



July 29, 2025

**New Mexico Oil Conservation Division**

New Mexico Energy, Minerals, and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Site Summary Report and Closure Request**

Federal Pioneer 1E  
Hilcorp Energy Company  
NMOCD Incident No: nAPP2510430103

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Site Summary Report and Closure Request* associated with a condensate release at the Federal Pioneer 1E natural gas production well (Site). The Site is located on private land in Unit J, Section 29, Township 30 North, Range 12 West, in San Juan County, New Mexico (Figure 1).

**SITE BACKGROUND**

On April 13, 2025, Hilcorp personnel discovered a potential release of 12.7 barrels (bbls) of condensate at the Site. Specifically, while attempting to haul contents of the condensate tank for an oil sale, the hauler noted the tank was 12.7 bbls less than gauging data suggested. A Hilcorp operator further investigated and observed a hex plug on the northwest side of the tank that had a small drip. The operator backed out the hex plug off one thread, cleaned the plug, and reinstalled it in the tank. There was no evidence of wet or stained soils with the exception of a small area of wet gravel directly below the hex plug where it had dripped measuring approximately 0.5 square feet. At the time of discovery, it was assumed the released fluids had immediately soaked into the ground and did not pool on the ground surface. The location of the suspected release is indicated on Figure 2 by sample location SS01. Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) of discovery and submitted an initial *Notification of Release* on April 14, 2025. NMOCD assigned the Site Incident Number nAPP2510430103.

**SITE CHARACTERIZATION AND CLOSURE CRITERIA**

As part of the Site investigation, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 11 and 12 (19.15.29.11 and 12) of the New Mexico Administrative Code (NMAC).

The Site is located in Quaternary age alluvial deposits associated with the Animas River drainage. The alluvial sediment is likely underlain by the Nacimiento Geologic Formation. In the report titled *"Hydrogeology and Water Resources of San Juan Basin, New Mexico"* (Stone, et. al., 1983), the alluvial deposits vary greatly across the basin in both hydrologic properties and water quality. Where present in sufficient quantity and quality, wells are located in this formation for stock, irrigation, and domestic use. The Nacimiento Formation is characterized by interbedded black

carbonaceous mudstones and white, coarse-grained sandstones, which range in thickness from 418 feet to 2,232 feet. The hydrogeologic properties of the Nacimiento Formation vary dependent on location. Where sufficient yield is present, the primary use of water from this formation is for domestic and/or livestock supply. The Nacimiento Formation is underlain by the Ojo Alamo sandstone (Stone et. al., 1983).

The closest significant watercourse is Halford Independent Ditch, located 30 feet west of the Site. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and is approximately 2 feet from a wetland (Figure 1, shown to the southwest of Site). The nearest fresh-water well is New Mexico Office of the State Engineer (NMOSE) permitted well SJ-02309, located approximately 385 feet northeast of the Site. The recorded depth to water on the NMOSE database is 27 feet below ground surface (bgs). The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as no potential karst by the Bureau of Land Management [BLM]). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site.

## SITE CLOSURE CRITERIA

Based on the information presented above and in accordance with *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 NMAC), the following Closure Criteria for constituents of concern (COCs) should be applied to the Site:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH) as a combination of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO): 100 mg/kg
- Chloride: 600 mg/kg

## SITE ASSESSMENT ACTIVITIES

To assess potential soil impacts from the potential release, Ensolum advanced five hand auger borings (HA01 through HA05) on May 1, 2025. The NMOCD was notified at least two business days prior to commencing confirmation soil samples, with sampling notifications provided in Appendix A. Due to the presence of on-Site equipment and underground utilities, the hand auger borings were advanced in the locations indicated on Figure 2. All hand auger borings were advanced to depths between 4 feet and 5 feet bgs. Soil samples were field screened for the presence of organic vapors using a calibrated photoionization detector (PID), with results recorded in the field notes and PID results summarized in Table 1.

Two soil samples were collected from each hand auger boring: one from the depth interval indicating the greatest potential for impacts based on field screening measurements/observations and one from the terminus of each boring. Soil samples were collected directly into laboratory-provided jars, immediately placed on ice, and submitted to Eurofins Environment Testing for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-MRO following EPA Method 8015M/D; and chloride following EPA Method 300.0. Field indications of petroleum hydrocarbons, including wet soil, staining, odors, or elevated PID readings, were not observed in any of the samples during the field work. Photographs taken during field activities are attached as Appendix B.

Laboratory analytical results indicated BTEX, TPH, and chloride were not detected above the NMOCD Table I Closure Criteria in any of the soil samples collected during the May 2025 assessment.

To assess potential impacts present underneath the condensate tank, the tank was removed on June 24, 2025 and one pothole, SS01, was advanced directly underneath the potential release point (hex plug) shown on Figure 2. The pothole was advanced to a depth of 2 feet bgs and samples were collected and field screened in the manner described above. Again, field indications of petroleum hydrocarbons, including wet soil, staining, odors, or elevated PID readings, were not observed during the work. Samples were collected at the ground surface and at a depth of 2 feet bgs from location SS01. Additionally, one 5-point composite sample (CS01) was collected at the ground surface from the tank footprint area. Samples were collected and analyzed in the manner described above for BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride were not detected above the NMOCD Table I Closure Criteria in any of the soil samples collected during the June 2025 assessment.

Based on the results described above, final confirmation soil samples were collected on July 3, 2025. The NMOCD was again notified at least two business days prior to commencing confirmation soil samples, with sampling notifications included in Appendix A. Two 5-point composite samples (CS01 and CS02) were collected at the Site, composite soil sample CS01 was recollected from the ground surface within the tank footprint and composite soil sample CS02 was collected from a depth of approximately 1.5 feet bgs within the pothole that was advanced on June 24, 2025. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a resealable plastic bag and homogenizing the samples by thoroughly mixing. Samples were placed directly into laboratory-provided containers and submitted to Envirotech Analytical Laboratory for analysis of BTEX, TPH, and chloride. Based on the laboratory analytical results, all COC concentrations were either not detected above the laboratory reporting limits or were compliant with NMOCD Table I Closure Criteria.

Soil sample analytical results are summarized in Table 1 and Figures 2 and 3, with complete laboratory analytical reports attached as Appendix C. Photographs taken during Site activities are included in Appendix B.

## CONCLUSIONS AND CLOSURE REQUEST

Based on the soil sampling activities and analytical results described above, petroleum hydrocarbon and/or chloride contaminants were not detected in any of the samples collected at the Site above the NMOCD Table I Closure Criteria. Based on the data collected from the Site and the circumstances around the discovery of the release, it is presumed the tank contents were stolen or measurements were inaccurate and no fluids were actually released at the Site. As such, the Site appears to be absent of soil impacts and waste-containing soil; therefore, Site conditions appear to be protective of human health, the environment, and groundwater, and Hilcorp respectfully requests closure for Incident Number nAPP2510430103.

## REFERENCES

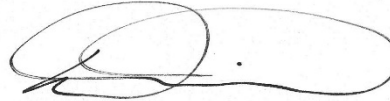
Stone, W., Lyford, F., Frenzel, P., Mizell, N., & Padgett, E. (1983). Hydrogeology and Water Resources of San Juan Basin, New Mexico. New Mexico Bureau of Mines & Mineral Resources.

We appreciate the opportunity to provide this document to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,  
**Ensolum, LLC**



Tracy Dembrowski  
Project Geologist  
(720) 989-6175  
tdembrowski@ensolum.com



Daniel R. Moir, PG (licensed in WY & TX)  
Senior Managing Geologist  
(303) 887-2946  
dmoir@ensolum.com

**Attachments:**

Figure 1: Site Location Map  
Figure 2: Delineation Soil Sample Location Map  
Figure 3: Composite Soil Sample Location Map  
  
Table 1: Soil Sample Analytical Results  
  
Appendix A: Agency Sampling Notification  
Appendix B: Photographic Log  
Appendix C: Laboratory Analytical Reports





FIGURES

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## Legend



Soil Sample Location in  
Compliance with  
NMOCD Closure  
Criteria



HA02  
HA01  
HA04  
HA03  
SS01  
HA05

0 12.5 25 50  
Feet

Notes:  
NMOCD: New Mexico Oil Conservation Division



**ENSOLUM**  
Environmental, Engineering and  
Hydrogeologic Consultants

## Delineation Soil Sample Location Map

Federal Pioneer 1E  
Hilcorp Energy Company  
36.782423, -108.118891  
San Juan County, New Mexico

FIGURE  
**2**



## Legend

Composite Soil  
Samples in Compliance  
with NMOCD Closure  
Criteria



CS01

CS02

0 5 10 20  
Feet

Notes:  
NMOCD: New Mexico Oil Conservation Division



## Composite Soil Sample Location Map

Federal Pioneer 1E  
Hilcorp Energy Company  
36.782423, -108.118891  
San Juan County, New Mexico

FIGURE  
**3**



TABLES

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**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Federal Pioneer 1E  
 Hilcorp Energy Company  
 San Juan County, New Mexico

Sample Identification	Date	Depth (feet bgs)	PID (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCDClosure Criteria for Soils Impacted by a Release</b>			<b>NE</b>	<b>10</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
<b>Delineation Soil Sample Analytical Results</b>													
HA01@1'	5/1/2025	1	98.2	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.4	<47	<47	<60
HA01@5'	5/1/2025	5	29.9	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.9	<50	<50	<60
HA02@2'	5/1/2025	2	6.1	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.7	<48	<48	<60
HA02@5'	5/1/2025	5	2.3	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<10	<50	<50	<60
HA03@2'	5/1/2025	2	51.4	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.6	<48	<48	<60
HA03@4'	5/1/2025	4	49.1	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.5	<47	<47	<60
HA04@3'	5/1/2025	3	27.0	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.4	<47	<47	<60
HA04@4'	5/1/2025	4	12.1	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.9	<49	<49	<60
HA05@4'	5/1/2025	4	41.2	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.2	<46	<46	<60
HA05@5'	5/1/2025	5	10.5	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.7	<48	<48	<60
SS01	6/24/2025	0 - 0.25	10.4	<0.017	<0.034	<0.034	<0.068	<0.068	<3.4	<9.5	<47	<47	<60
SS01@2'	6/24/2025	2	0.4	<0.016	<0.033	<0.033	<0.065	<0.065	<3.3	<9.7	<49	<49	<60
CS01	6/24/2025	0 - 0.25	14.3	<0.017	<0.035	<0.035	<0.070	<0.070	<3.5	<9.1	<46	<46	<60
<b>Composite Soil Sample Analytical Results</b>													
CS01	7/3/2025	0 - 0.25	--	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
CS02	7/3/2025	0 - 1.5	--	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0

**Notes:**

bgs: Below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

mg/kg: Milligrams per kilogram

NE: Not Established

NMOCDC: New Mexico Oil Conservation Division

PID: Photoionization detector

ppm: Parts per million

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

': Feet

&lt;: Indicates result less than the stated laboratory reporting limit (RL)





## APPENDIX A

### Agency Sampling Notification

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**From:** [Rodgers, Scott, EMNRD](#)  
**To:** [Stuart Hyde](#)  
**Cc:** [Mitch Killough](#)  
**Subject:** RE: [EXTERNAL] NAPP2510430103 - Federal Pioneer 1E Extension Request  
**Date:** Wednesday, July 9, 2025 11:30:00 AM  
**Attachments:** [image006.png](#)  
[image007.png](#)  
[image008.png](#)

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**[ \*\*EXTERNAL EMAIL\*\* ]**

Your time extension request is approved. Remediation Due date has been updated to September 10, 2025 within the incident page. Ensure that the site characterization/assessment report has been completed and is provided within the final closure report.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, time extension requests, sample event notifications, and variance requests.

If you have any questions, please contact me via email at your convenience.

Thank you,  
Scott

**Scott Rodgers** • Environmental Specialist – Adv.  
Environmental Bureau  
EMNRD - Oil Conservation Division  
5200 Oakland NE, Suite B | Albuquerque, NM 87113  
505.469.1830 | [scott.rodgers@emnrd.nm.gov](mailto:scott.rodgers@emnrd.nm.gov)  
<http://www.emnrd.nm.gov/oed>



---

**From:** Stuart Hyde <[shyde@ensolum.com](mailto:shyde@ensolum.com)>  
**Sent:** Tuesday, July 8, 2025 3:05 PM  
**To:** Rodgers, Scott, EMNRD <[Scott.Rodgers@emnrd.nm.gov](mailto:Scott.Rodgers@emnrd.nm.gov)>; Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Mitch Killough <[mkillough@hilcorp.com](mailto:mkillough@hilcorp.com)>

**Subject:** [EXTERNAL] NAPP2510430103 - Federal Pioneer 1E Extension Request

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

Scott,

On behalf of Hilcorp Energy Company, we are requesting a 60-day extension to the 7/12/2025 reporting deadline. At this time, we have conducted final sampling and are awaiting analytical results. If approved, the new deadline would be Wednesday September 10, 2025. Please reach out with any questions. Thanks.



**Stuart Hyde, PG**

(Licensed in TX, WA, & WY)

Senior Managing Geologist

970-903-1607

[Ensolum, LLC](#)

in f X

*"If you want to go fast, go alone. If you want to go far, go together." – African Proverb*

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Stuart Hyde](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 456148  
**Date:** Monday, April 28, 2025 9:48:56 AM

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[ \*\*EXTERNAL EMAIL\*\* ]

To whom it may concern (c/o Stuart Hyde for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2510430103.

The sampling event is expected to take place:

**When:** 05/01/2025 @ 09:00

**Where:** J-29-30N-12W 2075 FSL 1940 FEL (36.782426,-108.118105)

**Additional Information:** Contact Stuart Hyde, 970-903-1607

**Additional Instructions:** Federal Pioneer 1E well pad, 36.782423, -108.118891

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Stuart Hyde](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 479671  
**Date:** Friday, June 27, 2025 9:55:08 AM

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[ \*\*EXTERNAL EMAIL\*\* ]

To whom it may concern (c/o Stuart Hyde for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2510430103.

The sampling event is expected to take place:

**When:** 07/03/2025 @ 10:00

**Where:** J-29-30N-12W 2075 FSL 1940 FEL (36.782426,-108.118105)

**Additional Information:** Contact Stuart Hyde, 970-903-1607

**Additional Instructions:** Federal Pioneer 1E well pad, 36.782423, -108.118891

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**
- **If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505



## APPENDIX B

### Photographic Log

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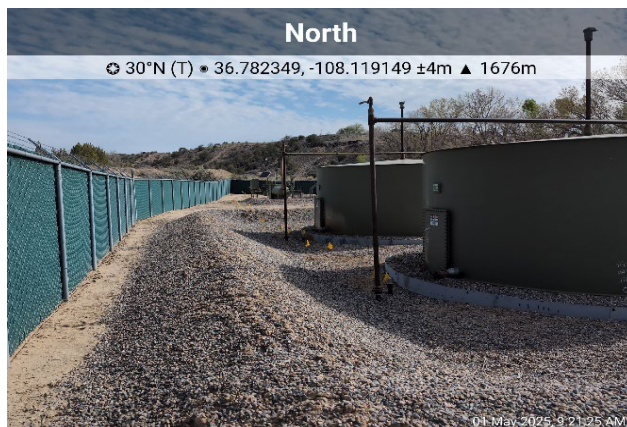




**Photographic Log**  
Hilcorp Energy Company  
Federal Pioneer #1E  
San Juan County, NM



Photograph: 1 Date: 4/13/2025  
Description: Hex plug at release point  
View: Southeast



Photograph: 2 Date: 5/1/2025  
Description: No obvious release/staining around tanks  
View: North



Photograph: 3 Date: 6/24/2025  
Description: Pothole below tank location  
View: Northeast



Photograph: 4 Date: 6/24/2025  
Description: Former condensate tank area  
View: South



## APPENDIX C

### Laboratory Analytical Reports

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Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mitch Killough  
Hilcorp Energy  
PO BOX 4700  
Farmington, New Mexico 87499

Generated 5/9/2025 10:33:53 AM

## JOB DESCRIPTION

Federal Pioneer 1E

## JOB NUMBER

885-24121-1

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  
5/9/2025 10:33:53 AM

Authorized for release by  
Michelle Garcia, Project Manager  
[michelle.garcia@et.eurofinsus.com](mailto:michelle.garcia@et.eurofinsus.com)  
(505)345-3975

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Laboratory Job ID: 885-24121-1

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## Definitions/Glossary

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

## 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: Hilcorp Energy  
Project: Federal Pioneer 1E

Job ID: 885-24121-1

**Job ID: 885-24121-1**

**Eurofins Albuquerque**

### Job Narrative 885-24121-1

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 5/2/2025 7:10 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 4.6°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: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA01@1'

Lab Sample ID: 885-24121-1

Date Collected: 05/01/25 10:30

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/02/25 15:21	05/05/25 19:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		35 - 166			05/02/25 15:21	05/05/25 19:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/25 15:21	05/05/25 19:12	1
Ethylbenzene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 19:12	1
Toluene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 19:12	1
Xylenes, Total	ND		0.10	mg/Kg		05/02/25 15:21	05/05/25 19:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		48 - 145			05/02/25 15:21	05/05/25 19:12	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		9.4	mg/Kg		05/05/25 08:42	05/05/25 14:32	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/05/25 08:42	05/05/25 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			05/05/25 08:42	05/05/25 14:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 09:03	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA01@5'

Lab Sample ID: 885-24121-2

Date Collected: 05/01/25 10:47

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/02/25 15:21	05/05/25 20:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			05/02/25 15:21	05/05/25 20:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/25 15:21	05/05/25 20:23	1
Ethylbenzene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 20:23	1
Toluene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 20:23	1
Xylenes, Total	ND		0.099	mg/Kg		05/02/25 15:21	05/05/25 20:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		48 - 145			05/02/25 15:21	05/05/25 20:23	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		9.9	mg/Kg		05/05/25 09:07	05/05/25 14:44	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/05/25 09:07	05/05/25 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	113		62 - 134			05/05/25 09:07	05/05/25 14:44	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 09:34	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA02@2'

Lab Sample ID: 885-24121-3

Date Collected: 05/01/25 12:13

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/02/25 15:21	05/05/25 21:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		35 - 166			05/02/25 15:21	05/05/25 21:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/25 15:21	05/05/25 21:35	1
Ethylbenzene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 21:35	1
Toluene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 21:35	1
Xylenes, Total	ND		0.10	mg/Kg		05/02/25 15:21	05/05/25 21:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		48 - 145			05/02/25 15:21	05/05/25 21:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/05/25 09:07	05/05/25 14:56	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/05/25 09:07	05/05/25 14:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	126		62 - 134			05/05/25 09:07	05/05/25 14:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 10:05	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA02@5'

Lab Sample ID: 885-24121-4

Date Collected: 05/01/25 12:30

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		05/02/25 15:21	05/05/25 21:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		35 - 166			05/02/25 15:21	05/05/25 21:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/02/25 15:21	05/05/25 21:58	1
Ethylbenzene	ND		0.048	mg/Kg		05/02/25 15:21	05/05/25 21:58	1
Toluene	ND		0.048	mg/Kg		05/02/25 15:21	05/05/25 21:58	1
Xylenes, Total	ND		0.097	mg/Kg		05/02/25 15:21	05/05/25 21:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		48 - 145			05/02/25 15:21	05/05/25 21:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/05/25 09:07	05/05/25 15:08	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/05/25 09:07	05/05/25 15:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	127		62 - 134			05/05/25 09:07	05/05/25 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		05/07/25 06:22	05/07/25 10:16	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA03@2'

Lab Sample ID: 885-24121-5

Date Collected: 05/01/25 10:59

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		05/02/25 15:21	05/05/25 22:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		35 - 166			05/02/25 15:21	05/05/25 22:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/02/25 15:21	05/05/25 22:22	1
Ethylbenzene	ND		0.046	mg/Kg		05/02/25 15:21	05/05/25 22:22	1
Toluene	ND		0.046	mg/Kg		05/02/25 15:21	05/05/25 22:22	1
Xylenes, Total	ND		0.092	mg/Kg		05/02/25 15:21	05/05/25 22:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145			05/02/25 15:21	05/05/25 22:22	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		9.6	mg/Kg		05/05/25 09:07	05/06/25 10:00	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/05/25 09:07	05/06/25 10:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134			05/05/25 09:07	05/06/25 10:00	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 10:47	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA03@4'

Lab Sample ID: 885-24121-6

Date Collected: 05/01/25 11:13

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/02/25 15:21	05/05/25 22:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			05/02/25 15:21	05/05/25 22:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/25 15:21	05/05/25 22:46	1
Ethylbenzene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 22:46	1
Toluene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 22:46	1
Xylenes, Total	ND		0.099	mg/Kg		05/02/25 15:21	05/05/25 22:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		48 - 145			05/02/25 15:21	05/05/25 22:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		05/05/25 09:07	05/06/25 10:11	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/05/25 09:07	05/06/25 10:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			05/05/25 09:07	05/06/25 10:11	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 10:57	20

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Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA04@3'      Lab Sample ID: 885-24121-7  
Date Collected: 05/01/25 11:37      Matrix: Solid  
Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		05/02/25 15:21	05/05/25 23:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			05/02/25 15:21	05/05/25 23:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/02/25 15:21	05/05/25 23:10	1
Ethylbenzene	ND		0.047	mg/Kg		05/02/25 15:21	05/05/25 23:10	1
Toluene	ND		0.047	mg/Kg		05/02/25 15:21	05/05/25 23:10	1
Xylenes, Total	ND		0.094	mg/Kg		05/02/25 15:21	05/05/25 23:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145			05/02/25 15:21	05/05/25 23:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/05/25 09:07	05/06/25 10:21	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/05/25 09:07	05/06/25 10:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			05/05/25 09:07	05/06/25 10:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 11:07	20

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA04@4'

Lab Sample ID: 885-24121-8

Date Collected: 05/01/25 11:45

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		05/02/25 15:21	05/05/25 23:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			05/02/25 15:21	05/05/25 23:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/02/25 15:21	05/05/25 23:33	1
Ethylbenzene	ND		0.047	mg/Kg		05/02/25 15:21	05/05/25 23:33	1
Toluene	ND		0.047	mg/Kg		05/02/25 15:21	05/05/25 23:33	1
Xylenes, Total	ND		0.094	mg/Kg		05/02/25 15:21	05/05/25 23:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		48 - 145			05/02/25 15:21	05/05/25 23:33	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		9.9	mg/Kg		05/05/25 09:07	05/06/25 10:32	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/05/25 09:07	05/06/25 10:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134			05/05/25 09:07	05/06/25 10:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 11:18	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA05@4'

Lab Sample ID: 885-24121-9

Date Collected: 05/01/25 12:53

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		05/02/25 15:21	05/05/25 23:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		35 - 166			05/02/25 15:21	05/05/25 23:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/02/25 15:21	05/05/25 23:57	1
Ethylbenzene	ND		0.048	mg/Kg		05/02/25 15:21	05/05/25 23:57	1
Toluene	ND		0.048	mg/Kg		05/02/25 15:21	05/05/25 23:57	1
Xylenes, Total	ND		0.096	mg/Kg		05/02/25 15:21	05/05/25 23:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145			05/02/25 15:21	05/05/25 23:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		05/05/25 10:13	05/05/25 14:50	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/05/25 10:13	05/05/25 14:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			05/05/25 10:13	05/05/25 14:50	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 11:28	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA05@5'

Lab Sample ID: 885-24121-10

Date Collected: 05/01/25 13:00

Matrix: Solid

Date Received: 05/02/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		05/02/25 15:21	05/06/25 00:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			05/02/25 15:21	05/06/25 00:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/02/25 15:21	05/06/25 00:21	1
Ethylbenzene	ND		0.048	mg/Kg		05/02/25 15:21	05/06/25 00:21	1
Toluene	ND		0.048	mg/Kg		05/02/25 15:21	05/06/25 00:21	1
Xylenes, Total	ND		0.096	mg/Kg		05/02/25 15:21	05/06/25 00:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		48 - 145			05/02/25 15:21	05/06/25 00:21	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		9.7	mg/Kg		05/05/25 10:13	05/05/25 16:01	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/05/25 10:13	05/05/25 16:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			05/05/25 10:13	05/05/25 16:01	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/07/25 06:22	05/07/25 11:38	20

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

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

Lab Sample ID: MB 885-25435/1-A

Matrix: Solid

Analysis Batch: 25522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25435

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/02/25 15:21	05/05/25 18:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		35 - 166			05/02/25 15:21	05/05/25 18:49	1

Lab Sample ID: LCS 885-25435/2-A

Matrix: Solid

Analysis Batch: 25522

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25435

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	32.5		mg/Kg		130	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	226		35 - 166				

Lab Sample ID: 885-24121-1 MS

Matrix: Solid

Analysis Batch: 25522

Client Sample ID: HA01@1'

Prep Type: Total/NA

Prep Batch: 25435

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.9	30.6		mg/Kg		123	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	226		35 - 166						

Lab Sample ID: 885-24121-1 MSD

Matrix: Solid

Analysis Batch: 25522

Client Sample ID: HA01@1'

Prep Type: Total/NA

Prep Batch: 25435

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		25.0	28.0		mg/Kg		112	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	216		35 - 166								

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

Lab Sample ID: MB 885-25435/1-A

Matrix: Solid

Analysis Batch: 25523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25435

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/25 15:21	05/05/25 18:49	1
Ethylbenzene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 18:49	1
Toluene	ND		0.050	mg/Kg		05/02/25 15:21	05/05/25 18:49	1

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

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

Lab Sample ID: MB 885-25435/1-A

Matrix: Solid

Analysis Batch: 25523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25435

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		05/02/25 15:21	05/05/25 18:49	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		48 - 145			05/02/25 15:21	05/05/25 18:49	1

Lab Sample ID: LCS 885-25435/3-A

Matrix: Solid

Analysis Batch: 25523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25435

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	1.05		mg/Kg		105	70 - 130
m&p-Xylene	2.00	2.21		mg/Kg		110	70 - 130
o-Xylene	1.00	1.06		mg/Kg		106	70 - 130
Toluene	1.00	1.06		mg/Kg		106	70 - 130
Xylenes, Total	3.00	3.27		mg/Kg		109	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	101		48 - 145				

Lab Sample ID: 885-24121-2 MS

Matrix: Solid

Analysis Batch: 25523

Client Sample ID: HA01@5'

Prep Type: Total/NA

Prep Batch: 25435

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.994	1.00		mg/Kg		101	70 - 130
Ethylbenzene	ND		0.994	0.988		mg/Kg		99	70 - 130
m&p-Xylene	ND		1.99	2.12		mg/Kg		107	70 - 130
o-Xylene	ND		0.994	1.00		mg/Kg		101	70 - 130
Toluene	ND		0.994	1.00		mg/Kg		101	70 - 130
Xylenes, Total	ND		2.98	3.12		mg/Kg		105	70 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	102		48 - 145						

Lab Sample ID: 885-24121-2 MSD

Matrix: Solid

Analysis Batch: 25523

Client Sample ID: HA01@5'

Prep Type: Total/NA

Prep Batch: 25435

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.999	1.02		mg/Kg		102	70 - 130	1	20
Ethylbenzene	ND		0.999	0.995		mg/Kg		100	70 - 130	1	20
m&p-Xylene	ND		2.00	2.13		mg/Kg		107	70 - 130	1	20
o-Xylene	ND		0.999	1.02		mg/Kg		102	70 - 130	2	20
Toluene	ND		0.999	1.01		mg/Kg		101	70 - 130	0	20
Xylenes, Total	ND		3.00	3.15		mg/Kg		105	70 - 130	1	20

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

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

Lab Sample ID: 885-24121-2 MSD

Matrix: Solid

Analysis Batch: 25523

Client Sample ID: HA01@5'

Prep Type: Total/NA

Prep Batch: 25435

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		48 - 145

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

Lab Sample ID: MB 885-25466/1-A

Matrix: Solid

Analysis Batch: 25465

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25466

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/05/25 08:40	05/05/25 11:07	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/05/25 08:40	05/05/25 11:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	113		62 - 134			05/05/25 08:40	05/05/25 11:07	1

Lab Sample ID: LCS 885-25466/2-A

Matrix: Solid

Analysis Batch: 25465

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	44.8		mg/Kg		90	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	96		62 - 134				

Lab Sample ID: MB 885-25478/1-A

Matrix: Solid

Analysis Batch: 25464

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25478

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/05/25 10:13	05/05/25 12:06	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/05/25 10:13	05/05/25 12:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			05/05/25 10:13	05/05/25 12:06	1

Lab Sample ID: LCS 885-25478/2-A

Matrix: Solid

Analysis Batch: 25464

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25478

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	44.5		mg/Kg		89	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	99		62 - 134				

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

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

Lab Sample ID: 885-24121-9 MS

Matrix: Solid

Analysis Batch: 25464

Client Sample ID: HA05@4'

Prep Type: Total/NA

Prep Batch: 25478

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier			Limits			
Diesel Range Organics [C10-C28]	ND		48.7	45.4		mg/Kg		93	44 - 136		
Surrogate	MS	MS									
Di-n-octyl phthalate (Surr)	%Recovery	Qualifier	Limits								
	105		62 - 134								

Lab Sample ID: 885-24121-9 MSD

Matrix: Solid

Analysis Batch: 25464

Client Sample ID: HA05@4'

Prep Type: Total/NA

Prep Batch: 25478

	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		48.8	46.1		mg/Kg		94	44 - 136	2	32
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
Di-n-octyl phthalate (Surr)	106		62 - 134								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-25616/1-A

Matrix: Solid

Analysis Batch: 25622

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25616

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		05/07/25 06:22	05/07/25 08:28	1

Lab Sample ID: LCS 885-25616/2-A

Matrix: Solid

Analysis Batch: 25622

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25616

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.2		mg/Kg		95	90 - 110

Lab Sample ID: 885-24121-1 MS

Matrix: Solid

Analysis Batch: 25622

Client Sample ID: HA01@1'

Prep Type: Total/NA

Prep Batch: 25616

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		29.8	ND		mg/Kg		NC	50 - 150

Lab Sample ID: 885-24121-1 MSD

Matrix: Solid

Analysis Batch: 25622

Client Sample ID: HA01@1'

Prep Type: Total/NA

Prep Batch: 25616

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		30.1	ND		mg/Kg		NC	50 - 150	NC	20

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QC Sample Results

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-24121-2 MS										Client Sample ID: HA01@5'			
Matrix: Solid										Prep Type: Total/NA			
Analysis Batch: 25622										Prep Batch: 25616			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits				
Chloride	ND		30.0	ND		mg/Kg		NC	50 - 150				

Lab Sample ID: 885-24121-2 MSD										Client Sample ID: HA01@5'			
Matrix: Solid										Prep Type: Total/NA			
Analysis Batch: 25622										Prep Batch: 25616			
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	ND		30.2	ND		mg/Kg		NC	50 - 150	NC	20		

## QC Association Summary

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

## GC VOA

## Prep Batch: 25435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-1	HA01@1'	Total/NA	Solid	5030C	
885-24121-2	HA01@5'	Total/NA	Solid	5030C	
885-24121-3	HA02@2'	Total/NA	Solid	5030C	
885-24121-4	HA02@5'	Total/NA	Solid	5030C	
885-24121-5	HA03@2'	Total/NA	Solid	5030C	
885-24121-6	HA03@4'	Total/NA	Solid	5030C	
885-24121-7	HA04@3'	Total/NA	Solid	5030C	
885-24121-8	HA04@4'	Total/NA	Solid	5030C	
885-24121-9	HA05@4'	Total/NA	Solid	5030C	
885-24121-10	HA05@5'	Total/NA	Solid	5030C	
MB 885-25435/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-25435/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-25435/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-24121-1 MS	HA01@1'	Total/NA	Solid	5030C	
885-24121-1 MSD	HA01@1'	Total/NA	Solid	5030C	
885-24121-2 MS	HA01@5'	Total/NA	Solid	5030C	
885-24121-2 MSD	HA01@5'	Total/NA	Solid	5030C	

## Analysis Batch: 25522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-1	HA01@1'	Total/NA	Solid	8015M/D	25435
885-24121-2	HA01@5'	Total/NA	Solid	8015M/D	25435
885-24121-3	HA02@2'	Total/NA	Solid	8015M/D	25435
885-24121-4	HA02@5'	Total/NA	Solid	8015M/D	25435
885-24121-5	HA03@2'	Total/NA	Solid	8015M/D	25435
885-24121-6	HA03@4'	Total/NA	Solid	8015M/D	25435
885-24121-7	HA04@3'	Total/NA	Solid	8015M/D	25435
885-24121-8	HA04@4'	Total/NA	Solid	8015M/D	25435
885-24121-9	HA05@4'	Total/NA	Solid	8015M/D	25435
885-24121-10	HA05@5'	Total/NA	Solid	8015M/D	25435
MB 885-25435/1-A	Method Blank	Total/NA	Solid	8015M/D	25435
LCS 885-25435/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	25435
885-24121-1 MS	HA01@1'	Total/NA	Solid	8015M/D	25435
885-24121-1 MSD	HA01@1'	Total/NA	Solid	8015M/D	25435

## Analysis Batch: 25523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-1	HA01@1'	Total/NA	Solid	8021B	25435
885-24121-2	HA01@5'	Total/NA	Solid	8021B	25435
885-24121-3	HA02@2'	Total/NA	Solid	8021B	25435
885-24121-4	HA02@5'	Total/NA	Solid	8021B	25435
885-24121-5	HA03@2'	Total/NA	Solid	8021B	25435
885-24121-6	HA03@4'	Total/NA	Solid	8021B	25435
885-24121-7	HA04@3'	Total/NA	Solid	8021B	25435
885-24121-8	HA04@4'	Total/NA	Solid	8021B	25435
885-24121-9	HA05@4'	Total/NA	Solid	8021B	25435
885-24121-10	HA05@5'	Total/NA	Solid	8021B	25435
MB 885-25435/1-A	Method Blank	Total/NA	Solid	8021B	25435
LCS 885-25435/3-A	Lab Control Sample	Total/NA	Solid	8021B	25435
885-24121-2 MS	HA01@5'	Total/NA	Solid	8021B	25435
885-24121-2 MSD	HA01@5'	Total/NA	Solid	8021B	25435

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QC Association Summary

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

GC Semi VOA

Analysis Batch: 25464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-9	HA05@4'	Total/NA	Solid	8015M/D	25478
885-24121-10	HA05@5'	Total/NA	Solid	8015M/D	25478
MB 885-25478/1-A	Method Blank	Total/NA	Solid	8015M/D	25478
LCS 885-25478/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	25478
885-24121-9 MS	HA05@4'	Total/NA	Solid	8015M/D	25478
885-24121-9 MSD	HA05@4'	Total/NA	Solid	8015M/D	25478

Analysis Batch: 25465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-1	HA01@1'	Total/NA	Solid	8015M/D	25466
885-24121-2	HA01@5'	Total/NA	Solid	8015M/D	25466
885-24121-3	HA02@2'	Total/NA	Solid	8015M/D	25466
885-24121-4	HA02@5'	Total/NA	Solid	8015M/D	25466
MB 885-25466/1-A	Method Blank	Total/NA	Solid	8015M/D	25466
LCS 885-25466/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	25466

Prep Batch: 25466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-1	HA01@1'	Total/NA	Solid	SHAKE	
885-24121-2	HA01@5'	Total/NA	Solid	SHAKE	
885-24121-3	HA02@2'	Total/NA	Solid	SHAKE	
885-24121-4	HA02@5'	Total/NA	Solid	SHAKE	
885-24121-5	HA03@2'	Total/NA	Solid	SHAKE	
885-24121-6	HA03@4'	Total/NA	Solid	SHAKE	
885-24121-7	HA04@3'	Total/NA	Solid	SHAKE	
885-24121-8	HA04@4'	Total/NA	Solid	SHAKE	
MB 885-25466/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-25466/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 25478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-9	HA05@4'	Total/NA	Solid	SHAKE	
885-24121-10	HA05@5'	Total/NA	Solid	SHAKE	
MB 885-25478/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-25478/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-24121-9 MS	HA05@4'	Total/NA	Solid	SHAKE	
885-24121-9 MSD	HA05@4'	Total/NA	Solid	SHAKE	

Analysis Batch: 25545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-5	HA03@2'	Total/NA	Solid	8015M/D	25466
885-24121-6	HA03@4'	Total/NA	Solid	8015M/D	25466
885-24121-7	HA04@3'	Total/NA	Solid	8015M/D	25466
885-24121-8	HA04@4'	Total/NA	Solid	8015M/D	25466

HPLC/IC

Prep Batch: 25616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-1	HA01@1'	Total/NA	Solid	300_Prep	
885-24121-2	HA01@5'	Total/NA	Solid	300_Prep	

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## QC Association Summary

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

## HPLC/IC (Continued)

## Prep Batch: 25616 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-3	HA02@2'	Total/NA	Solid	300_Prep	
885-24121-4	HA02@5'	Total/NA	Solid	300_Prep	
885-24121-5	HA03@2'	Total/NA	Solid	300_Prep	
885-24121-6	HA03@4'	Total/NA	Solid	300_Prep	
885-24121-7	HA04@3'	Total/NA	Solid	300_Prep	
885-24121-8	HA04@4'	Total/NA	Solid	300_Prep	
885-24121-9	HA05@4'	Total/NA	Solid	300_Prep	
885-24121-10	HA05@5'	Total/NA	Solid	300_Prep	
MB 885-25616/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-25616/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-24121-1 MS	HA01@1'	Total/NA	Solid	300_Prep	
885-24121-1 MSD	HA01@1'	Total/NA	Solid	300_Prep	
885-24121-2 MS	HA01@5'	Total/NA	Solid	300_Prep	
885-24121-2 MSD	HA01@5'	Total/NA	Solid	300_Prep	

## Analysis Batch: 25622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-24121-1	HA01@1'	Total/NA	Solid	300.0	25616
885-24121-2	HA01@5'	Total/NA	Solid	300.0	25616
885-24121-3	HA02@2'	Total/NA	Solid	300.0	25616
885-24121-4	HA02@5'	Total/NA	Solid	300.0	25616
885-24121-5	HA03@2'	Total/NA	Solid	300.0	25616
885-24121-6	HA03@4'	Total/NA	Solid	300.0	25616
885-24121-7	HA04@3'	Total/NA	Solid	300.0	25616
885-24121-8	HA04@4'	Total/NA	Solid	300.0	25616
885-24121-9	HA05@4'	Total/NA	Solid	300.0	25616
885-24121-10	HA05@5'	Total/NA	Solid	300.0	25616
MB 885-25616/1-A	Method Blank	Total/NA	Solid	300.0	25616
LCS 885-25616/2-A	Lab Control Sample	Total/NA	Solid	300.0	25616
885-24121-1 MS	HA01@1'	Total/NA	Solid	300.0	25616
885-24121-1 MSD	HA01@1'	Total/NA	Solid	300.0	25616
885-24121-2 MS	HA01@5'	Total/NA	Solid	300.0	25616
885-24121-2 MSD	HA01@5'	Total/NA	Solid	300.0	25616

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Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA01@1'  
Date Collected: 05/01/25 10:30  
Date Received: 05/02/25 07:10

Lab Sample ID: 885-24121-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 19:12
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 19:12
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 08:42
Total/NA	Analysis	8015M/D		1	25465	MI	EET ALB	05/05/25 14:32
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 09:03

Client Sample ID: HA01@5'  
Date Collected: 05/01/25 10:47  
Date Received: 05/02/25 07:10

Lab Sample ID: 885-24121-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 20:23
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 20:23
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 09:07
Total/NA	Analysis	8015M/D		1	25465	MI	EET ALB	05/05/25 14:44
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 09:34

Client Sample ID: HA02@2'  
Date Collected: 05/01/25 12:13  
Date Received: 05/02/25 07:10

Lab Sample ID: 885-24121-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 21:35
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 21:35
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 09:07
Total/NA	Analysis	8015M/D		1	25465	MI	EET ALB	05/05/25 14:56
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 10:05

Client Sample ID: HA02@5'  
Date Collected: 05/01/25 12:30  
Date Received: 05/02/25 07:10

Lab Sample ID: 885-24121-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 21:58

Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA02@5'

Lab Sample ID: 885-24121-4

Date Collected: 05/01/25 12:30

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 21:58
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 09:07
Total/NA	Analysis	8015M/D		1	25465	MI	EET ALB	05/05/25 15:08
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 10:16

Client Sample ID: HA03@2'

Lab Sample ID: 885-24121-5

Date Collected: 05/01/25 10:59

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 22:22
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 22:22
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 09:07
Total/NA	Analysis	8015M/D		1	25545	MI	EET ALB	05/06/25 10:00
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 10:47

Client Sample ID: HA03@4'

Lab Sample ID: 885-24121-6

Date Collected: 05/01/25 11:13

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 22:46
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 22:46
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 09:07
Total/NA	Analysis	8015M/D		1	25545	MI	EET ALB	05/06/25 10:11
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 10:57

Client Sample ID: HA04@3'

Lab Sample ID: 885-24121-7

Date Collected: 05/01/25 11:37

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 23:10
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 23:10

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA04@3'

Lab Sample ID: 885-24121-7

Date Collected: 05/01/25 11:37

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 09:07
Total/NA	Analysis	8015M/D		1	25545	MI	EET ALB	05/06/25 10:21
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 11:07

Client Sample ID: HA04@4'

Lab Sample ID: 885-24121-8

Date Collected: 05/01/25 11:45

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 23:33
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 23:33
Total/NA	Prep	SHAKE			25466	EM	EET ALB	05/05/25 09:07
Total/NA	Analysis	8015M/D		1	25545	MI	EET ALB	05/06/25 10:32
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 11:18

Client Sample ID: HA05@4'

Lab Sample ID: 885-24121-9

Date Collected: 05/01/25 12:53

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/05/25 23:57
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/05/25 23:57
Total/NA	Prep	SHAKE			25478	MI	EET ALB	05/05/25 10:13
Total/NA	Analysis	8015M/D		1	25464	MI	EET ALB	05/05/25 14:50
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 11:28

Client Sample ID: HA05@5'

Lab Sample ID: 885-24121-10

Date Collected: 05/01/25 13:00

Matrix: Solid

Date Received: 05/02/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8015M/D		1	25522	JP	EET ALB	05/06/25 00:21
Total/NA	Prep	5030C			25435	AT	EET ALB	05/02/25 15:21
Total/NA	Analysis	8021B		1	25523	JP	EET ALB	05/06/25 00:21
Total/NA	Prep	SHAKE			25478	MI	EET ALB	05/05/25 10:13
Total/NA	Analysis	8015M/D		1	25464	MI	EET ALB	05/05/25 16:01



Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Client Sample ID: HA05@5'  
Date Collected: 05/01/25 13:00  
Date Received: 05/02/25 07:10

Lab Sample ID: 885-24121-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			25616	JT	EET ALB	05/07/25 06:22
Total/NA	Analysis	300.0		20	25622	RC	EET ALB	05/07/25 11:38

Laboratory References:  
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy  
Project/Site: Federal Pioneer 1E

Job ID: 885-24121-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-27-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-26

Chain of Custody Record



<b>Client Information</b> Hilcorp Energy Co		Sampler: Tracy Dembrowski	Lab PM:	Carrier Tracking No(s):	COC No: 885-24121 COC
Client Contact: Mitch Killbough		Phone:	E-Mail: tdembrowski@ensolum.com	State of Origin:	Page: 1 of
Company: Hilcorp Energy Company		PWSID:		Job #:	
Address:		Analysis Requested			
City:		Due Date Requested:			
State, Zip:		TAT Requested (days): Standard 5 days			
Phone: (713) 757-5247		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Email: mkillbough@hilcorp.com		PO #:			
Project Name: Federal Pioneer 1E		WO #:			
Site:		Project #:			
		SSOW#:			
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A=Air)
HA01C1'	5/1/25	1030			S
HA01C5'		1047			
HA02C2'		1213			
HA02C5'		1230			
HA03C2'		1059			
HA03C4'		1113			
HA04C3'		1137			
HA04C4'		1145			
HA05C4'		1253			
HA05C5'		1300			
Possible Hazard Identification		Preservation Code:			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (Specify)					
Empty Kit Relinquished by:		Time:			
Relinquished by: [Signature]		Date: 5/1/25	1512	Company: Ensolum	Relinquished by: [Signature]
Relinquished by: [Signature]		Date: 5/1/25	1730	Company: Ensolum	Relinquished by: [Signature]
Relinquished by: [Signature]		Date: 5/1/25		Company: Ensolum	Relinquished by: [Signature]
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 21.4 to 22.6	

## Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-24121-1

Login Number: 24121

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mitch Killough  
Hilcorp Energy  
PO BOX 4700  
Farmington, New Mexico 87499

Generated 6/26/2025 4:53:22 PM

## JOB DESCRIPTION

Federal 1E

## JOB NUMBER

885-27435-1

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  
6/26/2025 4:53:22 PM

Authorized for release by  
Michelle Garcia, Project Manager  
[michelle.garcia@et.eurofinsus.com](mailto:michelle.garcia@et.eurofinsus.com)  
(505)345-3975

Client: Hilcorp Energy  
Project/Site: Federal 1E

Laboratory Job ID: 885-27435-1

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## Definitions/Glossary

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

## 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: Hilcorp Energy  
Project: Federal 1E

Job ID: 885-27435-1

**Job ID: 885-27435-1****Eurofins Albuquerque****Job Narrative  
885-27435-1**

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 6/25/2025 6:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°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: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

Client Sample ID: SS01

Lab Sample ID: 885-27435-1

Date Collected: 06/24/25 09:30

Matrix: Solid

Date Received: 06/25/25 06:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.4	mg/Kg		06/25/25 09:37	06/25/25 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			06/25/25 09:37	06/25/25 15:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017	mg/Kg		06/25/25 09:37	06/25/25 15:30	1
Ethylbenzene	ND		0.034	mg/Kg		06/25/25 09:37	06/25/25 15:30	1
Toluene	ND		0.034	mg/Kg		06/25/25 09:37	06/25/25 15:30	1
Xylenes, Total	ND		0.068	mg/Kg		06/25/25 09:37	06/25/25 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			06/25/25 09:37	06/25/25 15:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		06/25/25 09:49	06/26/25 13:56	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		06/25/25 09:49	06/26/25 13:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	113		62 - 134			06/25/25 09:49	06/26/25 13:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/25/25 10:32	06/25/25 14:53	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

Client Sample ID: SS01 @2'

Lab Sample ID: 885-27435-2

Date Collected: 06/24/25 09:40

Matrix: Solid

Date Received: 06/25/25 06:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.3	mg/Kg		06/25/25 09:37	06/25/25 16:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			06/25/25 09:37	06/25/25 16:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.016	mg/Kg		06/25/25 09:37	06/25/25 16:17	1
Ethylbenzene	ND		0.033	mg/Kg		06/25/25 09:37	06/25/25 16:17	1
Toluene	ND		0.033	mg/Kg		06/25/25 09:37	06/25/25 16:17	1
Xylenes, Total	ND		0.065	mg/Kg		06/25/25 09:37	06/25/25 16:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			06/25/25 09:37	06/25/25 16:17	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		06/25/25 09:49	06/26/25 14:07	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		06/25/25 09:49	06/26/25 14:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134			06/25/25 09:49	06/26/25 14:07	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/25/25 10:32	06/25/25 15:24	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

Client Sample ID: CS01

Lab Sample ID: 885-27435-3

Date Collected: 06/24/25 09:50

Matrix: Solid

Date Received: 06/25/25 06:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.5	mg/Kg		06/25/25 09:37	06/25/25 16:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			06/25/25 09:37	06/25/25 16:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017	mg/Kg		06/25/25 09:37	06/25/25 16:41	1
Ethylbenzene	ND		0.035	mg/Kg		06/25/25 09:37	06/25/25 16:41	1
Toluene	ND		0.035	mg/Kg		06/25/25 09:37	06/25/25 16:41	1
Xylenes, Total	ND		0.070	mg/Kg		06/25/25 09:37	06/25/25 16:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			06/25/25 09:37	06/25/25 16:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		06/25/25 09:49	06/26/25 14:18	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		06/25/25 09:49	06/26/25 14:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	115		62 - 134			06/25/25 09:49	06/26/25 14:18	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/25/25 10:32	06/25/25 15:35	20

Eurofins Albuquerque

## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

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

Lab Sample ID: MB 885-28960/1-A

Matrix: Solid

Analysis Batch: 29009

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28960

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		06/25/25 09:37	06/25/25 11:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			06/25/25 09:37	06/25/25 11:10	1

Lab Sample ID: LCS 885-28960/2-A

Matrix: Solid

Analysis Batch: 29009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28960

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	23.9		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	187		15 - 150				

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

Lab Sample ID: MB 885-28960/1-A

Matrix: Solid

Analysis Batch: 29008

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28960

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/25/25 09:37	06/25/25 11:10	1
Ethylbenzene	ND		0.050	mg/Kg		06/25/25 09:37	06/25/25 11:10	1
Toluene	ND		0.050	mg/Kg		06/25/25 09:37	06/25/25 11:10	1
Xylenes, Total	ND		0.10	mg/Kg		06/25/25 09:37	06/25/25 11:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			06/25/25 09:37	06/25/25 11:10	1

Lab Sample ID: LCS 885-28960/3-A

Matrix: Solid

Analysis Batch: 29008

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28960

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.905		mg/Kg		91	70 - 130
Ethylbenzene	1.00	0.917		mg/Kg		92	70 - 130
m&p-Xylene	2.00	1.94		mg/Kg		97	70 - 130
o-Xylene	1.00	0.931		mg/Kg		93	70 - 130
Toluene	1.00	0.911		mg/Kg		91	70 - 130
Xylenes, Total	3.00	2.87		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	93		15 - 150				

Eurofins Albuquerque

## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-28971/1-A

Matrix: Solid

Analysis Batch: 28976

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28971

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		06/25/25 10:32	06/25/25 12:05	1

Lab Sample ID: LCS 885-28971/2-A

Matrix: Solid

Analysis Batch: 28976

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.5		mg/Kg		97	90 - 110

Lab Sample ID: 885-27435-1 MS

Matrix: Solid

Analysis Batch: 28976

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 28971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		29.9	ND		mg/Kg		NC	50 - 150

Lab Sample ID: 885-27435-1 MSD

Matrix: Solid

Analysis Batch: 28976

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 28971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		30.2	ND		mg/Kg		NC	50 - 150	NC	20

Lab Sample ID: 885-27435-3 MS

Matrix: Solid

Analysis Batch: 28976

Client Sample ID: CS01

Prep Type: Total/NA

Prep Batch: 28971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		29.8	ND		mg/Kg		NC	50 - 150

Lab Sample ID: 885-27435-3 MSD

Matrix: Solid

Analysis Batch: 28976

Client Sample ID: CS01

Prep Type: Total/NA

Prep Batch: 28971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		29.9	ND		mg/Kg		NC	50 - 150	NC	20

Eurofins Albuquerque

## QC Association Summary

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

## GC VOA

## Prep Batch: 28960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-27435-1	SS01	Total/NA	Solid	5035	
885-27435-2	SS01 @2'	Total/NA	Solid	5035	
885-27435-3	CS01	Total/NA	Solid	5035	
MB 885-28960/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-28960/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-28960/3-A	Lab Control Sample	Total/NA	Solid	5035	

## Analysis Batch: 29008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-27435-1	SS01	Total/NA	Solid	8021B	28960
885-27435-2	SS01 @2'	Total/NA	Solid	8021B	28960
885-27435-3	CS01	Total/NA	Solid	8021B	28960
MB 885-28960/1-A	Method Blank	Total/NA	Solid	8021B	28960
LCS 885-28960/3-A	Lab Control Sample	Total/NA	Solid	8021B	28960

## Analysis Batch: 29009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-27435-1	SS01	Total/NA	Solid	8015M/D	28960
885-27435-2	SS01 @2'	Total/NA	Solid	8015M/D	28960
885-27435-3	CS01	Total/NA	Solid	8015M/D	28960
MB 885-28960/1-A	Method Blank	Total/NA	Solid	8015M/D	28960
LCS 885-28960/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	28960

## GC Semi VOA

## Prep Batch: 28964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-27435-1	SS01	Total/NA	Solid	SHAKE	
885-27435-2	SS01 @2'	Total/NA	Solid	SHAKE	
885-27435-3	CS01	Total/NA	Solid	SHAKE	

## Analysis Batch: 29056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-27435-1	SS01	Total/NA	Solid	8015M/D	28964
885-27435-2	SS01 @2'	Total/NA	Solid	8015M/D	28964
885-27435-3	CS01	Total/NA	Solid	8015M/D	28964

## HPLC/IC

## Prep Batch: 28971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-27435-1	SS01	Total/NA	Solid	300_Prep	
885-27435-2	SS01 @2'	Total/NA	Solid	300_Prep	
885-27435-3	CS01	Total/NA	Solid	300_Prep	
MB 885-28971/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-28971/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-27435-1 MS	SS01	Total/NA	Solid	300_Prep	
885-27435-1 MSD	SS01	Total/NA	Solid	300_Prep	
885-27435-3 MS	CS01	Total/NA	Solid	300_Prep	
885-27435-3 MSD	CS01	Total/NA	Solid	300_Prep	

Eurofins Albuquerque



QC Association Summary

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

HPLC/IC

Analysis Batch: 28976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-27435-1	SS01	Total/NA	Solid	300.0	28971
885-27435-2	SS01 @2'	Total/NA	Solid	300.0	28971
885-27435-3	CS01	Total/NA	Solid	300.0	28971
MB 885-28971/1-A	Method Blank	Total/NA	Solid	300.0	28971
LCS 885-28971/2-A	Lab Control Sample	Total/NA	Solid	300.0	28971
885-27435-1 MS	SS01	Total/NA	Solid	300.0	28971
885-27435-1 MSD	SS01	Total/NA	Solid	300.0	28971
885-27435-3 MS	CS01	Total/NA	Solid	300.0	28971
885-27435-3 MSD	CS01	Total/NA	Solid	300.0	28971

## Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

Client Sample ID: SS01

Lab Sample ID: 885-27435-1

Date Collected: 06/24/25 09:30

Matrix: Solid

Date Received: 06/25/25 06:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			28960	JP	EET ALB	06/25/25 09:37
Total/NA	Analysis	8015M/D		1	29009	JP	EET ALB	06/25/25 15:30
Total/NA	Prep	5035			28960	JP	EET ALB	06/25/25 09:37
Total/NA	Analysis	8021B		1	29008	JP	EET ALB	06/25/25 15:30
Total/NA	Prep	SHAKE			28964	EM	EET ALB	06/25/25 09:49
Total/NA	Analysis	8015M/D		1	29056	EM	EET ALB	06/26/25 13:56
Total/NA	Prep	300_Prep			28971	RC	EET ALB	06/25/25 10:32
Total/NA	Analysis	300.0		20	28976	RC	EET ALB	06/25/25 14:53

Client Sample ID: SS01 @2'

Lab Sample ID: 885-27435-2

Date Collected: 06/24/25 09:40

Matrix: Solid

Date Received: 06/25/25 06:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			28960	JP	EET ALB	06/25/25 09:37
Total/NA	Analysis	8015M/D		1	29009	JP	EET ALB	06/25/25 16:17
Total/NA	Prep	5035			28960	JP	EET ALB	06/25/25 09:37
Total/NA	Analysis	8021B		1	29008	JP	EET ALB	06/25/25 16:17
Total/NA	Prep	SHAKE			28964	EM	EET ALB	06/25/25 09:49
Total/NA	Analysis	8015M/D		1	29056	EM	EET ALB	06/26/25 14:07
Total/NA	Prep	300_Prep			28971	RC	EET ALB	06/25/25 10:32
Total/NA	Analysis	300.0		20	28976	RC	EET ALB	06/25/25 15:24

Client Sample ID: CS01

Lab Sample ID: 885-27435-3

Date Collected: 06/24/25 09:50

Matrix: Solid

Date Received: 06/25/25 06:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			28960	JP	EET ALB	06/25/25 09:37
Total/NA	Analysis	8015M/D		1	29009	JP	EET ALB	06/25/25 16:41
Total/NA	Prep	5035			28960	JP	EET ALB	06/25/25 09:37
Total/NA	Analysis	8021B		1	29008	JP	EET ALB	06/25/25 16:41
Total/NA	Prep	SHAKE			28964	EM	EET ALB	06/25/25 09:49
Total/NA	Analysis	8015M/D		1	29056	EM	EET ALB	06/26/25 14:18
Total/NA	Prep	300_Prep			28971	RC	EET ALB	06/25/25 10:32
Total/NA	Analysis	300.0		20	28976	RC	EET ALB	06/25/25 15:35

## Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy  
Project/Site: Federal 1E

Job ID: 885-27435-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-27-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5035	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-26



## Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-27435-1

Login Number: 27435

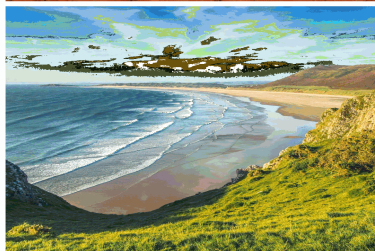
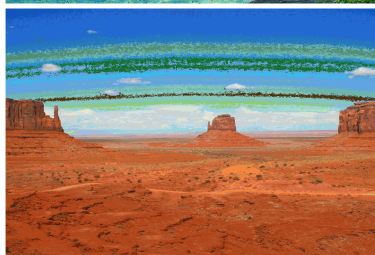
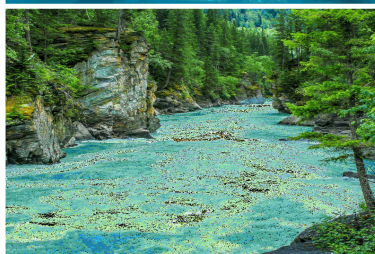
List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Report to:  
Mitch Killough



5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



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## Analytical Report

Hilcorp Energy Co

Project Name: Federal 1 E

Work Order: E507038

Job Number: 17051-0002

Received: 7/3/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
7/8/25

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 7/8/25

Mitch Killough  
PO Box 61529  
Houston, TX 77208



Project Name: Federal 1 E  
Workorder: E507038  
Date Received: 7/3/2025 1:55:00PM

Mitch Killough,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/3/2025 1:55:00PM, under the Project Name: Federal 1 E.

The analytical test results summarized in this report with the Project Name: Federal 1 E apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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Sample Summary

Hilcorp Energy Co	Project Name:	Federal 1 E	Reported:  07/08/25 14:25
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS01	E507038-01A	Soil	07/03/25	07/03/25	Glass Jar, 4 oz.
CS02	E507038-02A	Soil	07/03/25	07/03/25	Glass Jar, 4 oz.



## Sample Data

Hilcorp Energy Co  
PO Box 61529  
Houston TX, 77208

Project Name: Federal 1 E  
Project Number: 17051-0002  
Project Manager: Mitch Killough

**Reported:**  
7/8/2025 2:25:08PM

### CS01

#### E507038-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2527119	
Benzene	ND	0.0250	1	07/03/25	07/07/25	
Ethylbenzene	ND	0.0250	1	07/03/25	07/07/25	
Toluene	ND	0.0250	1	07/03/25	07/07/25	
o-Xylene	ND	0.0250	1	07/03/25	07/07/25	
p,m-Xylene	ND	0.0500	1	07/03/25	07/07/25	
Total Xylenes	ND	0.0250	1	07/03/25	07/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	85.6 %	70-130		07/03/25	07/07/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2527119	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/03/25	07/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	96.0 %	70-130		07/03/25	07/07/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2528006	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/07/25	07/08/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/07/25	07/08/25	
<i>Surrogate: n-Nonane</i>	92.7 %	61-141		07/07/25	07/08/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2527122	
Chloride	ND	20.0	1	07/03/25	07/07/25	



## Sample Data

Hilcorp Energy Co  
PO Box 61529  
Houston TX, 77208

Project Name: Federal 1 E  
Project Number: 17051-0002  
Project Manager: Mitch Killough

**Reported:**  
7/8/2025 2:25:08PM

## CS02

## E507038-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2527119	
Benzene	ND	0.0250	1	07/03/25	07/07/25	
Ethylbenzene	ND	0.0250	1	07/03/25	07/07/25	
Toluene	ND	0.0250	1	07/03/25	07/07/25	
o-Xylene	ND	0.0250	1	07/03/25	07/07/25	
p,m-Xylene	ND	0.0500	1	07/03/25	07/07/25	
Total Xylenes	ND	0.0250	1	07/03/25	07/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.0 %	70-130		07/03/25	07/07/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2527119	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/03/25	07/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		07/03/25	07/07/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2528006	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/07/25	07/08/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/07/25	07/08/25	
<i>Surrogate: n-Nonane</i>						
	90.1 %	61-141		07/07/25	07/08/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2527122	
Chloride	ND	20.0	1	07/03/25	07/07/25	



QC Summary Data

Hilcorp Energy Co	Project Name:	Federal 1 E	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	7/8/2025 2:25:08PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2527119-BLK1)

Prepared: 07/03/25 Analyzed: 07/07/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	6.85		8.00		85.7	70-130			

LCS (2527119-BS1)

Prepared: 07/03/25 Analyzed: 07/07/25

Benzene	5.43	0.0250	5.00		109	70-130			
Ethylbenzene	5.35	0.0250	5.00		107	70-130			
Toluene	5.42	0.0250	5.00		108	70-130			
o-Xylene	5.29	0.0250	5.00		106	70-130			
p,m-Xylene	10.8	0.0500	10.0		108	70-130			
Total Xylenes	16.1	0.0250	15.0		107	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.98		8.00		87.2	70-130			

Matrix Spike (2527119-MS1)

Source: E507019-05

Prepared: 07/03/25 Analyzed: 07/07/25

Benzene	4.69	0.0250	5.00	ND	93.9	70-130			
Ethylbenzene	4.60	0.0250	5.00	ND	92.0	70-130			
Toluene	4.66	0.0250	5.00	ND	93.3	70-130			
o-Xylene	4.62	0.0250	5.00	ND	92.3	70-130			
p,m-Xylene	9.34	0.0500	10.0	ND	93.4	70-130			
Total Xylenes	14.0	0.0250	15.0	ND	93.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.93		8.00		86.6	70-130			

Matrix Spike Dup (2527119-MSD1)

Source: E507019-05

Prepared: 07/03/25 Analyzed: 07/07/25

Benzene	4.45	0.0250	5.00	ND	89.0	70-130	5.37	27	
Ethylbenzene	4.36	0.0250	5.00	ND	87.2	70-130	5.40	26	
Toluene	4.43	0.0250	5.00	ND	88.5	70-130	5.23	20	
o-Xylene	4.40	0.0250	5.00	ND	88.0	70-130	4.79	25	
p,m-Xylene	8.86	0.0500	10.0	ND	88.6	70-130	5.33	23	
Total Xylenes	13.3	0.0250	15.0	ND	88.4	70-130	5.15	26	
Surrogate: 4-Bromochlorobenzene-PID	6.96		8.00		87.0	70-130			



QC Summary Data

Hilcorp Energy Co	Project Name:	Federal 1 E	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	7/8/2025 2:25:08PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2527119-BLK1) Prepared: 07/03/25 Analyzed: 07/07/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.9	70-130			

LCS (2527119-BS2) Prepared: 07/03/25 Analyzed: 07/07/25

Gasoline Range Organics (C6-C10)	49.5	20.0	50.0		98.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.77		8.00		97.1	70-130			

Matrix Spike (2527119-MS2) Source: E507019-05 Prepared: 07/03/25 Analyzed: 07/07/25

Gasoline Range Organics (C6-C10)	45.6	20.0	50.0	ND	91.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.88		8.00		98.5	70-130			

Matrix Spike Dup (2527119-MSD2) Source: E507019-05 Prepared: 07/03/25 Analyzed: 07/07/25

Gasoline Range Organics (C6-C10)	45.2	20.0	50.0	ND	90.4	70-130	0.847	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.65		8.00		95.7	70-130			



QC Summary Data

Hilcorp Energy Co	Project Name:	Federal 1 E	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	7/8/2025 2:25:08PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2528006-BLK1)					Prepared: 07/07/25 Analyzed: 07/07/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.5		50.0		91.0	61-141			

LCS (2528006-BS1)					Prepared: 07/07/25 Analyzed: 07/08/25				
Diesel Range Organics (C10-C28)	234	25.0	250		93.8	66-144			
Surrogate: n-Nonane	45.1		50.0		90.3	61-141			

Matrix Spike (2528006-MS1)					Source: E507038-02		Prepared: 07/07/25 Analyzed: 07/08/25		
Diesel Range Organics (C10-C28)	244	25.0	250	ND	97.5	56-156			
Surrogate: n-Nonane	46.5		50.0		92.9	61-141			

Matrix Spike Dup (2528006-MSD1)					Source: E507038-02		Prepared: 07/07/25 Analyzed: 07/08/25		
Diesel Range Organics (C10-C28)	243	25.0	250	ND	97.1	56-156	0.441	20	
Surrogate: n-Nonane	45.4		50.0		90.8	61-141			





QC Summary Data

Hilcorp Energy Co	Project Name:	Federal 1 E	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Mitch Killough	7/8/2025 2:25:08PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2527122-BLK1)					Prepared: 07/03/25 Analyzed: 07/06/25				
Chloride	ND	20.0							
LCS (2527122-BS1)					Prepared: 07/03/25 Analyzed: 07/06/25				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2527122-MS1)					Source: E506299-02		Prepared: 07/03/25 Analyzed: 07/06/25		
Chloride	322	20.0	250	45.5	111	80-120			
Matrix Spike Dup (2527122-MSD1)					Source: E506299-02		Prepared: 07/03/25 Analyzed: 07/06/25		
Chloride	310	20.0	250	45.5	106	80-120	3.79	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Hilcorp Energy Co	Project Name:	Federal 1 E	
PO Box 61529	Project Number:	17051-0002	Reported:
Houston TX, 77208	Project Manager:	Mitch Killough	07/08/25 14:25

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



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## Envirotech Analytical Laboratory

Printed: 7/3/2025 2:13:06PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Hilcorp Energy Co	Date Received:	07/03/25 13:55	Work Order ID:	E507038
Phone:	-	Date Logged In:	07/03/25 14:07	Logged In By:	Noe Soto
Email:	mkillough@hilcorp.com	Due Date:	07/08/25 17:00 (2 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Eric CarrollComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

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

QUESTIONS

Action 489910

**QUESTIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 489910
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2510430103
Incident Name	NAPP2510430103 FEDERAL PIONEER 1E @ 30-045-33473
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-045-33473] FEDERAL PIONEER #001E

**Location of Release Source**

Please answer all the questions in this group.

Site Name	FEDERAL PIONEER 1E
Date Release Discovered	04/13/2025
Surface Owner	Private

**Incident Details**

Please answer all the questions in this group.

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

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Equipment Failure   Production Tank   Condensate   Released: 13 BBL   Recovered: 0 BBL   Lost: 13 BBL.
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)	On 4/13/2025 at 9:27 am (MT), a condensate storage tank was scheduled for an oil sale, but the hauler noted that the tank was 12.7 bbls less than it should have been. The lease operator further investigated the spill location and observed a hex plug on the NW side of tank that had a small drip. The operator backed out the hex plug off one thread and cleaned it off. Once the plug was re-installed, the leak stopped. 0 bbls of fluid was recovered and was absorbed into the gravel/soils beneath the condensate storage tank. No spilled product migrated off the pad surface or outside of secondary containment.

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QUESTIONS, Page 2

Action 489910

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 489910
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>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.</i>	

**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	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<b>Although the spilled fluids did not migrate outside of secondary containment, the fluids migrated vertically into the ground surface beneath the condensate storage tank.</b>

*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: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 07/29/2025
--	--



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QUESTIONS, Page 3

Action 489910

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 489910
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Site Characterization</b>	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 100 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 300 and 500 (ft.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 300 and 500 (ft.)
Any other fresh water well or spring	Between 500 and 1000 (ft.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Zero feet, overlying, or within area
A wetland	Between 1 and 100 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 1 and 100 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

<b>Remediation Plan</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	0
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	05/01/2025
On what date will (or did) the final sampling or liner inspection occur	07/03/2025
On what date will (or was) the remediation complete(d)	07/01/2025
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	



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QUESTIONS, Page 4

Action 489910

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 489910
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	<i>Not answered.</i>
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<i>Not answered.</i>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	<b>Yes</b>
Other Non-listed Remedial Process. Please specify	<b>No remediation required</b>
<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: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 07/29/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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1220 S. St Francis Dr.  
Santa Fe, NM 87505

QUESTIONS, Page 5  
  
Action 489910

QUESTIONS (continued)

Operator:  HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:  372171
	Action Number:  489910
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
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**Oil Conservation Division**  
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Action 489910

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 489910
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	479671
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/03/2025
What was the (estimated) number of samples that were to be gathered	3
What was the sampling surface area in square feet	100

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	0
What was the total volume (cubic yards) remediated	0
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	N/A
<p><i>The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.</i></p>	
<p>I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.</p>	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 07/29/2025

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Action 489910

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 489910
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 489910

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 489910
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	10/9/2025