885-11123-6 MS	MW24-G	Total/NA	Water	8015D	11722
885-11123-6 MSD	MW24-G	Total/NA	Water	8015D	11722

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QC Association Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

HPLC/IC

Analysis Batch: 11630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-11630/4	Method Blank	Total/NA	Water	300.0	
LCS 885-11630/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-11630/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 12237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11123-1	MW24-A	Total/NA	Water	300.0	
885-11123-2	MW24-B	Total/NA	Water	300.0	
885-11123-3	MW24-E	Total/NA	Water	300.0	
885-11123-4	MW24-D	Total/NA	Water	300.0	
885-11123-5	MW24-F	Total/NA	Water	300.0	
885-11123-6	MW24-G	Total/NA	Water	300.0	
MB 885-12237/23	Method Blank	Total/NA	Water	300.0	
MB 885-12237/4	Method Blank	Total/NA	Water	300.0	
LCS 885-12237/24	Lab Control Sample	Total/NA	Water	300.0	
LCS 885-12237/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-12237/3	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

**Client Sample ID: MW24-A**  
**Date Collected: 08/31/24 15:00**  
**Date Received: 09/04/24 07:45**

**Lab Sample ID: 885-11123-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	11804	AT	EET ALB	09/06/24 14:24
Total/NA	Analysis	8021B		1	11807	AT	EET ALB	09/06/24 14:24
Total/NA	Prep	3511			11722	KR	EET ALB	09/06/24 08:16
Total/NA	Analysis	8015D		1	11747	KR	EET ALB	09/06/24 13:18
Total/NA	Analysis	300.0		200	12237	RC	EET ALB	09/13/24 11:29

**Client Sample ID: MW24-B**  
**Date Collected: 08/31/24 12:20**  
**Date Received: 09/04/24 07:45**

**Lab Sample ID: 885-11123-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	11804	AT	EET ALB	09/06/24 14:46
Total/NA	Analysis	8021B		1	11807	AT	EET ALB	09/06/24 14:46
Total/NA	Prep	3511			11722	KR	EET ALB	09/06/24 08:16
Total/NA	Analysis	8015D		1	11747	KR	EET ALB	09/06/24 14:06
Total/NA	Analysis	300.0		500	12237	RC	EET ALB	09/13/24 09:08

**Client Sample ID: MW24-E**  
**Date Collected: 08/31/24 18:35**  
**Date Received: 09/04/24 07:45**

**Lab Sample ID: 885-11123-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	11804	AT	EET ALB	09/06/24 15:08
Total/NA	Analysis	8021B		1	11807	AT	EET ALB	09/06/24 15:08
Total/NA	Prep	3511			11722	KR	EET ALB	09/06/24 08:16
Total/NA	Analysis	8015D		1	11747	KR	EET ALB	09/06/24 14:31
Total/NA	Analysis	300.0		100	12237	RC	EET ALB	09/13/24 11:42

**Client Sample ID: MW24-D**  
**Date Collected: 09/01/24 14:27**  
**Date Received: 09/04/24 07:45**

**Lab Sample ID: 885-11123-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	11804	AT	EET ALB	09/06/24 15:29
Total/NA	Analysis	8021B		1	11807	AT	EET ALB	09/06/24 15:29
Total/NA	Prep	3511			11722	KR	EET ALB	09/06/24 08:16
Total/NA	Analysis	8015D		1	11747	KR	EET ALB	09/06/24 14:55
Total/NA	Analysis	300.0		2000	12237	RC	EET ALB	09/13/24 09:20

Lab Chronicle

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

**Client Sample ID: MW24-F**  
**Date Collected: 09/01/24 13:46**  
**Date Received: 09/04/24 07:45**

**Lab Sample ID: 885-11123-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		2	11804	AT	EET ALB	09/06/24 15:51
Total/NA	Analysis	8021B		2	11807	AT	EET ALB	09/06/24 15:51
Total/NA	Prep	3511			11722	KR	EET ALB	09/06/24 08:16
Total/NA	Analysis	8015D		1	11747	KR	EET ALB	09/06/24 15:20
Total/NA	Analysis	300.0		5000	12237	RC	EET ALB	09/13/24 09:33

**Client Sample ID: MW24-G**  
**Date Collected: 09/01/24 10:30**  
**Date Received: 09/04/24 07:45**

**Lab Sample ID: 885-11123-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	11804	AT	EET ALB	09/06/24 16:13
Total/NA	Analysis	8021B		1	11807	AT	EET ALB	09/06/24 16:13
Total/NA	Prep	3511			11722	KR	EET ALB	09/06/24 08:16
Total/NA	Analysis	8015D		1	11747	KR	EET ALB	09/06/24 15:44
Total/NA	Analysis	300.0		2000	12237	RC	EET ALB	09/13/24 09:46

**Laboratory References:**  
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex  
Project/Site: East Pecos Pipeline Spill

Job ID: 885-11123-1

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	02-26-25
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		Water	Chloride
8015D		Water	Gasoline Range Organics [C6 - C10]
8015D	3511	Water	Diesel Range Organics [C10-C28]
8015D	3511	Water	Motor Oil Range Organics [C28-C40]
8021B		Water	Benzene
8021B		Water	Ethylbenzene
8021B		Water	Toluene
8021B		Water	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25



Chain-of-Custody Record				Turn-Around Time:			
Client:		Vertex		<input checked="" type="checkbox"/> Standard • <input checked="" type="checkbox"/> Rush    Water Samples			
Direct bill: Devon, WBS# MM-155085.AL,RNM				Project Name:			
Mailing Address: 5315 Buena Vista Dr.				East Pecos Pipeline Spill			
Carlsbad, NM 88220				Project #:			
Phone #: 575.689.7597				22E-03982			
email or Fax#: <a href="mailto:jim.raley@dvn.com">jim.raley@dvn.com</a>				Project Manager:			
QA/QC Package:				Kent Stallings			
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				<a href="mailto:KStallings@vertexresource.com">KStallings@vertexresource.com</a>			
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____				Sampler: L.Pullman			
<input type="checkbox"/> EDD (Type) _____				On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>chuckley</i>			
				# of Coolers: 1			
				Cooler Temp (including CFI): 1.3 - 0.1 = 1.0 °C			
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	
08/31/24	15:00	Water	MW24-A Cl	1, 500ml bot.		1	
08/31/24	15:05	Water	MW24T-A TPH	1, 1L bottle		2	
08/31/24	15:00	Water	MW24-A BTEX	3, HCl vials 7578, 7602, 7579		3	
08/31/24	12:20	Water	MW24-B Cl	1, 500ml bot.		4	
08/31/24	12:24	Water	MW24T-B TPH	1, 1L bottle		5	
08/31/24	12:20	Water	MW24-B BTEX	3, HCl vials 7555, 7554, 7531		6	
08/31/24	18:35	Water	MW24-E Cl	1, 500ml bot.		3	
08/31/24	18:40	Water	MW24T-E TPH	1, 1L bottle			
08/31/24	18:35	Water	MW24-E BTEX	3, HCl vials 7580, 7601, 7577			
Relinquished by:				Received by:			
Date: 7-3-24		Time: 0700		Via: <i>Signature</i>		Date: 9/3/24	
Date: 7/3/24		Time: 1900		Via: <i>Signature</i>		Date: 7:05	

~~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: 885-11123-1

Login Number: 11123

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.	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	

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

QUESTIONS

Action 412911

**QUESTIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 412911
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2233339274
Incident Name	NAPP2233339274 EAST PECOS PIPELINE SPILL @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Facility	[fAPP2122957910] Delaware Basin Midstream, LLC - Gas Gathering PL

**Location of Release Source**

Please answer all the questions in this group.

Site Name	EAST PECOS PIPELINE SPILL
Date Release Discovered	11/17/2022
Surface Owner	Private

**Incident Details**

Please answer all the questions in this group.

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	Yes
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Pipeline (Any)   Crude Oil   Released: 100 BBL   Recovered: 0 BBL   Lost: 100 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Pipeline (Any)   Produced Water   Released: 4,425 BBL   Recovered: 0 BBL   Lost: 4,425 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 412911

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 412911
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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; (2) an unauthorized release of a volume that: (d) substantially damages property or the environment.
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: James Raley Title: EHS Professional Email: jim.raley@dvsn.com Date: 12/17/2024
--	---



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QUESTIONS, Page 3

Action 412911

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 412911
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	Yes
<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 1000 (ft.) and ½ (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 ½ and 1 (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<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

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	71000
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	34099
GRO+DRO (EPA SW-846 Method 8015M)	23099
BTEX (EPA SW-846 Method 8021B or 8260B)	4.9
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	04/05/2025
On what date will (or did) the final sampling or liner inspection occur	08/13/2024
On what date will (or was) the remediation complete(d)	12/02/2026
What is the estimated surface area (in square feet) that will be reclaimed	194604
What is the estimated volume (in cubic yards) that will be reclaimed	28830
What is the estimated surface area (in square feet) that will be remediated	194604
What is the estimated volume (in cubic yards) that will be remediated	93600

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 412911

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 412911
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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	Not answered.
<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	Yes
In which state is the disposal taking place	Texas
What is the name of the out-of-state facility	R360
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<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: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 12/17/2024
<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 412911

QUESTIONS (continued)

Operator:  WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID:  246289
	Action Number:  412911
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 412911

QUESTIONS (continued)

Operator:  WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID:  246289
	Action Number:  412911
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 412911

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 412911
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
scwells	Remediation plan approved with the following conditions: WPX should be aware that investigatory and/or remedial wells may require placement in the footprint of the excavation. OCD requires contaminant removal to the maximum extent as is practicable and therefore a GCL is not approved at this time. Should you choose to stop excavation before RRALs are met, OCD must be consulted immediately by WPX to establish the best path forward. Secondly, A confirmation sampling variance is approved to collect both sidewall and base samples at a frequency of every 400 square feet.	1/28/2025