

October 9, 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 Investigation Report and Closure Request

San Juan 27-4 Unit 37M Rio Arriba, New Mexico Hilcorp Energy Company

NMOCD Incident No: nAPP2522527512

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Site Investigation Report and Closure Request* for a produced water release at the San Juan 27-4 Unit 37M natural gas production well (Site). The Site is located on United States Forest Service (USFS) land in Unit J, Section 33, Township 27 North, Range 4 West, Rio Arriba, New Mexico (Figure 1).

### SITE BACKGROUND

On August 12, 2025, Hilcorp operations identified a release of 78 barrels (bbls) of produced water at the Site. The Hilcorp field operator was notified of a potential leak by a third-party water hauler and discovered a small corrosion hole near the base of the pit tank. Upon discovery, the operator drained the remaining fluid into a water hauler and removed it from the Site. The release was attributed to tank corrosion. All fluids remained within the secondary containment berm, with an estimated release extent of approximately 500 square feet. No released fluid was recovered from within the secondary containment berm.

Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) on August 13, 2025, and the Site was assigned release Incident Number nAPP2522527512.

### 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 the Tertiary (Eocene) age San Jose Formation. In the report "Hydrogeology and Water Resources of San Juan Basin, New Mexico" (Stone, et. al., 1983), the San Jose Formation is composed of interbedded sandstones and mudstones and varies in thickness from less than 200 feet to approximately 2,700 feet. The hydrogeologic properties of the San Jose Formation are largely uncharacterized. Where yields are sufficient, the primary use of water from this Formation is for domestic and/or livestock supply.

Site Investigation Report and Closure Request San Juan 27-4 Unit 37M Hilcorp Energy Company

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### POTENTIAL SENSITIVE RECEPTORS

Potential nearby receptors were assessed through desktop reviews of United States Geological Survey (USGS) topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, New Mexico Office of the State Engineer (NMOSE) database, aerial photographs, and Site-specific observations.

To assess Site-specific depth-to-groundwater, borehole BH01 was advanced on September 16, 2025, to a depth of 55 feet below ground surface (bgs). Soil logging indicated the borehole was dry to the terminal depth during drilling. Upon completion, the open borehole was allowed to equilibrate for 72 hours. A water-level indicator was used to assess for the presence or absence of groundwater on September 19, 2025. Groundwater was not encountered in the borehole at a depth of approximately 54 feet bgs (sluff had filled the boring from 55 to 54 feet bgs), indicating the depth to groundwater beneath the Site is greater than 50 feet bgs. Information regarding the depth to water determination is provided in Appendix A, including the drilling log and photograph of the water-level indicator confirming no water encountered.

The closest significant watercourse is an intermittent stream located 1,431 feet east of the Site and is identified as a dashed blue line on a USGS 7.5-minute quadrangle map. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland (Figure 1). No wellhead protection areas, springs, or domestic/stock wells are located within a 500-foot radius from the Site. 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 low potential karst by the Bureau of Land Management, or BLM). No schools, hospitals, institutions, churches, and/or other occupied permanent residences or structures are located within 300 feet of the Site.

### SITE CLOSURE CRITERIA

Based on the information presented above and in accordance with the *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): 2,500 mg/kg
- GRO+DRO: 1,000 mg/kgChloride: 10,000 mg/kg

#### 2025 SITE ASSESSMENT ACTIVITIES

To assess potential soil impacts resulting from the release, Ensolum advanced six hand auger boreholes (HA01 through HA06) on August 21, 2025. The NMOCD was notified prior to commencing on-Site activities, with sampling notifications provided in Appendix B. Borehole HA01 was advanced within the release footprint inside of the secondary containment berm to assess the soil within the release source. Boreholes HA02 through HA06 were advanced outside the release footprint to laterally delineate potential impacts resulting from the release (Figure 2). HA01 was advanced to a depth of 7 feet bgs and encountered refusal. The remaining hand auger boreholes encountered refusal shallower than 7 feet bgs, with depths ranging from 2 feet to 6 feet bgs. Soil samples were field screened at 1-foot intervals for the presence of organic vapors using a calibrated photoionization detector (PID), with screening results presented in Table 1.



Site Investigation Report and Closure Request San Juan 27-4 Unit 37M Hilcorp Energy Company

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Three soil samples were collected from auger boreholes HA01 through HA05: one from the top 6-inches bgs, one from the depth interval exhibiting the greatest observable contamination based on field screening observations, and one from the terminus of each borehole. HA06 encountered shallow refusal at 2-feet bgs and as such, only two samples were collected. 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.

All concentrations of total BTEX, TPH, and chloride in the soil samples collected during the August 2025 assessment were below the applicable NMOCD Table I Closure Criteria. Sample locations are shown on Figure 2. Soil sample analytical results are summarized in Table 1, with complete laboratory analytical reports attached as Appendix C. Photographs taken during field activities are included in Appendix D.

### **CONCLUSIONS AND CLOSURE REQUEST**

Based on the delineation activities and soil 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. As such, Site conditions appear to be protective of human health, the environment, and groundwater and Hilcorp respectfully requests closure for Incident Number nAPP2522527512.

### **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.

Stuart Hyde

(970) 903-1607

shyde@ensolum.com

Senior Managing Geologist

Sincerely, **Ensolum, LLC** 

Zach My

Zach Myers Staff Geologist (614)323-4728

zmyers@ensolum.com

Cc: National Forest Service

BLM Hilcorp

### **Attachments:**

Figure 1: Site Location Map

Figure 2: **Delineation Soil Sample Locations**  Site Investigation Report and Closure Request San Juan 27-4 Unit 37M Hilcorp Energy Company

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Table 1: Soil Sample Analytical Results

Appendix A: Depth to Water Determination
Appendix B: Agency Correspondence
Appendix C: Laboratory Analytical Reports

Appendix D: Photographic Log



**FIGURES** 



1,000 2,000

4,000

**■** Feet

10375=

# **Site Location Map**

San Juan 27-4 #37M Hilcorp Energy Company

36.5269318,-107.2532654 Rio Arriba County, New Mexico FIGURE

1

Notes:

the State Engineer

NMOSE: New Mexico Office of

DTW: Depth to Water in Feet





# **Delineation Soil Sample Locations**

San Juan 27-4 #37M Hilcorp Energy Company

36.5269318,-107.2532654 Rio Arriba County, New Mexico FIGURE 2



**TABLES** 



#### TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS San Juan 27-4 #37M **Hilcorp Energy Company** Rio Arriba County, New Mexico Chloride Field Total BTEX **TPH GRO** TPH DRO TPH MRO GRO+DRO Total TPH Sample Depth Benzene Toluene Ethylbenzene **Xvlenes** Chloride Test Identification (feet bgs) (ppm) (mg/kg) (ppm) NMOCD Closure Criteria for Soils Impacted by a NE NE NE NE NE 50 NE NE NE 1,000 2,500 10,000 Release HA01@0-0.5' 8/21/2025 77 160 740 HA01@2' 8/21/2025 2 <157 0.4 NS NS HA01@3' 8/21/2025 3 <157 9.1 NS HA01@4' 8/21/2025 134.5 < 0.024 < 0.049 0.54 3.2 3.74 160 330 170 490 660 <50 4 HA01@6' <157 121.4 NS 8/21/2025 6 NS 0.26 32 HA01@7' 8/21/2025 13.2 < 0.024 < 0.049 < 0.049 0.26 32 32 < 50 HA02@0-0.5' 0-0.5 8/21/2025 <157 2.8 < 0.024 < 0.048 < 0.048 < 0.095 < 0.095 <4.8 <9.9 <50 <9.9 <50 <50 HA02@2' 8/21/2025 <157 12.4 < 0.024 < 0.048 < 0.048 < 0.097 < 0.097 <49 <50 2 <4.8 <9.8 <49 <9.8 HA02@4' 8/21/2025 7.4 HA03@0-0.5' 0-0.5 8/21/2025 4.4 HA03@2' 8/21/2025 110 HA03@4' 8/21/2025 1.5 NS HA03@6' 6/25/2025 6 <157 < 0.025 < 0.050 < 0.050 < 0.099 <0.099 < 9.4 <47 <9.4 <47 <50 HA04@0-0.5' 8/21/2025 0-0.5 <157 2.4 <0.050 < 0.10 < 0.10 <95 <47 <47 <49 NS NS NS NS NS HA04@2' 8/21/2025 0.9 NS NS NS NS NS NS 2 8/21/2025 4 1.5 < 0.024 < 0.049 < 0.049 <0.098 < 0.024 <4.9 <10 <10 <50 HA04@4' HA04@5' 8/21/2025 5 1.3 <4.9 <49 HA05@0-0.5' 8/21/2025 0-0.5 <48 <50

#### Notes:

HA05@2'

HA03@0-0.5'

HA03@2'

bgs: Below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

8/21/2025

8/21/2025 8/21/2025 0-0.5

DRO: Diesel Range Organics

GRO: Gasoline Range Organics

mg/kg: Milligrams per kilogram

MRO: Motor Oil/Lube Oil Range Organics

NE: Not Established

NMOCD: New Mexico Oil Conservation Division

NS

PID: Photoionization detector

ppm: Parts per million

TPH: Total Petroleum Hydrocarbon

': Feet

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1.7

12

<: Indicates result less than the stated laboratory reporting limit (RL)</p>

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Ensolum 1 of 1



# **APPENDIX A**

Depth to Water Determination

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**APPENDIX B** 

**Agency Correspondence** 

From: OCDOnline@state.nm.us

To: <u>Stuart Hyde</u>

**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 496624

**Date:** Monday, August 18, 2025 8:52:28 AM

## [\*\*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#) nAPP2522527512.

The sampling event is expected to take place:

When: 08/21/2025 @ 10:00

Where: J-33-27N-04W 1560 FSL 1680 FEL (36.52688,-107.25253)

Additional Information: Contact PM Stuart Hyde 970-903-1607 or Wes Weichert 816-266-

8732

**Additional Instructions:** San Juan 27-4 Unit #37M (30-039-25933) GPS: 36.52688, -107.25253. Delineation sampling only, number of samples is estimated.

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 C**

**Laboratory Analytical Reports** 

Attn: Kate Kaufman Hilcorp Energy PO BOX 4700 Farmington, New Mexico 87499

Generated 9/4/2025 12:58:06 PM

**JOB DESCRIPTION** 

San Juan 27-4 #37M

**JOB NUMBER** 

885-31729-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

# **Eurofins Albuquerque**

# **Job Notes**

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

# Authorization

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9/4/2025

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

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Client: Hilcorp Energy
Laboratory Job ID: 885-31729-1
Project/Site: San Juan 27-4 #37M

# **Table of Contents**

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## **Definitions/Glossary**

Client: Hilcorp Energy Job ID: 885-31729-1

Project/Site: San Juan 27-4 #37M

#### **Qualifiers**

## **GC VOA**

Qualifier Description

S1+ Surrogate recovery exceeds control limits, high biased.

### **HPLC/IC**

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

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

applicable.

## Glossary

DL, RA, RE, IN

MDC

Abbreviation	These commonly used abbreviations may or may not be present in this report.
<b>‡</b>	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)

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)

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)

Minimum Detectable Concentration (Radiochemistry)

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

Job ID: 885-31729-1

## Case Narrative

Client: Hilcorp Energy Job ID: 885-31729-1

Project: San Juan 27-4 #37M

**Eurofins Albuquerque** 

#### Job Narrative 885-31729-1

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

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

#### Receipt

The samples were received on 8/23/2025 6:10 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 4.2°C.

#### Gasoline Range Organics

Method 8015D GRO: Surrogate recovery for the following sample was outside control limits: HA01@4' (885-31729-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC VOA

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

## **Diesel Range Organics**

Method 8015D DRO: The following sample was diluted due to the nature of the sample matrix: HA03@6' (885-31729-9). Elevated reporting limits (RLs) are provided.

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.

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Lab Sample ID: 885-31729-1

Matrix: Solid

Job ID: 885-31729-1

Client Sample ID: HA01@0-0.5'
Date Collected: 08/21/25 10:51

Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		08/25/25 09:48	08/28/25 23:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 150			08/25/25 09:48	08/28/25 23:17	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/25/25 09:48	08/28/25 23:17	1
Ethylbenzene	ND		0.047	mg/Kg		08/25/25 09:48	08/28/25 23:17	1
Toluene	ND		0.047	mg/Kg		08/25/25 09:48	08/28/25 23:17	1
Xylenes, Total	ND		0.094	mg/Kg		08/25/25 09:48	08/28/25 23:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			08/25/25 09:48	08/28/25 23:17	1
- Method: SW846 8015M/D - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	77		9.9	mg/Kg		08/28/25 13:19	09/02/25 12:44	1
Diesel Range Organics [C10-C28]			40	mg/Kg		08/28/25 13:19	09/02/25 12:44	1
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	160		49	mg/Ng				·
Motor Oil Range Organics	160 %Recovery	Qualifier	Limits	ilig/i\g		Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]		Qualifier		ilig/Ng			Analyzed 09/02/25 12:44	Dil Fac
Motor Oil Range Organics [C28-C40] Surrogate	%Recovery		Limits	iiig/Ng		Prepared		Dil Fac
Motor Oil Range Organics [C28-C40]  Surrogate  Di-n-octyl phthalate (Surr)	%Recovery 125 Chromatograp		Limits	Unit	D	Prepared		Dil Fac

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

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Lab Sample ID: 885-31729-2

Matrix: Solid

Job ID: 885-31729-1

Client Sample ID: HA01@4'
Date Collected: 08/21/25 11:13

Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	160		4.9	mg/Kg		08/25/25 09:48	08/28/25 23:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	289	S1+	15 - 150			08/25/25 09:48	08/28/25 23:41	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/25/25 09:48	08/28/25 23:41	1
Ethylbenzene	0.54		0.049	mg/Kg		08/25/25 09:48	08/28/25 23:41	1
Toluene	ND		0.049	mg/Kg		08/25/25 09:48	08/28/25 23:41	1
Xylenes, Total	3.2		0.098	mg/Kg		08/25/25 09:48	08/28/25 23:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		15 - 150			08/25/25 09:48	08/28/25 23:41	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	330		9.6	mg/Kg		08/28/25 13:19	08/29/25 16:56	1
Motor Oil Range Organics [C28-C40]	170		48	mg/Kg		08/28/25 13:19	08/29/25 16:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			08/28/25 13:19	08/29/25 16:56	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	ND		50	mg/Kg		08/26/25 07:45	08/26/25 13:12	10

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Client Sample ID: HA01@7'

Lab Sample ID: 885-31729-3

Matrix: Solid

Job ID: 885-31729-1

Date Collected: 08/21/25 13:21 Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		08/25/25 09:48	08/29/25 12:42	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		<u> 15 - 150</u>			08/25/25 09:48	08/29/25 12:42	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/25/25 09:48	08/29/25 12:42	1
Ethylbenzene	ND		0.049	mg/Kg		08/25/25 09:48	08/29/25 12:42	1
Toluene	ND		0.049	mg/Kg		08/25/25 09:48	08/29/25 12:42	1
Xylenes, Total	0.26		0.097	mg/Kg		08/25/25 09:48	08/29/25 12:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			08/25/25 09:48	08/29/25 12:42	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	32		9.7	mg/Kg		08/28/25 13:19	09/02/25 13:20	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/28/25 13:19	09/02/25 13:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	118		62 - 134			08/28/25 13:19	09/02/25 13:20	1

Method: EPA 300.0 - Anions, Ion Cl	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND —	50	mg/Kg		08/26/25 07:45	08/26/25 14:01	10

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Client: Hilcorp Energy

Chloride

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Client Sample ID: HA02@0-0.5'

Lab Sample ID: 885-31729-4

08/26/25 07:45

08/26/25 14:11

Matrix: Solid

Date Collected: 08/21/25 11:31 Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		08/25/25 09:48	08/29/25 00:28	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	113		15 - 150			08/25/25 09:48	08/29/25 00:28	
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.024	mg/Kg		08/25/25 09:48	08/29/25 00:28	
Ethylbenzene	ND		0.048	mg/Kg		08/25/25 09:48	08/29/25 00:28	
Toluene	ND		0.048	mg/Kg		08/25/25 09:48	08/29/25 00:28	
Xylenes, Total	ND		0.095	mg/Kg		08/25/25 09:48	08/29/25 00:28	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		15 - 150			08/25/25 09:48	08/29/25 00:28	
Method: SW846 8015M/D - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		08/28/25 13:19	08/29/25 17:19	
			50	mg/Kg		08/28/25 13:19	08/29/25 17:19	
Motor Oil Range Organics [C28-C40]	ND							
Motor Oil Range Organics [C28-C40]  Surrogate	ND <b>%Recovery</b>	Qualifier	Limits			Prepared	Analyzed	Dil Fa
		Qualifier				Prepared 08/28/25 13:19	Analyzed 08/29/25 17:19	Dil Fa
Surrogate		<u>-i</u>	Limits					Dil Fa

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mg/Kg

ND

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Lab Sample ID: 885-31729-5

Matrix: Solid

Job ID: 885-31729-1

Client Sample ID: HA02@2' Date Collected: 08/21/25 11:36

Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		08/25/25 09:48	08/29/25 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		15 - 150			08/25/25 09:48	08/29/25 00:52	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/25/25 09:48	08/29/25 00:52	1
Ethylbenzene	ND		0.048	mg/Kg		08/25/25 09:48	08/29/25 00:52	1
Toluene	ND		0.048	mg/Kg		08/25/25 09:48	08/29/25 00:52	1
Xylenes, Total	ND		0.097	mg/Kg		08/25/25 09:48	08/29/25 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			08/25/25 09:48	08/29/25 00:52	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		08/28/25 13:19	08/29/25 17:30	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/28/25 13:19	08/29/25 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			08/28/25 13:19	08/29/25 17:30	1

Method: EPA 300.0 - Anions, Ion Cl	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	50	mg/Kg		08/26/25 07:45	08/26/25 14:21	10

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Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Client Sample ID: HA02@4'

Lab Sample ID: 885-31729-6

Matrix: Solid

Date Collected: 08/21/25 11:44 Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		08/25/25 09:48	08/29/25 01:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		<u> 15 - 150</u>			08/25/25 09:48	08/29/25 01:40	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 09:48	08/29/25 01:40	1
Ethylbenzene	ND		0.049	mg/Kg		08/25/25 09:48	08/29/25 01:40	1
Toluene	ND		0.049	mg/Kg		08/25/25 09:48	08/29/25 01:40	1
Xylenes, Total	ND		0.098	mg/Kg		08/25/25 09:48	08/29/25 01:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			08/25/25 09:48	08/29/25 01:40	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/28/25 13:19	08/29/25 17:42	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/28/25 13:19	08/29/25 17:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	117		62 - 134			08/28/25 13:19	08/29/25 17:42	1

Method: EPA 300.0 - Anions, Ion Cl	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	50	mg/Kg		08/26/25 07:45	08/26/25 14:30	10

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1'

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Client Sample ID: HA03@0-0.5'

Lab Sample ID: 885-31729-7

Date Collected: 08/21/25 12:07
Date Received: 08/23/25 06:10

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		08/25/25 09:48	08/29/25 02:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		<u> 15 - 150</u>			08/25/25 09:48	08/29/25 02:03	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/25/25 09:48	08/29/25 02:03	1
Ethylbenzene	ND		0.048	mg/Kg		08/25/25 09:48	08/29/25 02:03	1
Toluene	ND		0.048	mg/Kg		08/25/25 09:48	08/29/25 02:03	1
Xylenes, Total	ND		0.097	mg/Kg		08/25/25 09:48	08/29/25 02:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		<u> 15 - 150</u>			08/25/25 09:48	08/29/25 02:03	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		08/28/25 13:19	08/29/25 17:53	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/28/25 13:19	08/29/25 17:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			08/28/25 13:19	08/29/25 17:53	1

Method: EPA 300.0 - Anions, Ion C	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	50	mg/Kg		08/26/25 07:45	08/26/25 14:40	10

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Client: Hilcorp Energy

Chloride

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Client Sample ID: HA03@2'

Lab Sample ID: 885-31729-8

08/26/25 07:45

08/26/25 14:50

Matrix: Solid

Date Collected: 08/21/25 12:43 Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		08/25/25 09:48	08/29/25 02:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		15 - 150			08/25/25 09:48	08/29/25 02:27	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 09:48	08/29/25 02:27	1
Ethylbenzene	ND		0.049	mg/Kg		08/25/25 09:48	08/29/25 02:27	1
Toluene	ND		0.049	mg/Kg		08/25/25 09:48	08/29/25 02:27	1
Xylenes, Total	ND		0.099	mg/Kg		08/25/25 09:48	08/29/25 02:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			08/25/25 09:48	08/29/25 02:27	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		08/28/25 13:19	08/29/25 18:05	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/28/25 13:19	08/29/25 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
			62 - 134			08/28/25 13:19	08/29/25 18:05	1
Di-n-octyl phthalate (Surr)	90							
Di-n-octyl phthalate (Surr)  Method: EPA 300.0 - Anions, Ion		ohy						

50

mg/Kg

110

Client: Hilcorp Energy

Chloride

Project/Site: San Juan 27-4 #37M Client Sample ID: HA03@6'

Date Collected: 08/21/25 13:10

Date Received: 08/23/25 06:10

Job ID: 885-31729-1

Lab Sample ID: 885-31729-9

08/26/25 07:45

08/26/25 15:00

10

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		08/25/25 13:37	08/27/25 21:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			08/25/25 13:37	08/27/25 21:36	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 13:37	08/27/25 21:36	1
Ethylbenzene	ND		0.050	mg/Kg		08/25/25 13:37	08/27/25 21:36	1
Toluene	ND		0.050	mg/Kg		08/25/25 13:37	08/27/25 21:36	1
Xylenes, Total	ND		0.10	mg/Kg		08/25/25 13:37	08/27/25 21:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/25/25 13:37	08/27/25 21:36	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		09/02/25 12:09	09/03/25 12:42	1
			47	mg/Kg		09/02/25 12:09	09/03/25 12:42	1
Motor Oil Range Organics [C28-C40]	ND							
	ND %Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]  Surrogate  Di-n-octyl phthalate (Surr)		Qualifier				<b>Prepared</b> 09/02/25 12:09	Analyzed 09/03/25 12:42	Dil Fac
Surrogate		<u> </u>	Limits					Dil Fac

50

mg/Kg

ND

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Date Received: 08/23/25 06:10

Client Sample ID: HA04@0-0.5'

Date Collected: 08/21/25 13:02

Lab Sample ID: 885-31729-10

Matrix: Solid

Job ID: 885-31729-1

Method: SW846 8015M/D - Gasol	ine Range Org	anics (GRC	)) (GC)				
Analyte Gasoline Range Organics [C6 - C10]	Result ND	Qualifier		 <u>D</u>	Prepared 08/25/25 13:37	Analyzed 08/27/25 22:41	Dil Fac
Surrogate 4-Bromofluorobenzene (Surr)	%Recovery	Qualifier	Limits 15 - 150		<b>Prepared</b> 08/25/25 13:37	Analyzed 08/27/25 22:41	Dil Fac

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 13:37	08/27/25 22:41	
Ethylbenzene	ND		0.050	mg/Kg		08/25/25 13:37	08/27/25 22:41	1
Toluene	ND		0.050	mg/Kg		08/25/25 13:37	08/27/25 22:41	1
Xylenes, Total	ND		0.10	mg/Kg		08/25/25 13:37	08/27/25 22:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			08/25/25 13:37	08/27/25 22:41	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		09/02/25 12:09	09/03/25 12:53	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		09/02/25 12:09	09/03/25 12:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			09/02/25 12:09	09/03/25 12:53	1

Method: EPA 300.0 - Anions, Ion C	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	49	mg/Kg		08/26/25 07:45	08/26/25 15:10	10

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Client Sample ID: HA04@4'

Lab Sample ID: 885-31729-11

Matrix: Solid

<b>Date Collected:</b>	08/21/25 14:08
Date Received:	08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		08/25/25 13:37	08/27/25 23:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		<u> 15 - 150</u>			08/25/25 13:37	08/27/25 23:46	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/25/25 13:37	08/27/25 23:46	1
Ethylbenzene	ND		0.049	mg/Kg		08/25/25 13:37	08/27/25 23:46	1
Toluene	ND		0.049	mg/Kg		08/25/25 13:37	08/27/25 23:46	1
Xylenes, Total	ND		0.098	mg/Kg		08/25/25 13:37	08/27/25 23:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/25/25 13:37	08/27/25 23:46	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		09/02/25 12:09	09/03/25 13:05	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		09/02/25 12:09	09/03/25 13:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	117		62 - 134			09/02/25 12:09	09/03/25 13:05	1

Method: EPA 300.0 - Anions, ion Ci	nromatograpr	1y						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		08/26/25 07:45	08/26/25 15:39	10

Client: Hilcorp Energy

Surrogate

Di-n-octyl phthalate (Surr)

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Lab Sample ID: 885-31729-12

Prepared

09/02/25 12:09

Analyzed

09/03/25 13:16

Dil Fac

Matrix: Solid

Client Sample ID: HA04@5'
Date Collected: 08/21/25 14:15

Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		08/25/25 13:37	08/28/25 00:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/25/25 13:37	08/28/25 00:08	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 13:37	08/28/25 00:08	1
Ethylbenzene	ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 00:08	1
Toluene	ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 00:08	1
Xylenes, Total	ND		0.099	mg/Kg		08/25/25 13:37	08/28/25 00:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 _ 150			08/25/25 13:37	08/28/25 00:08	1
Method: SW846 8015M/D - Diese	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		09/02/25 12:09	09/03/25 13:16	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		09/02/25 12:09	09/03/25 13:16	1

Method: EPA 300.0 - Anions, Ion Chromatography								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		49	mg/Kg		08/26/25 07:45	08/26/25 15:49	10

Limits

62 - 134

%Recovery Qualifier

119

Client: Hilcorp Energy

Chloride

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Client Sample ID: HA05@0-0.5'

Lab Sample ID: 885-31729-13

08/26/25 07:45 08/26/25 15:59

Matrix: Solid

Date Collected: 08/21/25 13:45 Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		08/25/25 13:37	08/28/25 00:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/25/25 13:37	08/28/25 00:30	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 13:37	08/28/25 00:30	1
Ethylbenzene	ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 00:30	1
Toluene	ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 00:30	1
Xylenes, Total	ND		0.099	mg/Kg		08/25/25 13:37	08/28/25 00:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			08/25/25 13:37	08/28/25 00:30	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		09/02/25 12:09	09/03/25 13:28	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		09/02/25 12:09	09/03/25 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			09/02/25 12:09	09/03/25 13:28	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy						

50

mg/Kg

ND

# **Client Sample Results**

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Lab Sample ID: 885-31729-14

Matrix: Solid

Client Sample ID: HA05@3'
Date Collected: 08/21/25 13:59

Date Received: 08/23/25 06:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		08/25/25 13:37	08/28/25 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 150			08/25/25 13:37	08/28/25 00:52	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/25/25 13:37	08/28/25 00:52	1
Ethylbenzene	ND		0.048	mg/Kg		08/25/25 13:37	08/28/25 00:52	1
Toluene	ND		0.048	mg/Kg		08/25/25 13:37	08/28/25 00:52	1
Xylenes, Total	ND		0.095	mg/Kg		08/25/25 13:37	08/28/25 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/25/25 13:37	08/28/25 00:52	1
Method: SW846 8015M/D - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
DI ID 0 1 1040 CCC	11		9.7	mg/Kg		09/02/25 15:01	09/03/25 15:10	1
Diesel Range Organics [C10-C28]								
Diesel Range Organics [C10-C28]  Motor Oil Range Organics [C28-C40]	76		49	mg/Kg		09/02/25 15:01	09/03/25 15:10	1
Motor Oil Range Organics	76 %Recovery	Qualifier	49 <i>Limits</i>	mg/Kg		09/02/25 15:01  Prepared	09/03/25 15:10  Analyzed	1 Dil Fac
Motor Oil Range Organics [C28-C40]		Qualifier		mg/Kg				
Motor Oil Range Organics [C28-C40]  Surrogate  Di-n-octyl phthalate (Surr)		<u> </u>	Limits	mg/Kg		Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40] Surrogate		<u> </u>	Limits	mg/Kg Unit	D	Prepared	Analyzed	Dil Fac

# **Client Sample Results**

Client: Hilcorp Energy

Xylenes, Total

Surrogate

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

Lab Sample ID: 885-31729-15

08/28/25 01:14

Analyzed

Dil Fac

08/25/25 13:37

Prepared

Matrix: Solid

Client Sample ID: HA06@0-0.5' Date Collected: 08/21/25 14:08

Date Received: 08/23/25 06:10

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		4.9	mg/Kg		08/25/25 13:37	08/28/25 01:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 150			08/25/25 13:37	08/28/25 01:14	1	
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		08/25/25 13:37	08/28/25 01:14	1	
Ethylbenzene	ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 01:14	1	
Toluene	ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 01:14	1	

0.097

Limits

mg/Kg

4-Bromofluorobenzene (Surr)	97		15 _ 150			08/25/25 13:37	08/28/25 01:14	
- Method: SW846 8015M/D - Diesel	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		09/02/25 15:01	09/03/25 15:34	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		09/02/25 15:01	09/03/25 15:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90	-	62 - 134			09/02/25 15:01	09/03/25 15:34	1

ND

%Recovery Qualifier

Method: EPA 300.0 - Anions, Ion Chromatography									
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
	Chloride	ND	50	mg/Kg		08/26/25 07:45	08/26/25 16:19	10	

# **Client Sample Results**

Client: Hilcorp Energy

Chloride

Project/Site: San Juan 27-4 #37M

Lab Sample ID: 885-31729-16

08/26/25 09:57

08/26/25 16:29

Matrix: Solid

Job ID: 885-31729-1

Client Sample ID: HA06@2' Date Collected: 08/21/25 14:19

Date Received: 08/23/25 06:10

	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		4.9	mg/Kg		08/25/25 13:37	08/28/25 01:35	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
101		15 - 150			08/25/25 13:37	08/28/25 01:35	1
Organic Comp	ounds (GC)	ı					
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.024	mg/Kg		08/25/25 13:37	08/28/25 01:35	1
ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 01:35	1
ND		0.049	mg/Kg		08/25/25 13:37	08/28/25 01:35	1
ND		0.097	mg/Kg		08/25/25 13:37	08/28/25 01:35	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
95		15 - 150			08/25/25 13:37	08/28/25 01:35	1
l Range Organ	ics (DRO) (	GC)					
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		9.5	mg/Kg		09/02/25 15:01	09/03/25 15:58	1
ND		48	mg/Kg		09/02/25 15:01	09/03/25 15:58	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
90		62 - 134			09/02/25 15:01	09/03/25 15:58	1
	%Recovery 101  Organic Comp Result ND ND ND ND SP Recovery 95  Pl Range Organ Result ND ND ND ND ND Recovery 95  Pl Range Organ Result ND ND ND ND ND %Recovery	## Arecovery 101    Corganic Compounds (GC)   Result   Qualifier	%Recovery         Qualifier         Limits           101         15 - 150           Organic Compounds (GC)           Result         Qualifier         RL           ND         0.024           ND         0.049           ND         0.097           %Recovery         Qualifier         Limits           95         15 - 150           Pl Range Organics (DRO) (GC)         Result         Qualifier           ND         9.5           ND         48           %Recovery         Qualifier         Limits	%Recovery         Qualifier         Limits           101         15 - 150           Organic Compounds (GC)           Result         Qualifier         RL         Unit           ND         0.024         mg/Kg           ND         0.049         mg/Kg           ND         0.097         mg/Kg           %Recovery         Qualifier         Limits           95         15 - 150           Pl Range Organics (DRO) (GC)         Result         Unit           ND         9.5         mg/Kg           ND         48         mg/Kg           %Recovery         Qualifier         Limits	%Recovery         Qualifier         Limits           101         15 - 150           Organic Compounds (GC)           Result         Qualifier         RL         Unit         D           ND         0.024         mg/Kg         Mg/Kg	%Recovery         Qualifier         Limits         Prepared           101         15 - 150         08/25/25 13:37           Organic Compounds (GC)           Result         Qualifier         RL         Unit         D         Prepared           ND         0.024         mg/Kg         08/25/25 13:37           ND         0.049         mg/Kg         08/25/25 13:37           ND         0.097         mg/Kg         08/25/25 13:37           %Recovery         Qualifier         Limits         Prepared           95         15 - 150         08/25/25 13:37           PResult         Qualifier         RL         Unit         D         Prepared           ND         9.5         mg/Kg         09/02/25 15:01         09/02/25 15:01           ND         48         mg/Kg         09/02/25 15:01           %Recovery         Qualifier         Limits         Prepared	%Recovery         Qualifier         Limits         Prepared         Analyzed           Organic Compounds (GC)           Result         Qualifier         RL         Unit         D         Prepared         Analyzed           ND         0.024         mg/Kg         08/25/25 13:37         08/28/25 01:35           ND         0.049         mg/Kg         08/25/25 13:37         08/28/25 01:35           ND         0.049         mg/Kg         08/25/25 13:37         08/28/25 01:35           ND         0.097         mg/Kg         08/25/25 13:37         08/28/25 01:35           %Recovery         Qualifier         Limits         Prepared         Analyzed           95         15 - 150         08/25/25 13:37         08/28/25 01:35           El Range Organics (DRO) (GC)         Result         Unit         D         Prepared         Analyzed           ND         9.5         mg/Kg         09/02/25 15:01         09/03/25 15:58           ND         48         mg/Kg         09/02/25 15:01         09/03/25 15:58           %Recovery         Qualifier         Limits         Prepared         Analyzed

50

mg/Kg

ND

10

Prep Batch: 33094

Job ID: 885-31729-1 Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

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

Lab Sample ID: MB 885-33094/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 33488

Gasoline Range Organics [C6 - C10]

MB	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		5.0	mg/Kg		08/25/25 09:48	08/28/25 15:48	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 15 - 150 08/25/25 09:48 4-Bromofluorobenzene (Surr) 111 08/28/25 15:48

Lab Sample ID: LCS 885-33094/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 33488					Prep Batch: 33094			
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics [C6 -	25.0	24.1		mg/Kg		96	70 - 130	

C10]

Analyte

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	214		15 - 150

Lab Sample ID: MB 885-33151/1-A Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 33398

MB MB Result Qualifier RL Analyte Unit Prepared Analyzed Dil Fac Gasoline Range Organics [C6 - C10] 5.0 08/25/25 13:37 08/27/25 21:15 ND mg/Kg

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99	15 - 150	08/25/25 13:37	08/27/25 21:15	1

Lab Sample ID: LCS 885-33151/2-A **Client Sample ID: Lab Control Sample** 

Matrix: Solid

Matrix: Solid				Prep Type: Total/NA
Analysis Batch: 33398				Prep Batch: 33151
	Spike	LCS LCS	%R	tec

Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics [C6 -25.0 22.7 mg/Kg 70 - 130

C10]

LCS LCS

Surrogate	%Recovery Qualifi	er Limits
4-Bromofluorobenzene (Surr)	215	15 - 150

Lab Sample ID: 885-31729-9 MS

**Matrix: Solid** Analysis Batch: 33398 Prep Batch: 33151

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits ND 24.8 21.3 86 mg/Kg 70 - 130Gasoline Range Organics [C6 -

C10]

MS MS

Surrogate %Recovery Qualifier Limits 15 - 150 4-Bromofluorobenzene (Surr) 212

Eurofins Albuquerque

Prep Batch: 33151

Client Sample ID: HA03@6' Prep Type: Total/NA

## **QC Sample Results**

Spike

Added

MSD MSD

Result Qualifier

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

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

Lab Sample ID: 885-31729-9 MSD

**Matrix: Solid** 

Analysis Batch: 33398

Gasoline Range Organics [C6 -

Client Sample ID: HA03@6' Prep Type: Total/NA

Prep Batch: 33151

RPD RPD Limits Limit

70 - 130 6 20

C10]

Analyte

MSD MSD

ND

Sample Sample

Result Qualifier

%Recovery Qualifier Limits Surrogate 15 - 150 4-Bromofluorobenzene (Surr) 214

24.9 22.7 mg/Kg 91

%Rec

Unit

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

Lab Sample ID: MB 885-33094/1-A

**Matrix: Solid** 

**Analysis Batch: 33489** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33094

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 09:48	08/28/25 15:48	1
Ethylbenzene	ND		0.050	mg/Kg		08/25/25 09:48	08/28/25 15:48	1
Toluene	ND		0.050	mg/Kg		08/25/25 09:48	08/28/25 15:48	1
Xylenes, Total	ND		0.10	mg/Kg		08/25/25 09:48	08/28/25 15:48	1

MB MB

Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed 15 - 150 08/25/25 09:48 08/28/25 15:48 4-Bromofluorobenzene (Surr) 91

Lab Sample ID: LCS 885-33094/3-A

**Matrix: Solid** 

**Analysis Batch: 33489** 

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Prep Batch: 33094

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	1.00	0.869		mg/Kg		87	70 - 130
Ethylbenzene	1.00	0.857		mg/Kg		86	70 - 130
m&p-Xylene	2.00	1.84		mg/Kg		92	70 - 130
o-Xylene	1.00	0.870		mg/Kg		87	70 - 130
Toluene	1.00	0.875		mg/Kg		87	70 - 130
Xylenes, Total	3.00	2.71		mg/Kg		90	70 - 130

LCS LCS

%Recovery Qualifier Limits Surrogate 15 - 150 4-Bromofluorobenzene (Surr) 92

Lab Sample ID: MB 885-33151/1-A

**Matrix: Solid** 

**Analysis Batch: 33399** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33151

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/25/25 13:37	08/27/25 21:15	1
Ethylbenzene	ND		0.050	mg/Kg		08/25/25 13:37	08/27/25 21:15	1
Toluene	ND		0.050	mg/Kg		08/25/25 13:37	08/27/25 21:15	1
Xylenes, Total	ND		0.10	mg/Kg		08/25/25 13:37	08/27/25 21:15	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 95 15 - 150 08/25/25 13:37 08/27/25 21:15

Prep Batch: 33151

Prep Type: Total/NA

### **QC Sample Results**

Client: Hilcorp Energy Job ID: 885-31729-1

Project/Site: San Juan 27-4 #37M

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCS 885-33151/3-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 33399

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	1.00	1.01		mg/Kg		101	70 - 130
Ethylbenzene	1.00	1.01		mg/Kg		101	70 - 130
m&p-Xylene	2.00	2.01		mg/Kg		100	70 - 130
o-Xylene	1.00	1.01		mg/Kg		101	70 - 130
Toluene	1.00	1.01		mg/Kg		101	70 - 130
Xylenes, Total	3.00	3.02		mg/Kg		101	70 - 130

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

Lab Sample ID: 885-31729-10 MS Client Sample ID: HA04@0-0.5'

**Matrix: Solid** 

Analysis Batch: 33399									Prep Ba	atch: 33151
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		0.998	0.996		mg/Kg		100	70 - 130	
Ethylbenzene	ND		0.998	1.02		mg/Kg		102	70 - 130	
m&p-Xylene	ND		2.00	2.03		mg/Kg		101	70 - 130	
o-Xylene	ND		0.998	1.02		mg/Kg		102	70 - 130	
Toluene	ND		0.998	1.01		mg/Kg		102	70 - 130	
Xylenes, Total	ND		2.99	3.04		mg/Kg		102	70 - 130	

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

Lab Sample ID: 885-31729-10 MSD Client Sample ID: HA04@0-0.5' Matrix: Solid Prep Type: Total/NA

Analysis Batch: 33399									Prep	Batch:	33151
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.997	0.939		mg/Kg		94	70 - 130	6	20
Ethylbenzene	ND		0.997	0.955		mg/Kg		96	70 - 130	7	20
m&p-Xylene	ND		1.99	1.93		mg/Kg		97	70 - 130	5	20
o-Xylene	ND		0.997	0.953		mg/Kg		96	70 - 130	7	20
Toluene	ND		0.997	0.935		mg/Kg		94	70 - 130	8	20
Xylenes, Total	ND		2.99	2.88		mg/Kg		96	70 - 130	5	20

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

Spike

Added

49.0

Client: Hilcorp Energy

Job ID: 885-31729-1

MS MS

Qualifier

Unit

mg/Kg

Result

50.1

Project/Site: San Juan 27-4 #37M

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

Lab Sample ID: 885-31729-8 MS **Matrix: Solid** 

Lab Sample ID: 885-31729-8 MSD

Analysis Batch: 33561

Client Sample ID: HA03@2'

Prep Type: Total/NA

Prep Batch: 33478

Limits

Diesel Range Organics [C10-C28]

**Matrix: Solid** 

**Analysis Batch: 33561** 

Analyte

MS MS

ND

Sample Sample

Result Qualifier

%Recovery Qualifier Limits Surrogate 62 - 134 Di-n-octyl phthalate (Surr) 94

Client Sample ID: HA03@2

44 - 136

%Rec

102

Prep Type: Total/NA

Prep Batch: 33478 RPD

Sample Sample Spike MSD MSD Analyte Result Qualifier babbA Result Qualifier %Rec Limits RPD Limit Unit D Diesel Range Organics ND 49 1 54.2 mg/Kg 110 44 - 136 8 32 [C10-C28]

MSD MSD

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 101 62 - 134

Lab Sample ID: MB 885-33717/1-A

**Matrix: Solid** 

**Analysis Batch: 33782** 

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 33717

мв мв

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] ND 10 mg/Kg 09/02/25 12:08 09/03/25 11:38 50 09/02/25 12:08 09/03/25 11:38 Motor Oil Range Organics [C28-C40] ND mg/Kg

> MB MB

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 62 - 134 09/02/25 12:08 09/03/25 11:38 113

Lab Sample ID: LCS 885-33717/2-A

**Matrix: Solid** 

Analysis Batch: 33782

Client Sample ID: Lab Control Sample

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits **Diesel Range Organics** 50.0 57.3 115 51 - 148 mg/Kg

[C10-C28]

LCS LCS

%Recovery Surrogate Qualifier Limits Di-n-octyl phthalate (Surr) 121 62 - 134

Lab Sample ID: MB 885-33744/1-A

**Matrix: Solid** 

**Analysis Batch: 33782** 

Client Sample ID: Method Blank

Prep Type: Total/NA

MR MR Result Qualifier RL Unit Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] ND 10 mg/Kg 09/02/25 15:00 09/03/25 13:12 Motor Oil Range Organics [C28-C40] ND 50 mg/Kg 09/02/25 15:00 09/03/25 13:12

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Prep Type: Total/NA Prep Batch: 33717

Prep Batch: 33744

Job ID: 885-31729-1 Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

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

**Matrix: Solid** 

Lab Sample ID: MB 885-33744/1-A

Analysis Batch: 33782

MB MB

Surrogate %Recovery Qualifier Di-n-octyl phthalate (Surr) 86

Limits 62 - 134

Spike

Added

50.0

LCS LCS

42 7

Result Qualifier

Unit

Unit

LCS LCS

MS MS

MSD MSD

Qualifier

Unit

mg/Kg

Result

776 4

802

Result Qualifier

Qualifier

Result

49.7

mg/Kg

Unit

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Prepared 09/02/25 15:00

D

D

%Rec

85

Analyzed 09/03/25 13:12

Client Sample ID: Lab Control Sample

Limits

51 - 148

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 33744

Prep Batch: 33744

Dil Fac

Lab Sample ID: LCS 885-33744/2-A

**Matrix: Solid** 

**Analysis Batch: 33782** 

Analyte

**Diesel Range Organics** [C10-C28]

Surrogate Di-n-octyl phthalate (Surr) 88

Limits 62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-33185/1-A

**Matrix: Solid** 

Chloride

Analyte

Analyte

Analyte

**Analysis Batch: 33192** 

MB MB

Sample Sample

Sample Sample

Qualifier

мв мв

Result

740

740

Result Qualifier

Analyte

Result Qualifier ND

Lab Sample ID: LCS 885-33185/2-A

**Matrix: Solid Analysis Batch: 33192** 

Chloride Lab Sample ID: 885-31729-1 MS

**Matrix: Solid** 

**Analysis Batch: 33192** 

Chloride

Lab Sample ID: 885-31729-1 MSD **Matrix: Solid** 

Analysis Batch: 33192

Chloride

Lab Sample ID: MB 885-33214/1-A **Matrix: Solid** 

**Analysis Batch: 33192** 

Analyte

Result Qualifier Chloride ND

LCS LCS

%Recovery Qualifier

Spike

Added

50.7

Spike

Added

50.3

Spike

Added

49.5

RL

5.0

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 33185

Prepared Analyzed Dil Fac 08/26/25 07:45 08/26/25 09:17

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 33185

%Rec

D %Rec 90 - 110

%Rec

%Rec

67

116

Limits

Client Sample ID: HA01@0-0.5'

Prep Type: Total/NA

Prep Batch: 33185

%Rec

Limits 50 - 150

Client Sample ID: HA01@0-0.5' Prep Type: Total/NA

Prep Batch: 33185

%Rec RPD

Limits RPD Limit 50 - 150 20

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33214

Prepared Analyzed Dil Fac 08/26/25 09:57 08/26/25 10:57

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RL

5.0

# **QC Sample Results**

Client: Hilcorp Energy Job ID: 885-31729-1

Project/Site: San Juan 27-4 #37M

Method: 300.0 - Anions, Ion Chromatography (Continued)

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 885-33214/2-A **Matrix: Solid Prep Type: Total/NA** Prep Batch: 33214 Analysis Batch: 33192 Spike LCS LCS

Added Result Qualifier Analyte Unit %Rec Limits Chloride 49.7 48.2 mg/Kg 97 90 - 110

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

#### **GC VOA**

### Prep Batch: 33094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-1	HA01@0-0.5'	Total/NA	Solid	5030C	_
885-31729-2	HA01@4'	Total/NA	Solid	5030C	
885-31729-3	HA01@7'	Total/NA	Solid	5030C	
885-31729-4	HA02@0-0.5'	Total/NA	Solid	5030C	
885-31729-5	HA02@2'	Total/NA	Solid	5030C	
885-31729-6	HA02@4'	Total/NA	Solid	5030C	
885-31729-7	HA03@0-0.5'	Total/NA	Solid	5030C	
885-31729-8	HA03@2'	Total/NA	Solid	5030C	
MB 885-33094/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-33094/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-33094/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Prep Batch: 33151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-9	HA03@6'	Total/NA	Solid	5030C	
885-31729-10	HA04@0-0.5'	Total/NA	Solid	5030C	
885-31729-11	HA04@4'	Total/NA	Solid	5030C	
885-31729-12	HA04@5'	Total/NA	Solid	5030C	
885-31729-13	HA05@0-0.5'	Total/NA	Solid	5030C	
885-31729-14	HA05@3'	Total/NA	Solid	5030C	
885-31729-15	HA06@0-0.5'	Total/NA	Solid	5030C	
885-31729-16	HA06@2'	Total/NA	Solid	5030C	
MB 885-33151/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-33151/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-33151/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-31729-9 MS	HA03@6'	Total/NA	Solid	5030C	
885-31729-9 MSD	HA03@6'	Total/NA	Solid	5030C	
885-31729-10 MS	HA04@0-0.5'	Total/NA	Solid	5030C	
885-31729-10 MSD	HA04@0-0.5'	Total/NA	Solid	5030C	

#### Analysis Batch: 33398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-9	HA03@6'	Total/NA	Solid	8015M/D	33151
885-31729-10	HA04@0-0.5'	Total/NA	Solid	8015M/D	33151
885-31729-11	HA04@4'	Total/NA	Solid	8015M/D	33151
885-31729-12	HA04@5'	Total/NA	Solid	8015M/D	33151
885-31729-13	HA05@0-0.5'	Total/NA	Solid	8015M/D	33151
885-31729-14	HA05@3'	Total/NA	Solid	8015M/D	33151
885-31729-15	HA06@0-0.5'	Total/NA	Solid	8015M/D	33151
885-31729-16	HA06@2'	Total/NA	Solid	8015M/D	33151
MB 885-33151/1-A	Method Blank	Total/NA	Solid	8015M/D	33151
LCS 885-33151/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	33151
885-31729-9 MS	HA03@6'	Total/NA	Solid	8015M/D	33151
885-31729-9 MSD	HA03@6'	Total/NA	Solid	8015M/D	33151

### Analysis Batch: 33399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-9	HA03@6'	Total/NA	Solid	8021B	33151
885-31729-10	HA04@0-0.5'	Total/NA	Solid	8021B	33151
885-31729-11	HA04@4'	Total/NA	Solid	8021B	33151
885-31729-12	HA04@5'	Total/NA	Solid	8021B	33151

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4

6

8

9

10

4.

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

## **GC VOA (Continued)**

## Analysis Batch: 33399 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-13	HA05@0-0.5'	Total/NA	Solid	8021B	33151
885-31729-14	HA05@3'	Total/NA	Solid	8021B	33151
885-31729-15	HA06@0-0.5'	Total/NA	Solid	8021B	33151
885-31729-16	HA06@2'	Total/NA	Solid	8021B	33151
MB 885-33151/1-A	Method Blank	Total/NA	Solid	8021B	33151
LCS 885-33151/3-A	Lab Control Sample	Total/NA	Solid	8021B	33151
885-31729-10 MS	HA04@0-0.5'	Total/NA	Solid	8021B	33151
885-31729-10 MSD	HA04@0-0.5'	Total/NA	Solid	8021B	33151

#### Analysis Batch: 33488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-1	HA01@0-0.5'	Total/NA	Solid	8015M/D	33094
885-31729-2	HA01@4'	Total/NA	Solid	8015M/D	33094
885-31729-4	HA02@0-0.5'	Total/NA	Solid	8015M/D	33094
885-31729-5	HA02@2'	Total/NA	Solid	8015M/D	33094
885-31729-6	HA02@4'	Total/NA	Solid	8015M/D	33094
885-31729-7	HA03@0-0.5'	Total/NA	Solid	8015M/D	33094
885-31729-8	HA03@2'	Total/NA	Solid	8015M/D	33094
MB 885-33094/1-A	Method Blank	Total/NA	Solid	8015M/D	33094
LCS 885-33094/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	33094

#### **Analysis Batch: 33489**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-1	HA01@0-0.5'	Total/NA	Solid	8021B	33094
885-31729-2	HA01@4'	Total/NA	Solid	8021B	33094
885-31729-4	HA02@0-0.5'	Total/NA	Solid	8021B	33094
885-31729-5	HA02@2'	Total/NA	Solid	8021B	33094
885-31729-6	HA02@4'	Total/NA	Solid	8021B	33094
885-31729-7	HA03@0-0.5'	Total/NA	Solid	8021B	33094
885-31729-8	HA03@2'	Total/NA	Solid	8021B	33094
MB 885-33094/1-A	Method Blank	Total/NA	Solid	8021B	33094
LCS 885-33094/3-A	Lab Control Sample	Total/NA	Solid	8021B	33094

## Analysis Batch: 33569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-3	HA01@7'	Total/NA	Solid	8015M/D	33094

#### Analysis Batch: 33570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-3	HA01@7'	Total/NA	Solid	8021B	33094

#### **GC Semi VOA**

#### Prep Batch: 33478

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<b>Lab Sample ID</b> 885-31729-1	Client Sample ID HA01@0-0.5'	Prep Type Total/NA	Matrix Solid	Method SHAKE	Prep Batch
885-31729-2	HA01@4'	Total/NA	Solid	SHAKE	
885-31729-3	HA01@7'	Total/NA	Solid	SHAKE	
885-31729-4	HA02@0-0.5'	Total/NA	Solid	SHAKE	
885-31729-5	HA02@2'	Total/NA	Solid	SHAKE	
885-31729-6	HA02@4'	Total/NA	Solid	SHAKE	

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Job ID: 885-31729-1

### **GC Semi VOA (Continued)**

#### Prep Batch: 33478 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-7	HA03@0-0.5'	Total/NA	Solid	SHAKE	
885-31729-8	HA03@2'	Total/NA	Solid	SHAKE	
885-31729-8 MS	HA03@2'	Total/NA	Solid	SHAKE	
885-31729-8 MSD	HA03@2'	Total/NA	Solid	SHAKE	

#### Analysis Batch: 33561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-2	HA01@4'	Total/NA	Solid	8015M/D	33478
885-31729-4	HA02@0-0.5'	Total/NA	Solid	8015M/D	33478
885-31729-5	HA02@2'	Total/NA	Solid	8015M/D	33478
885-31729-6	HA02@4'	Total/NA	Solid	8015M/D	33478
885-31729-7	HA03@0-0.5'	Total/NA	Solid	8015M/D	33478
885-31729-8	HA03@2'	Total/NA	Solid	8015M/D	33478
885-31729-8 MS	HA03@2'	Total/NA	Solid	8015M/D	33478
885-31729-8 MSD	HA03@2'	Total/NA	Solid	8015M/D	33478

## Analysis Batch: 33688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-1	HA01@0-0.5'	Total/NA	Solid	8015M/D	33478
885-31729-3	HA01@7'	Total/NA	Solid	8015M/D	33478

#### Prep Batch: 33717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
885-31729-9	HA03@6'	Total/NA	Solid	SHAKE	
885-31729-10	HA04@0-0.5'	Total/NA	Solid	SHAKE	
885-31729-11	HA04@4'	Total/NA	Solid	SHAKE	
885-31729-12	HA04@5'	Total/NA	Solid	SHAKE	
885-31729-13	HA05@0-0.5'	Total/NA	Solid	SHAKE	
MB 885-33717/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-33717/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

#### Prep Batch: 33744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-14	HA05@3'	Total/NA	Solid	SHAKE	
885-31729-15	HA06@0-0.5'	Total/NA	Solid	SHAKE	
885-31729-16	HA06@2'	Total/NA	Solid	SHAKE	
MB 885-33744/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-33744/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

#### **Analysis Batch: 33778**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-9	HA03@6'	Total/NA	Solid	8015M/D	33717
885-31729-10	HA04@0-0.5'	Total/NA	Solid	8015M/D	33717
885-31729-11	HA04@4'	Total/NA	Solid	8015M/D	33717
885-31729-12	HA04@5'	Total/NA	Solid	8015M/D	33717
885-31729-13	HA05@0-0.5'	Total/NA	Solid	8015M/D	33717

#### Analysis Batch: 33782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-14	HA05@3'	Total/NA	Solid	8015M/D	33744
885-31729-15	HA06@0-0.5'	Total/NA	Solid	8015M/D	33744

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Client: Hilcorp Energy

Job ID: 885-31729-1 Project/Site: San Juan 27-4 #37M

## GC Semi VOA (Continued)

### **Analysis Batch: 33782 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-16	HA06@2'	Total/NA	Solid	8015M/D	33744
MB 885-33717/1-A	Method Blank	Total/NA	Solid	8015M/D	33717
MB 885-33744/1-A	Method Blank	Total/NA	Solid	8015M/D	33744
LCS 885-33717/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	33717
LCS 885-33744/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	33744

### HPLC/IC

### Prep Batch: 33185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-1	HA01@0-0.5'	Total/NA	Solid	300_Prep	_
885-31729-2	HA01@4'	Total/NA	Solid	300_Prep	
885-31729-3	HA01@7'	Total/NA	Solid	300_Prep	
885-31729-4	HA02@0-0.5'	Total/NA	Solid	300_Prep	
885-31729-5	HA02@2'	Total/NA	Solid	300_Prep	
885-31729-6	HA02@4'	Total/NA	Solid	300_Prep	
885-31729-7	HA03@0-0.5'	Total/NA	Solid	300_Prep	
885-31729-8	HA03@2'	Total/NA	Solid	300_Prep	
885-31729-9	HA03@6'	Total/NA	Solid	300_Prep	
885-31729-10	HA04@0-0.5'	Total/NA	Solid	300_Prep	
885-31729-11	HA04@4'	Total/NA	Solid	300_Prep	
885-31729-12	HA04@5'	Total/NA	Solid	300_Prep	
885-31729-13	HA05@0-0.5'	Total/NA	Solid	300_Prep	
885-31729-14	HA05@3'	Total/NA	Solid	300_Prep	
885-31729-15	HA06@0-0.5'	Total/NA	Solid	300_Prep	
MB 885-33185/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-33185/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-31729-1 MS	HA01@0-0.5'	Total/NA	Solid	300_Prep	
885-31729-1 MSD	HA01@0-0.5'	Total/NA	Solid	300_Prep	

#### Analysis Batch: 33192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-2	HA01@4'	Total/NA	Solid	300.0	33185
885-31729-3	HA01@7'	Total/NA	Solid	300.0	33185
885-31729-4	HA02@0-0.5'	Total/NA	Solid	300.0	33185
885-31729-5	HA02@2'	Total/NA	Solid	300.0	33185
885-31729-6	HA02@4'	Total/NA	Solid	300.0	33185
885-31729-7	HA03@0-0.5'	Total/NA	Solid	300.0	33185
885-31729-8 HA03@2'		Total/NA	Solid	300.0	33185
885-31729-9	HA03@6'	Total/NA	Solid	300.0	33185
885-31729-10	HA04@0-0.5'	Total/NA	Solid	300.0	33185
885-31729-11	HA04@4'	Total/NA	Solid	300.0	33185
885-31729-12	HA04@5'	Total/NA	Solid	300.0	33185
885-31729-13	HA05@0-0.5'	Total/NA	Solid	300.0	33185
885-31729-14	HA05@3'	Total/NA	Solid	300.0	33185
885-31729-15	HA06@0-0.5'	Total/NA	Solid	300.0	33185
885-31729-16	HA06@2'	Total/NA	Solid	300.0	33214
MB 885-33185/1-A	Method Blank	Total/NA	Solid	300.0	33185
MB 885-33214/1-A Method Blank		Total/NA	Solid	300.0	33214
LCS 885-33185/2-A	Lab Control Sample	Total/NA	Solid	300.0	33185
LCS 885-33214/2-A	Lab Control Sample	Total/NA	Solid	300.0	33214

Client: Hilcorp Energy Job ID: 885-31729-1

Project/Site: San Juan 27-4 #37M

## **HPLC/IC (Continued)**

### **Analysis Batch: 33192 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-1 MS	HA01@0-0.5'	Total/NA	Solid	300.0	33185
885-31729-1 MSD	HA01@0-0.5'	Total/NA	Solid	300.0	33185

#### Prep Batch: 33214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-16	HA06@2'	Total/NA	Solid	300_Prep	
MB 885-33214/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-33214/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

## Analysis Batch: 33303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-31729-1	HA01@0-0.5'	Total/NA	Solid	300.0	33185

10

33303 RC

Date Received: 08/23/25 06:10

Client: Hilcorp Energy

Date Collected: 08/21/25 10:51

Lab Sample ID: 885-31729-1

**Matrix: Solid** 

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor **Number Analyst** Lab or Analyzed 5030C 08/25/25 09:48 Total/NA Prep 33094 KLS EET ALB 8015M/D Total/NA Analysis 1 33488 JP **EET ALB** 08/28/25 23:17 Total/NA Prep 5030C 33094 KLS **EET ALB** 08/25/25 09:48 08/28/25 23:17 Total/NA Analysis 8021B 1 33489 JP **EET ALB** Total/NA Prep SHAKE 33478 DR **EET ALB** 08/28/25 13:19 Total/NA Analysis 8015M/D 1 33688 BZR **EET ALB** 09/02/25 12:44 Total/NA **EET ALB** 08/26/25 07:45 Prep 300 Prep 33185 RC

Lab Sample ID: 885-31729-2

08/27/25 16:10

**EET ALB** 

Matrix: Solid

Client Sample ID: HA01@4'

Analysis

Date Collected: 08/21/25 11:13 Date Received: 08/23/25 06:10

Total/NA

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C		<u> </u>	33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8015M/D		1	33488	JP	EET ALB	08/28/25 23:41
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8021B		1	33489	JP	EET ALB	08/28/25 23:41
Total/NA	Prep	SHAKE			33478	DR	EET ALB	08/28/25 13:19
Total/NA	Analysis	8015M/D		1	33561	EM	EET ALB	08/29/25 16:56
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 13:12

Client Sample ID: HA01@7'

300.0

Date Collected: 08/21/25 13:21

Date Received: 08/23/25 06:10

Lab Sample	ID:	885-31729-3

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8015M/D		1	33569	JP	EET ALB	08/29/25 12:42
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8021B		1	33570	JP	EET ALB	08/29/25 12:42
Total/NA	Prep	SHAKE			33478	DR	EET ALB	08/28/25 13:19
Total/NA	Analysis	8015M/D		1	33688	BZR	EET ALB	09/02/25 13:20
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 14:01

Client Sample ID: HA02@0-0.5'

Date Collected: 08/21/25 11:31

Date Received: 08/23/25 06:10

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8015M/D		1	33488	JP	EET ALB	08/29/25 00:28

Job ID: 885-31729-1

Client Sample ID: HA02@0-0.5'

Lab Sample ID: 885-31729-4

Matrix: Solid

Date Collected: 08/21/25 11:31 Date Received: 08/23/25 06:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8021B		1	33489	JP	EET ALB	08/29/25 00:28
Total/NA	Prep	SHAKE			33478	DR	EET ALB	08/28/25 13:19
Total/NA	Analysis	8015M/D		1	33561	EM	EET ALB	08/29/25 17:19
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 14:11

Lab Sample ID: 885-31729-5

**Matrix: Solid** 

Client Sample ID: HA02@2' Date Collected: 08/21/25 11:36

Date Received: 08/23/25 06:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8015M/D		1	33488	JP	EET ALB	08/29/25 00:52
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8021B		1	33489	JP	EET ALB	08/29/25 00:52
Total/NA	Prep	SHAKE			33478	DR	EET ALB	08/28/25 13:19
Total/NA	Analysis	8015M/D		1	33561	EM	EET ALB	08/29/25 17:30
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 14:21

Client Sample ID: HA02@4'

Date Collected: 08/21/25 11:44

Date Received: 08/23/25 06:10

Lab Sample II	D: 885-31/29-6	
	Matrix: Solid	

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8015M/D		1	33488	JP	EET ALB	08/29/25 01:40
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8021B		1	33489	JP	EET ALB	08/29/25 01:40
Total/NA	Prep	SHAKE			33478	DR	EET ALB	08/28/25 13:19
Total/NA	Analysis	8015M/D		1	33561	EM	EET ALB	08/29/25 17:42
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 14:30

Client Sample ID: HA03@0-0.5'

Date Collected: 08/21/25 12:07

Date Received: 08/23/25 06:10

	Lab Sam	ple ID:	885-31729-7
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**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8015M/D		1	33488	JP	EET ALB	08/29/25 02:03
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8021B		1	33489	JP	EET ALB	08/29/25 02:03

Client: Hilcorp Energy

Project/Site: San Juan 27-4 #37M

Client Sample ID: HA03@0-0.5'

Date Collected: 08/21/25 12:07

Date Received: 08/23/25 06:10

Lab Sample ID: 885-31729-7

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			33478	DR	EET ALB	08/28/25 13:19
Total/NA	Analysis	8015M/D		1	33561	EM	EET ALB	08/29/25 17:53
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 14:40

Client Sample ID: HA03@2'

Date Collected: 08/21/25 12:43

Date Received: 08/23/25 06:10

Lab Sample ID: 885-31729-8

**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8015M/D		1	33488	JP	EET ALB	08/29/25 02:27
Total/NA	Prep	5030C			33094	KLS	EET ALB	08/25/25 09:48
Total/NA	Analysis	8021B		1	33489	JP	EET ALB	08/29/25 02:27
Total/NA	Prep	SHAKE			33478	DR	EET ALB	08/28/25 13:19
Total/NA	Analysis	8015M/D		1	33561	EM	EET ALB	08/29/25 18:05
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
_Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 14:50

Client Sample ID: HA03@6'

Date Collected: 08/21/25 13:10

Date Received: 08/23/25 06:10

Lab Sample ID: 885-31729-9

**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/27/25 21:36
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/27/25 21:36
Total/NA	Prep	SHAKE			33717	BZR	EET ALB	09/02/25 12:09
Total/NA	Analysis	8015M/D		1	33778	DR	EET ALB	09/03/25 12:42
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 15:00

Client Sample ID: HA04@0-0.5'

Date Collected: 08/21/25 13:02

Date Received: 08/23/25 06:10

Lab Sample ID: 885-31729-10

**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/27/25 22:41
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/27/25 22:41
Total/NA	Prep	SHAKE			33717	BZR	EET ALB	09/02/25 12:09
Total/NA	Analysis	8015M/D		1	33778	DR	EET ALB	09/03/25 12:53

Job ID: 885-31729-1

Project/Site: San Juan 27-4 #37M

Client: Hilcorp Energy

Client Sample ID: HA04@0-0.5'

Date Collected: 08/21/25 13:02 Date Received: 08/23/25 06:10 Lab Sample ID: 885-31729-10

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 15:10

Client Sample ID: HA04@4'

Date Collected: 08/21/25 14:08 Date Received: 08/23/25 06:10

Lab Sample ID: 885-31729-11

**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/27/25 23:46
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/27/25 23:46
Total/NA	Prep	SHAKE			33717	BZR	EET ALB	09/02/25 12:09
Total/NA	Analysis	8015M/D		1	33778	DR	EET ALB	09/03/25 13:05
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 15:39

Client Sample ID: HA04@5'

Date Collected: 08/21/25 14:15

Date Received: 08/23/25 06:10

Lab Sample ID: 885-31729-12

**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/28/25 00:08
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/28/25 00:08
Total/NA	Prep	SHAKE			33717	BZR	EET ALB	09/02/25 12:09
Total/NA	Analysis	8015M/D		1	33778	DR	EET ALB	09/03/25 13:16
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 15:49

Client Sample ID: HA05@0-0.5'

Date Collected: 08/21/25 13:45

Date Received: 08/23/25 06:10

Lab Samp	ie iD:	885-31	729-13
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**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/28/25 00:30
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/28/25 00:30
Total/NA	Prep	SHAKE			33717	BZR	EET ALB	09/02/25 12:09
Total/NA	Analysis	8015M/D		1	33778	DR	EET ALB	09/03/25 13:28
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 15:59

Client: Hilcorp Energy

Client Sample ID: HA05@3'

Date Collected: 08/21/25 13:59 Date Received: 08/23/25 06:10 Lab Sample ID: 885-31729-14

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/28/25 00:52
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/28/25 00:52
Total/NA	Prep	SHAKE			33744	BZR	EET ALB	09/02/25 15:01
Total/NA	Analysis	8015M/D		1	33782	BZR	EET ALB	09/03/25 15:10
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 16:09

Client Sample ID: HA06@0-0.5'

Date Collected: 08/21/25 14:08

Lab Sample ID: 885-31729-15

**Matrix: Solid** 

Date Received: 08/23/25 06:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/28/25 01:14
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/28/25 01:14
Total/NA	Prep	SHAKE			33744	BZR	EET ALB	09/02/25 15:01
Total/NA	Analysis	8015M/D		1	33782	BZR	EET ALB	09/03/25 15:34
Total/NA	Prep	300_Prep			33185	RC	EET ALB	08/26/25 07:45
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 16:19

Client Sample ID: HA06@2'

Date Collected: 08/21/25 14:19

Date Received: 08/23/25 06:10

Lab Sample ID: 885-31729-16

**Matrix: Solid** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8015M/D		1	33398	AT	EET ALB	08/28/25 01:35
Total/NA	Prep	5030C			33151	KLS	EET ALB	08/25/25 13:37
Total/NA	Analysis	8021B		1	33399	AT	EET ALB	08/28/25 01:35
Total/NA	Prep	SHAKE			33744	BZR	EET ALB	09/02/25 15:01
Total/NA	Analysis	8015M/D		1	33782	BZR	EET ALB	09/03/25 15:58
Total/NA	Prep	300_Prep			33214	RC	EET ALB	08/26/25 09:57
Total/NA	Analysis	300.0		10	33192	RC	EET ALB	08/26/25 16:29

#### Laboratory References:

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

# **Accreditation/Certification Summary**

Client: Hilcorp Energy Job ID: 885-31729-1

Project/Site: San Juan 27-4 #37M

### **Laboratory: Eurofins Albuquerque**

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

Authority	Progr	am	Identification Number	<b>Expiration Date</b>	
New Mexico	State		NM9425, NM0901	02-27-26	
0 ,	are included in this report, be	ut the laboratory is not certif	ied by the governing authority. This lis	st may include analytes	
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 [C	10-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		
Dregon	NELA	<b>ι</b> Ρ	NM100001	02-26-26	

Eurofins Albuquerque

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Received by OCD: 10/9/2025 2	:21:59 PM	Page 58 qf 69
HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	B081 Pesticides/8082 PCB's	S: ofroelich@ensolom.com shyde@ensolom.com NMOCD Any sub-contracted data will be clearly notated on the analytical report.
490 Tel	OMN \ ORO \ ORO GRO \ DRO \ MRO	70
	(BTEX) MTBE / TMB's (8021)	Rem is possiting
Turn-Around Time:  Scol Standard   Rush Project Name:  San Juan 27-4 #37M Project #:	Project Manager:  Zach Myers Zach Myers Zach Myers  Zmyers @enschum.com Zmyers @enschum.com  # of Cooler: Vyes INO AND  Cooler Templincluding cry: 4.4 -0.2 - 4.2 (°C)  Container Preservative HEAL No.  Type and # Type  U OZ, one on ce  U OZ, one on ce	Received by Via Date Time Remark Repeaved by Via Counce Date Time  (b: to contracted to other accredited laboratories This serves as notice of this possibility
Chain-of-Custody Record Client: H: Icorp Energy Company alth: Kate Kaufman Mailing Address:	Cardination   Cardination	Date Time Relinquished by Received by Via Caure:    B 22 25   333

## **Login Sample Receipt Checklist**

Client: Hilcorp Energy Job Number: 885-31729-1

Login Number: 31729 List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Creator. Casarrubias, rracy		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Released to Imaging: 10/10/2025 1:54:40 PM



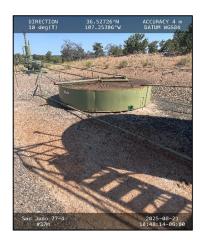
APPENDIX D

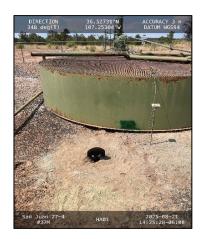
Photographic Log

# **E** ENSOLUM

#### **Photographic Log**

Hilcorp Energy Company San Juan 27-4 Unit 37M Rio Arriba County, New Mexico





Photograph: 1 Date: 8/21/2025

Description: View of release point inside berm

Photograph: 2 Date: 8/21/2025

Description: Sample location HA01 directly adjacent to

release point View: Northwest

View: North





Photograph: 3 Date: 9/16/2025 Description: Depth to water boring with total depth of

55'

View: Southeast

Photograph: 4 Date: 9/19/2025

Description: Gauging depth to water boring at 54' with

no water detected

View: North

Phone: (505) 629-6116
Online Phone Directory
<a href="https://www.emnrd.nm.gov/ocd/contact-us">https://www.emnrd.nm.gov/ocd/contact-us</a>

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

QUESTIONS

Action 513875

#### **QUESTIONS**

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	513875
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Prerequisites			
Incident ID (n#)	nAPP2522527512		
Incident Name	NAPP2522527512 SAN JUAN 27-4 UNIT #37M @ 30-039-25933		
Incident Type	Produced Water Release		
Incident Status	Remediation Closure Report Received		
Incident Well	[30-039-25933] SAN JUAN 27 4 UNIT #037M		

Location of Release Source		
Please answer all the questions in this group.		
Site Name	San Juan 27-4 Unit #37M	
Date Release Discovered	08/12/2025	
Surface Owner	Federal	

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

Nature and Volume of Release	
faterial(s) released, please answer all that apply below. Any calculations or specific justifications for	or the volumes provided should be attached to the follow-up C-141 submission.
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion   Tank (Any)   Produced Water   Released: 78 BBL   Recovered: 0 BBL   Lost: 78 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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

QUESTIONS, Page 2

Action 513875

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QUESTI	ONS (continued)
Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171 Action Number: 513875 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	
Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	e. gas only) are to be submitted on the C-129 form.
Initial Response  The responsible party must undertake the following actions immediately unless they could create a s	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	ation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for releating the OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are requireses which may endanger public health or the environment. The acceptance of a C-141 report I adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 10/09/2025

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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, Page 3

Action 513875

**QUESTIONS** (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	513875
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Site Characterization		
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)	
What method was used to determine the depth to ground water	Direct Measurement	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:		
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 500 and 1000 (ft.)	
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)	
Any other fresh water well or spring	Between ½ and 1 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
A wetland	Between 500 and 1000 (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 5 (mi.)	
Did the release impact areas not on an exploration, development, production, or storage site	No	

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission	Yes	
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination a	ssociated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride (EPA 300.0 or SM4500 Cl B)	740	
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	660	
GRO+DRO (EPA SW-846 Method 8015M)	490	
BTEX (EPA SW-846 Method 8021B or 8260B)	3.7	
Benzene (EPA SW-846 Method 8021B or 8260B)	0	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence	08/21/2025	
On what date will (or did) the final sampling or liner inspection occur	08/21/2025	
On what date will (or was) the remediation complete(d)	08/21/2025	
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	
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 4

Action 513875

QUESTIONS (continued	QL	JESTIC	ONS (	continu	ıed
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Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	513875
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Remediation Plan (continued)		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:		
(Select all answers below that apply.)		
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Not answered.	
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.	
(In Situ) Soil Vapor Extraction	Not answered.	
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.	
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.	
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.	
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.	
OTHER (Non-listed remedial process)	Yes	
Other Non-listed Remedial Process. Please specify	Remediation not required	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Name: Stuart Hyde Title: Senior Geologist I hereby agree and sign off to the above statement Email: shyde@ensolum.com Date: 10/09/2025

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 5

Action 513875

**QUESTIONS** (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	513875
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

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

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

QUESTIONS, Page 6

Action 513875

**QUESTIONS** (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	513875
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	496624
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/21/2025
What was the (estimated) number of samples that were to be gathered	10
What was the sampling surface area in square feet	2000

Remediation Closure Request		
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.		
Requesting a remediation closure approval with this submission	Yes	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes	
What was the total surface area (in square feet) remediated	0	
What was the total volume (cubic yards) remediated	0	
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes	
What was the total surface area (in square feet) reclaimed	0	
What was the total volume (in cubic yards) reclaimed	0	
Summarize any additional remediation activities not included by answers (above)	N/A	

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement

I hereby agree and sign off to the above statement

Title: Senior Geologist
Email: shyde@ensolum.com
Date: 10/09/2025

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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, Page 7

Action 513875

**QUESTIONS** (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	513875
	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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# State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Action 513875

#### **CONDITIONS**

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	513875
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### CONDITIONS

Created B	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2522527512, thank you. This Remediation Closure Report is approved. Please be advised that step-out sampling locations on pad that define the edge of the release will create the outline of the area that will need to be sampled for reclamation. The larger the step-out, the larger the eventual reclamation area that will need be to be sampled once the pad is abandoned and returned back to "land no longer in use." The reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division.	10/10/2025