



August 20, 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: Remediation Work Plan**

Canyon Largo Unit Com #472  
Hilcorp Energy Company  
NMOCD Incident No: nAPP2514946582

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Work Plan* (Work Plan) for a release at the Canyon Largo Unit Com #472 natural gas production well (Site). The Site is located on land managed by the United States Bureau of Land Management (BLM) in Unit A, Section 26, Township 29 North, Range 6 West, Rio Arriba County, New Mexico (Figure 1). This Work Plan includes a summary of delineation activities performed at the Site and the proposed remediation of impacted soil originating from the release.

## **SITE BACKGROUND**

On May 27, 2025, Hilcorp personnel discovered a release of 42 barrels (bbls) of condensate at the Site. Specifically, the field operator turned the well on after an extended pressure buildup over the prior weekend. The following week, the operator discovered the well had unloaded an abnormal volume of fluid that had overtopped the condensate tank, resulting in the release. The release also migrated as sheet flow into the below-grade tank (BGT) cribbing but was ultimately contained within the secondary containment berm. A total of 20 bbls of condensate were recovered from within the BGT cribbing resulting in 22 bbls of condensate unrecovered.

Hilcorp submitted the *Notification of Release* to the New Mexico Oil Conservation Division (NMOCD) on May 29, 2025. The NMOCD has assigned the Site Incident Number nAPP2514946582.

## **SITE CHARACTERIZATION**

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). This information is further discussed below.

## **GEOLOGY AND HYDROGEOLOGY**

The Site is located on Tertiary (Eocene) age San Jose Formation and is underlain by the Nacimiento Geologic Formation. In the report titled "*Hydrogeology and Water Resources of San Juan Basin, New Mexico*" (Stone, et. al., 1983), the San Jose Formation is composed of interbedded sandstones and mudstones and varies in thickness from less than 200 feet to about 2,700 feet. The hydrologic properties of the San Jose Formation are largely untested. Where sufficient yield is present, the primary use of water from this Formation is for domestic and/or livestock supply.

## 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, one borehole was advanced on the Site well pad on July 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 at least 72 hours. A water-level indicator was used to assess for the presence or absence of groundwater on July 21, 2025. Groundwater was not encountered in the borehole at a depth of approximately 51.5 feet bgs (sluff had filled the boring from 55 feet to 51.5 feet bgs), indicating the depth to groundwater beneath the Site is greater than 51.5 feet bgs. The boring was backfilled following the depth to water measurement. Depth to water information is provided as Appendix A.

The nearest significant watercourse to the Site is a dry wash located approximately 950 feet west-northwest of the well pad. The nearest fresh water well is located greater than 1,000 feet from the Site. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and within 300 feet from any wetland. No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile 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 BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. A Site receptor map is shown on Figure 1.

## 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/kg
- Chloride: 10,000 mg/kg

## DELINEATION AND SOIL SAMPLING ACTIVITIES

Upon discovery of the release, Hilcorp retained Ensolum to conduct hand auger delineation activities on June 11, 2025. A notification of sampling activities was provided to the NMOCD prior to the delineation work and is attached as Appendix B. In total, six boreholes (BH01 through BH06) were advanced at the Site to depths up to 4 feet bgs (Figure 2). Boreholes BH01 and BH02 were advanced within the release footprint in order to assess the soil with the greatest potential impacts resulting from the release and provide vertical delineation. Boreholes BH03 through BH06 were advanced to field screen and delineate the lateral and vertical extents of potential impacts outside of the release footprint. All hand auger boreholes met refusal at a depth of 4 feet bgs on formation sandstone bedrock.

During delineation activities, Ensolum personnel logged soil lithology and field screened for the presence of volatile organic compounds (VOCs) using a calibrated photoionization detector (PID). Soil descriptions and field screening results were noted in the field book. Photographs taken during delineation activities are also provided in Appendix C. PID field screening results are also included in Table 1.

Two soil samples were collected from each pothole in order to delineate the vertical impacts at the Site: one at the depth interval indicating the greatest observed contamination (including VOC concentration based on PID field screening results) and a second soil sample collected at the terminus of each borehole. Soil samples were collected directly into laboratory-provided jars and immediately placed on ice. Samples were submitted to Eurofins Environment Testing (Eurofins) for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH following Method 8015M/D, and chloride following EPA Method 300.0.

Based on the laboratory analytical results, BTEX and/or TPH concentrations exceeding the NMOCD Closure Criteria were encountered in boreholes BH01 and BH02 to the terminus of the borings (4 feet bgs), which are located within the release footprint. BTEX, TPH, and/or chloride were either not detected above laboratory reporting limits or were not detected above the applicable Closure Criteria in any other analyzed samples.

Based on the analytical results collected during the June 11, 2025 sampling event and shallow refusal on bedrock, additional sampling was necessary to vertically delineate impacts within the release footprint. As such, drilling was conducted on July 16, 2025 using hollow-stem auger drilling and sampling equipment. One borehole, BH02, was advanced near hand auger borehole BH01 to a depth of 15 feet bgs. Soil samples were collected from the drill rig at 5-foot intervals and submitted to Eurofins for analysis of BTEX, TPH, and chloride using the same methods described above. Based on the analytical results, BTEX and TPH were detected above the NMOCD Closure Criteria from sample "BH02 4-6" collected at a depth interval of 4 feet to 6 feet bgs. Results from all other analyzed samples indicated that concentrations of BTEX, TPH, and chloride were compliant with the applicable Closure Criteria.

A summary of analytical results is summarized in Table 1 and Figure 2, with complete laboratory reports attached in Appendix D.

## REMEDIATION WORK PLAN

Based on the soil sampling results described above, it is estimated impacted soil is present at the Site between the ground surface to a maximum depth of approximately 7 feet bgs. Analytical results also indicate impacted soil is likely limited to areas within the secondary containment berm with an approximate areal extent of 1,800 square feet. Based on these estimates, approximately 400 cubic yards to 500 cubic yards of impacted soil are present at the Site.

Because of the areal extent of impacts, volume of impacted soil, and remote location of the Site, soil shredding has been chosen as the remediation technique to address impacted soil at the Site. Soil shredding is an ex-situ and on-Site treatment of impacted soil through which impacted material is chemically treated using a chemical oxidant (hydrogen peroxide) applied to the soil. Impacted material is excavated from the ground using standard construction techniques and placed onto a soil screening unit using a special shredding bucket. The impacted soil is conveyed by the screening unit and chemical treatment is applied simultaneously. The treated soil will be placed in 100 cubic yard stockpiles and allowed to process for 24 to 48 hours in order for the oxidant to degrade the petroleum hydrocarbon contaminants in the soil. The stockpiles will be stored on-Site, and a berm will be constructed around the stockpile area in order to prevent run-off should a significant precipitation event occur.

Once treated, one 5-point composite sample will be collected for analysis from each 100 cubic yard stockpile using a hand auger and/or the excavator bucket. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a resealable plastic bag and homogenizing the samples by thoroughly mixing. Samples will be submitted to the analytical laboratory using the handling procedures described above and will be analyzed for TPH and BTEX constituents. Assuming soil is compliant with the NMOCD Table I Closure Criteria, the soil will be ultimately used to backfill the open excavation. Any stockpiles exceeding the applicable Closure Criteria will be allowed to process for a longer period of time and/or be retreated until Closure Criteria are met.

As soil is removed from the excavation, the excavation sidewalls and floors will be field screened using a PID. Once field screening indicates impacted soil has been removed, 5-point composite samples will be collected from the sidewalls and floor of the excavation at a frequency of one sample per 200 square feet. The 5-point composite samples will be collected in the same manner described above. Samples will also be collected and submitted to the analytical laboratory using the techniques described above and will again be analyzed for TPH and BTEX constituents.

## SCHEDULE

Within 90 days of NMOCD and BLM approval of this *Remediation Work Plan*, pending contractor availability, Hilcorp will complete the remediation work as described above. Hilcorp will notify the NMOCD and BLM of any delays in this schedule.

## VARIANCE REQUEST

Based on previous delineation analytical results, chloride was not detected in any analyzed sample at concentrations exceeding the NMOCD Table I Closure Criteria (10,000 mg/kg) or reclamation requirement (600 mg/kg). As such and in accordance with 19.15.29.14 NMAC, we are requesting a variance in order to collect confirmation soil samples from the remedial excavation for analysis of only TPH and BTEX constituents. Based on the existing Site data and no significant concentrations of chloride being detected resulting from the release, this variance will provide equal protection of fresh water, public health, and the environment.

## 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.

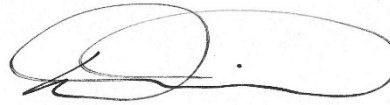


We appreciate the opportunity to provide this work plan to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,  
**Ensolum, LLC**



Stuart Hyde, PG (licensed in TX, WA & WY)  
Senior Managing Geologist  
(970) 903-1607  
shyde@ensolum.com



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

**Attachments:**

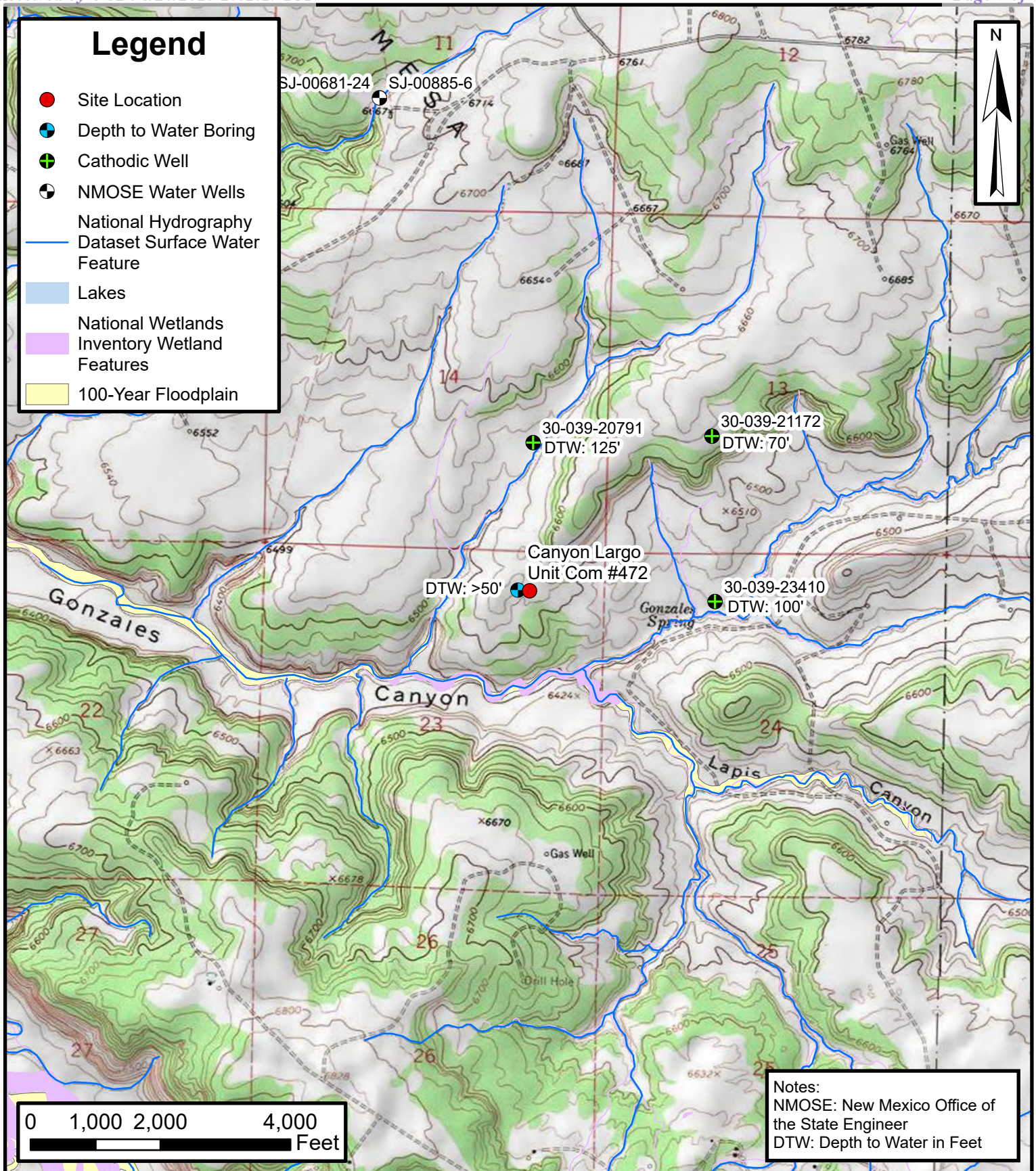
- Figure 1: Site Location Map
- Figure 2: Delineation Soil Samples
  
- Table 1: Soil Sample Analytical Results
  
- Appendix A: Depth to Water Determination
- Appendix B: Agency Correspondence
- Appendix C: Photographic Log
- Appendix D: Laboratory Analytical Reports



FIGURES

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## Site Location Map

Canyon Largo Unit Com #472  
 Hilcorp Energy Company

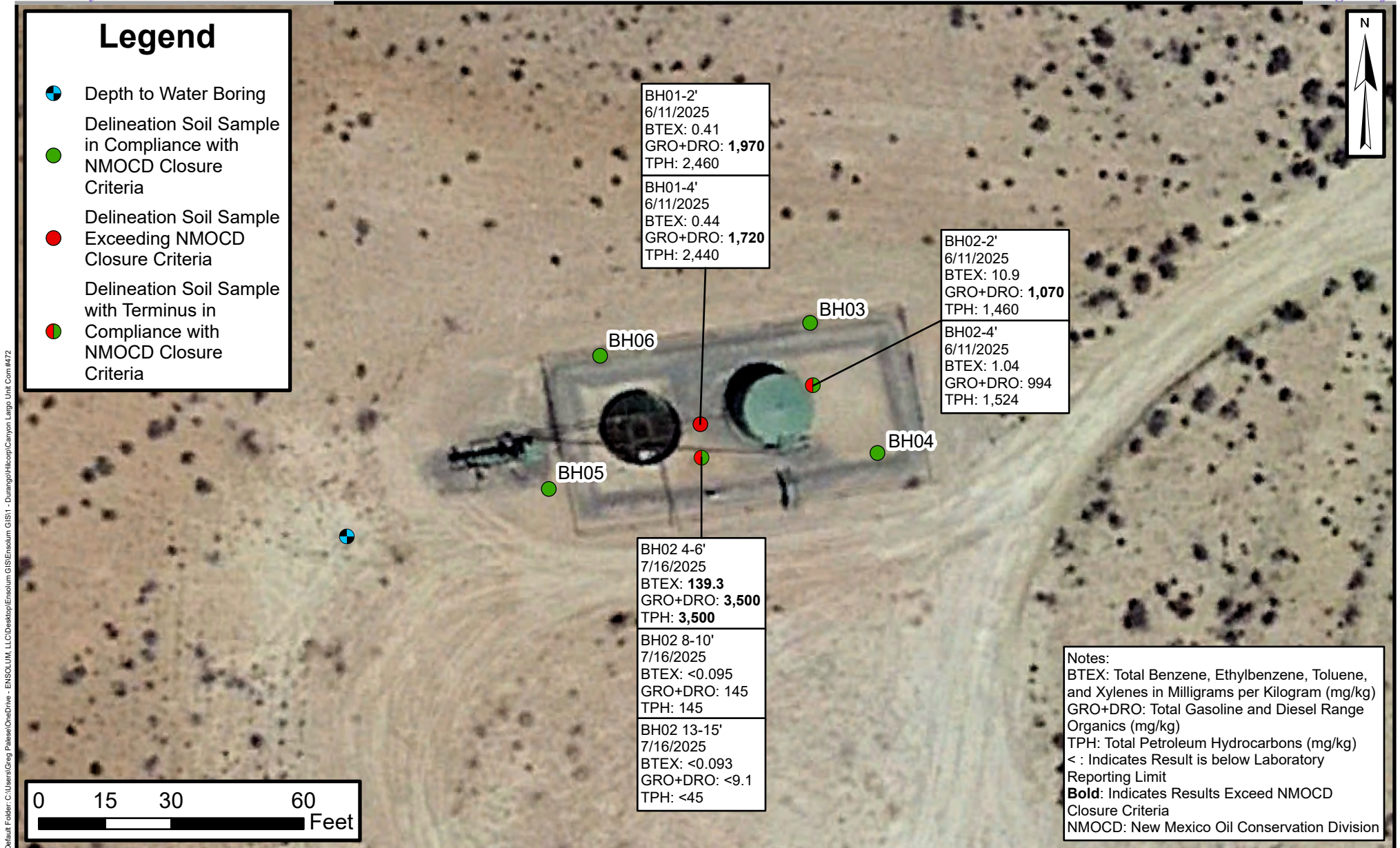
36.390957, -107.432089  
 Rio Arriba County, New Mexico

FIGURE

1

**ENSOLUM**  
 Environmental, Engineering and  
 Hydrogeologic Consultants





## Delineation Soil Samples

Canyon Largo Unit Com #472  
 Hilcorp Energy Company  
 36.390957, -107.432089  
 Rio Arriba County, New Mexico

**FIGURE  
2**



TABLES





**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Canyon Largo Unit Com #472  
 Hilcorp Energy Company  
 Rio Arriba County, New Mexico

Sample Identification	Date	Depth (feet bgs)	PID (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Closure Criteria for Soils Impacted by a Release</b>			<b>NE</b>	<b>10</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
BH01-2'	6/11/2025	2	15,000	<0.025	<0.050	0.15	0.26	0.41	70	1,900	490	<b>1,970</b>	2,460	<60
BH01-4'	6/11/2025	4	5,280	<0.024	<0.049	0.27	0.17	<b>0.44</b>	120	1,600	720	<b>1,720</b>	2,440	<60
BH02-2'	6/11/2025	2	4,111	<0.12	1.1	1.1	8.7	10.9	330	740	390	<b>1,070</b>	1,460	<60
BH02-4'	6/11/2025	4	3,299	<0.025	<0.049	0.19	0.85	1.04	84	910	530	994	1,524	<60
BH02 4-6	7/16/2025	4 - 6	388.0	<0.23	22	7.3	110	<b>139.3</b>	1,400	2,100	<490	<b>3,500</b>	<b>3,500</b>	110
BH02 8-10	7/16/2025	8 - 10	86.8	<0.024	<0.047	<0.047	<0.095	<0.095	4.8	140	<46	145	145	<60
BH02 13-15	7/16/2025	13 - 15	—	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	<9.1	<45	<9.1	<45	<60
BH03-N2'	6/11/2025	2	3.3	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.7	<49	<9.7	<49	<60
BH03-N4'	6/11/2025	4	1,153	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	12	<48	12	12	<59
BH04-E2'	6/11/2025	2	97.6	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.5	<47	<9.5	<47	<60
BH04-E4'	6/11/2025	4	10.2	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<10	<50	<10	<50	<60
BH05-S2'	6/11/2025	2	111.8	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.8	<49	<9.8	<49	<60
BH05-S4'	6/11/2025	4	43.2	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.5	<48	<9.5	<48	<60
BH06-W2'	6/11/2025	2	20.8	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.3	<47	<9.3	<47	<60
BH06-W4'	6/11/2025	4	36.9	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.6	<48	<9.6	<48	<60

**Notes:**

bgs: Below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

mg/kg: Milligrams per kilogram

NE: Not Established

NMOCD: New Mexico Oil Conservation Division

PID: Photoionization detector

ppm: Parts per million

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

': Feet

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


Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table I Closure Criteria for Soils Impacted by a Release





## APPENDIX A

### Depth to Water Determination

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					Client: <u>HEC</u>		BORING LOG NUMBER	
					Project Name: <u>CLU 477</u>		<u>BH01 DTW</u>	
Date Sampled: <u>7-16-25</u> Drilled By: <u>Envirodrill</u> Driller: <u>Radney</u> Logged By: <u>EC</u>					Project Location: <u>NM</u>		Project No.:	
					Project Manager: <u>S. Hyde</u>			
Ground Surface Elevation: Top of Casing Elevation: North Coordinate: West Coordinate:					Borehole Diameter: <u>8"</u>		Casing Diameter: <u>NA</u>	
					Well Materials: <u>NA</u>		Surface Completion: <u>NA</u>	
					Boring Method: <u>NA</u>			
DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PTD READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION	
0		<u>NM</u>	<u>NM</u>	<u>NM</u>	<u>SP</u>	<u>lt red brown fn sand moise</u>		
1								
2								
3								
4								
5								
6					<u>SP</u>	<u>lt gray weathered sandstone</u>		
7						<u>dry</u>		
8								
9								
10								
11					<u>SSR</u>	<u>lt gray sand stone</u>		
12						<u>to 55"</u>		
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

					Client: HEC		BORING LOG NUMBER	
					Project Name: CLU 472		B401 DTW	
Date Sampled: 7-16-25 Drilled By: EDE Driller: Ryan Logged By: E. Carroll					Project Location: NM		Project No.:	
					Project Manager: S. Hyde			
Ground Surface Elevation: Top of Casing Elevation: North Coordinate: West Coordinate:					Borehole Diameter: Casing Diameter: Well Materials: Surface Completion: Boring Method:			
DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION		BORING/WELL COMPLETION
25		NM	NM	NM	SSS	Drv 16. gray brown Sandstone		
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48						TD = 55'		
49								
50								

						Client: <u>HEC</u> Project Name: <u>CLU 472</u> Project Location: <u>NM</u> Project Manager: <u>S. Hyde</u>		BORING LOG NUMBER <u>B102</u> Project No.:	
Date Sampled: <u>7-16-25</u> Drilled By: <u>Envirodrill</u> Driller: Logged By: <u>EC</u>						Ground Surface Elevation: Top of Casing Elevation: North Coordinate: West Coordinate:		Borehole Diameter: <u>8"</u> Casing Diameter: <u>NA</u> Well Materials: <u>NA</u> Surface Completion: <u>NA</u> Boring Method: <u>HSA</u>	
DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION		
0									
1									
2	<u>4-6</u>	<u>NM</u>	<u>80%</u>	<u>389</u>	<u>SP</u>	<u>lt red brown fn sand hard moist</u>			
3									
4									
5									
6									
7									
8									
9	<u>9-11</u>	<u>NM</u>	<u>40%</u>	<u>86.8</u>	<u>SP</u>	<u>lt gray brown weathered sand stone hard dry</u>			
10									
11									
12									
13									
14									
15	<u>15</u>	<u>NM</u>	<u>0%</u>	<u>NM</u>	<u>SP</u>	<u>Hard sand stone no recovery sample from cuttings</u>			
16					<u>SST</u>				
17									
18									
19									
20									
21									
22									
23									
24									
25									



## DAILY DRILLING REPORT

JOB COMPLETED ☒ YES ☐ NO

NO. JOBS THIS DAY

Client ENSOLUMDate 7/16/25 Start: 7:00 End: 4:30Project CANYON CARGO # 472Job No. 25383

Location \_\_\_\_\_ City \_\_\_\_\_

Project Type: ☐ Contract ☐ WT ☐ Enviro ☐ Geotech ☐ Labor Only ☐ Other \_\_\_\_\_

CLIENT HOLE NO.	DRILL DEPTH FROM -	DRILL DEPTH TO -	PERCOLATION	BIT SIZE	BIT TYPE	NO. OF SAMPLES				FORMATION DRILLED AND DEPTH
						RING	SPLIT	CA	BN	
1	0	55								<input type="checkbox"/> SAND <input type="checkbox"/> SILT <input type="checkbox"/> CLAY <input type="checkbox"/> CALICHE <input type="checkbox"/> GRAVEL <input type="checkbox"/> COBBLES <input type="checkbox"/> MEDIUM SOFT <input type="checkbox"/> MEDIUM HARD <input type="checkbox"/> EXTREMELY HARD <input type="checkbox"/> REFUSAL GROUNDWATER TABLE ENCOUNTERED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO GROUNDWATER DEPTH _____
2	0	15								
FOOTAGE DRILLED		DRILL RATE PER HOUR		TOTAL SAMPLES						

FUNCTION	SERVICE PERFORMED	QTY.	RATE	CHARGE	RENTALS / SUPPLIES	QTY.	RATE	CHARGE
262	MAKE READY / DECONTAMINATION - BEFORE / AFTER JOB				SUPPORT VEHICLE / TRAILER	1		
212	MOBILIZE / DEMOBILIZE EQUIPMENT	2.0			GENERATOR			
212	DRILLING INCLUDES:				TRAILER(S)			
	SAFETY MEETING	0.5			CORING MACHINE / SAW CUT			
	DRILL OPERATIONS	2.5			BULLET TEETH			
	REAMING HOLE(S)				PORTLAND CEMENT			
	MOVING BETWEEN SITE(S)				PRE-MIX			
	GROUTING, HOURS _____ FEET _____				ASPHALT			
	SITE CLEANUP				VISQUEEN			
212	MISCELLANEOUS LABOR INCLUDES:				DRUMS			
	DECONTAMINATION SERVICES				BRASS SLEEVES, SIZE:			
	MOVING DRUMS				PVC CASING _____ IN. X 5 FT.			
	CREW TRAVEL WITHOUT RIG	2.0			PVC CASING _____ IN. X 10 FT.	5		
212	LABORER				SCREEN .0 _____ 0 SLOT _____ IN. X 5 FT.	1		
212	WELL INSTALLATION				SCREEN .0 _____ 0 SLOT _____ IN. X 10 FT.			
212	WELL DEVELOPMENT				TOP LOCKING CAP	1		
212	WELL ABANDONMENT				BOTTOM CAP	1		
250	STANDBY & DELAYS (EXPLAIN)	1.0			SAND-SACKS, GRADE NO.:			
212	CREW OVERTIME				WELL VAULT, SIZE: _____ IN.			
-	PER DIEM	2			BENTONITE PELLETS, PAILS:			
212	MEAL / MISC. BREAKS (DOT REQUIRED)	0.5			BENTONITE POWDER, SACKS:	30		
278	CREW BREAK				JACK HAMMER			
276	PERMITS / REPORTS				AIR COMPRESSOR, SIZE:			
277	SUPERVISORY TIME							

REMARKS: WAITING ON SITE FOR CLIENT

MAN-HOUR ALLOCATION HOURS

OPERATOR Ryan 9.5ASSISTANT Tim 4.5

LABORER \_\_\_\_\_

- SIGNATURE APPROVING WORK CONTENT -

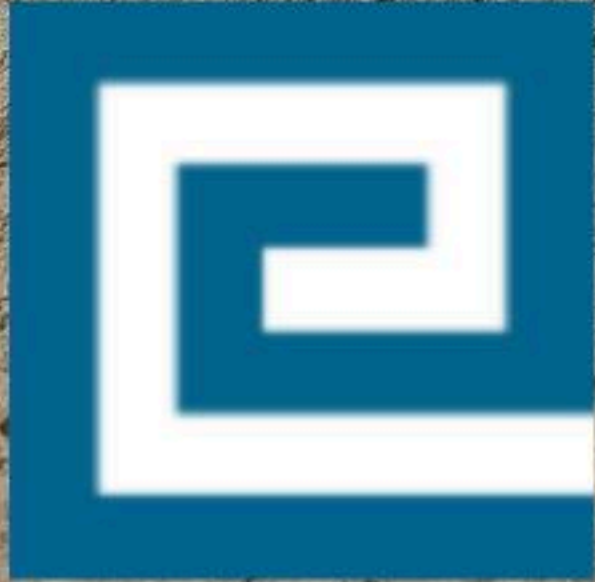
CLIENT SIGNATURE: Eric [Signature]

P.O./W.O./JOB NO.: \_\_\_\_\_

White - Invoicing; Yellow - Client

Enviro-Drill





Ensolum  
Hilcorp - CLU 472  
07.21.2025 14:36  
36.39088, -107.43239







## APPENDIX B

### Agency Correspondence

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**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Stuart Hyde](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 471248  
**Date:** Thursday, June 5, 2025 12:32:57 PM

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

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2514946582.

The sampling event is expected to take place:

**When:** 06/11/2025 @ 10:00

**Where:** A-26-29N-06W 790 FNL 1285 FEL (36.690598,-107.431711)

**Additional Information:** Project Manager Stuart Hyde 970-903-1607

**Additional Instructions:** Hilcorp Canyon Largo Unit #472, coordinates 36.390598, -107.431711

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

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

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

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

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Stuart Hyde](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 483892  
**Date:** Thursday, July 10, 2025 2:14:57 PM

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

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2514946582.

The sampling event is expected to take place:

**When:** 07/16/2025 @ 09:00

**Where:** A-26-29N-06W 790 FNL 1285 FEL (36.690598,-107.431711)

**Additional Information:** Project Manager Stuart Hyde 970-903-1607

**Additional Instructions:** Hilcorp Canyon Largo Unit #472, coordinates 36.390598, -107.431711

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

### Photographic Log

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### Photographic Log

Hilcorp Energy Company  
Canyon Largo Unit Com #472  
San Juan County, New Mexico



Photograph: 1 Date: 6/11/2025  
Description: Attempted boring inside cribbing  
View: Northwest



Photograph: 2 Date: 6/11/2025  
Description: Release extent  
View: North



Photograph: 3 Date: 6/11/2025  
Description: BH01  
View: Southeast



Photograph: 4 Date: 6/11/2025  
Description: BH02  
View: West





### Photographic Log

Hilcorp Energy Company  
Canyon Largo Unit Com #472  
San Juan County, New Mexico



Photograph: 5  
Description: BH03  
View: Southwest

Date: 6/11/2025



Photograph: 6  
Description: BH04  
View: West

Date: 6/11/2025



Photograph: 7  
Description: BH05  
View: North

Date: 6/11/2025



Photograph: 8  
Description: BH06  
View: Southeast

Date: 6/11/2025

**Photographic Log**

Hilcorp Energy Company  
Canyon Largo Unit Com #472  
San Juan County, New Mexico



Photograph: 9

Date: 7/21/2025

Description: Depth to water boring

View: Northwest



Photograph: 10

Date: 7/21/2025

Description: Groundwater greater than 51 feet

View: West



## APPENDIX D

### Laboratory Analytical Reports

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Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 6/23/2025 12:44:47 PM

## JOB DESCRIPTION

Canyon Largo Unit #472

## JOB NUMBER

885-26741-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
6/23/2025 12:44:47 PM

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

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Laboratory Job ID: 885-26741-1

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Definitions/Glossary

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

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

## Case Narrative

Client: Hilcorp Energy  
Project: Canyon Largo Unit #472

Job ID: 885-26741-1

**Job ID: 885-26741-1**

**Eurofins Albuquerque**

### Job Narrative 885-26741-1

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

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

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

#### Receipt

The samples were received on 6/13/2025 6:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.3°C.

#### Gasoline Range Organics

Method 8015D\_GRO: Surrogate recovery for the following samples were outside control limits: BH01-2' (885-26741-1), BH01-4' (885-26741-2), BH02-2' (885-26741-3) and BH02-4' (885-26741-4). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-28342 and analytical batch 885-28345 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015D\_DRO: Surrogate recovery for the following sample is outside the upper control limit: (CCV 885-28634/38). Due to this high bias, only associated samples with passing surrogate or non-detect for target analytes have been reported.

Method 8015D\_DRO: Surrogate recovery was outside acceptance limits for the following matrix spike (MS) sample: (885-26741-A-4-E MS). The parent sample's surrogate recovery and the matrix spike duplicate (MSD) surrogate recovery were within limits. The MS/MSD sample has been qualified and reported. Furthermore, the LCS surrogate was also within reporting limits.

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

#### HPLC/IC

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

Eurofins Albuquerque



## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH01-2'

Lab Sample ID: 885-26741-1

Date Collected: 06/11/25 14:00

Matrix: Solid

Date Received: 06/13/25 06:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	70		5.0	mg/Kg		06/13/25 06:40	06/18/25 21:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	166	S1+	15 - 150			06/13/25 06:40	06/18/25 21:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 06:40	06/18/25 21:06	1
Ethylbenzene	0.15		0.050	mg/Kg		06/13/25 06:40	06/18/25 21:06	1
Toluene	ND		0.050	mg/Kg		06/13/25 06:40	06/18/25 21:06	1
Xylenes, Total	0.26		0.099	mg/Kg		06/13/25 06:40	06/18/25 21:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			06/13/25 06:40	06/18/25 21:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1900		49	mg/Kg		06/19/25 09:13	06/20/25 15:21	5
Motor Oil Range Organics [C28-C40]	490		240	mg/Kg		06/19/25 09:13	06/20/25 15:21	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			06/19/25 09:13	06/20/25 15:21	5

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:13	06/13/25 17:11	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH01-4'

Lab Sample ID: 885-26741-2

Date Collected: 06/11/25 14:15

Matrix: Solid

Date Received: 06/13/25 06:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	120		4.9	mg/Kg		06/13/25 10:44	06/18/25 21:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	219	S1+	15 - 150			06/13/25 10:44	06/18/25 21:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		06/13/25 10:44	06/18/25 21:30	1
Ethylbenzene	0.27		0.049	mg/Kg		06/13/25 10:44	06/18/25 21:30	1
Toluene	ND		0.049	mg/Kg		06/13/25 10:44	06/18/25 21:30	1
Xylenes, Total	0.17		0.097	mg/Kg		06/13/25 10:44	06/18/25 21:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 150			06/13/25 10:44	06/18/25 21:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1600		19	mg/Kg		06/14/25 15:40	06/16/25 15:46	2
Motor Oil Range Organics [C28-C40]	720		97	mg/Kg		06/14/25 15:40	06/16/25 15:46	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	127		62 - 134			06/14/25 15:40	06/16/25 15:46	2

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:13	06/13/25 17:25	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH02-2'

Lab Sample ID: 885-26741-3

Date Collected: 06/11/25 14:30

Matrix: Solid

Date Received: 06/13/25 06:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	330		25	mg/Kg		06/13/25 10:44	06/18/25 21:54	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	183	S1+	15 - 150			06/13/25 10:44	06/18/25 21:54	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.12	mg/Kg		06/13/25 10:44	06/18/25 21:54	5
Ethylbenzene	1.1		0.25	mg/Kg		06/13/25 10:44	06/18/25 21:54	5
Toluene	1.1		0.25	mg/Kg		06/13/25 10:44	06/18/25 21:54	5
Xylenes, Total	8.7		0.49	mg/Kg		06/13/25 10:44	06/18/25 21:54	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 150			06/13/25 10:44	06/18/25 21:54	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	740		49	mg/Kg		06/19/25 09:13	06/19/25 14:04	5
Motor Oil Range Organics [C28-C40]	390		250	mg/Kg		06/19/25 09:13	06/19/25 14:04	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	120		62 - 134			06/19/25 09:13	06/19/25 14:04	5

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:13	06/13/25 18:33	20

Eurofins Albuquerque



## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH02-4'

Lab Sample ID: 885-26741-4

Date Collected: 06/11/25 14:40

Matrix: Solid

Date Received: 06/13/25 06:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	84		4.9	mg/Kg		06/13/25 10:44	06/18/25 22:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	199	S1+	15 - 150			06/13/25 10:44	06/18/25 22:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 10:44	06/18/25 22:17	1
Ethylbenzene	0.19		0.049	mg/Kg		06/13/25 10:44	06/18/25 22:17	1
Toluene	ND		0.049	mg/Kg		06/13/25 10:44	06/18/25 22:17	1
Xylenes, Total	0.85		0.098	mg/Kg		06/13/25 10:44	06/18/25 22:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 150			06/13/25 10:44	06/18/25 22:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	910		19	mg/Kg		06/19/25 09:13	06/19/25 13:20	2
Motor Oil Range Organics [C28-C40]	530		94	mg/Kg		06/19/25 09:13	06/19/25 13:20	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	132		62 - 134			06/19/25 09:13	06/19/25 13:20	2

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61	mg/Kg		06/13/25 09:13	06/13/25 18:47	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH03-N2'

Lab Sample ID: 885-26741-5

Date Collected: 06/11/25 15:00

Matrix: Solid

Date Received: 06/13/25 06:45

## 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		06/13/25 10:44	06/18/25 22:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		15 - 150			06/13/25 10:44	06/18/25 22:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 10:44	06/18/25 22:41	1
Ethylbenzene	ND		0.049	mg/Kg		06/13/25 10:44	06/18/25 22:41	1
Toluene	ND		0.049	mg/Kg		06/13/25 10:44	06/18/25 22:41	1
Xylenes, Total	ND		0.099	mg/Kg		06/13/25 10:44	06/18/25 22:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			06/13/25 10:44	06/18/25 22:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		06/14/25 15:40	06/16/25 11:23	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		06/14/25 15:40	06/16/25 11:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	116		62 - 134			06/14/25 15:40	06/16/25 11:23	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:13	06/13/25 19:00	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH03-N4'

Lab Sample ID: 885-26741-6

Date Collected: 06/11/25 15:10

Matrix: Solid

Date Received: 06/13/25 06:45

## 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		06/13/25 10:44	06/18/25 23:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			06/13/25 10:44	06/18/25 23:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		06/13/25 10:44	06/18/25 23:52	1
Ethylbenzene	ND		0.049	mg/Kg		06/13/25 10:44	06/18/25 23:52	1
Toluene	ND		0.049	mg/Kg		06/13/25 10:44	06/18/25 23:52	1
Xylenes, Total	ND		0.097	mg/Kg		06/13/25 10:44	06/18/25 23:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			06/13/25 10:44	06/18/25 23:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		9.6	mg/Kg		06/14/25 15:40	06/16/25 11:34	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		06/14/25 15:40	06/16/25 11:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	119		62 - 134			06/14/25 15:40	06/16/25 11:34	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		06/13/25 09:13	06/13/25 19:14	20

Eurofins Albuquerque



## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH04-E2'

Lab Sample ID: 885-26741-7

Date Collected: 06/11/25 15:20

Matrix: Solid

Date Received: 06/13/25 06:45

## 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		06/13/25 10:44	06/19/25 00:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			06/13/25 10:44	06/19/25 00:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 10:44	06/19/25 00:39	1
Ethylbenzene	ND		0.049	mg/Kg		06/13/25 10:44	06/19/25 00:39	1
Toluene	ND		0.049	mg/Kg		06/13/25 10:44	06/19/25 00:39	1
Xylenes, Total	ND		0.098	mg/Kg		06/13/25 10:44	06/19/25 00:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			06/13/25 10:44	06/19/25 00:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		06/14/25 15:40	06/16/25 11:45	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		06/14/25 15:40	06/16/25 11:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	114		62 - 134			06/14/25 15:40	06/16/25 11:45	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:13	06/13/25 19:28	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH04-E4'

Lab Sample ID: 885-26741-8

Date Collected: 06/11/25 15:25

Matrix: Solid

Date Received: 06/13/25 06:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		06/13/25 10:44	06/19/25 01:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			06/13/25 10:44	06/19/25 01:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 10:44	06/19/25 01:03	1
Ethylbenzene	ND		0.050	mg/Kg		06/13/25 10:44	06/19/25 01:03	1
Toluene	ND		0.050	mg/Kg		06/13/25 10:44	06/19/25 01:03	1
Xylenes, Total	ND		0.10	mg/Kg		06/13/25 10:44	06/19/25 01:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			06/13/25 10:44	06/19/25 01:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		06/14/25 15:40	06/16/25 11:56	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		06/14/25 15:40	06/16/25 11:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	119		62 - 134			06/14/25 15:40	06/16/25 11:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:14	06/13/25 19:41	20

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH05-S2'

Lab Sample ID: 885-26741-9

Date Collected: 06/11/25 16:00

Matrix: Solid

Date Received: 06/13/25 06:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		06/13/25 10:44	06/19/25 01:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			06/13/25 10:44	06/19/25 01:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 10:44	06/19/25 01:27	1
Ethylbenzene	ND		0.050	mg/Kg		06/13/25 10:44	06/19/25 01:27	1
Toluene	ND		0.050	mg/Kg		06/13/25 10:44	06/19/25 01:27	1
Xylenes, Total	ND		0.099	mg/Kg		06/13/25 10:44	06/19/25 01:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			06/13/25 10:44	06/19/25 01:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		06/14/25 15:05	06/15/25 22:53	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		06/14/25 15:05	06/15/25 22:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			06/14/25 15:05	06/15/25 22:53	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:14	06/13/25 19:55	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH05-S4'

Lab Sample ID: 885-26741-10

Date Collected: 06/11/25 16:05

Matrix: Solid

Date Received: 06/13/25 06:45

## 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		06/13/25 10:44	06/19/25 01:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			06/13/25 10:44	06/19/25 01:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 10:44	06/19/25 01:51	1
Ethylbenzene	ND		0.049	mg/Kg		06/13/25 10:44	06/19/25 01:51	1
Toluene	ND		0.049	mg/Kg		06/13/25 10:44	06/19/25 01:51	1
Xylenes, Total	ND		0.099	mg/Kg		06/13/25 10:44	06/19/25 01:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			06/13/25 10:44	06/19/25 01:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		06/14/25 15:05	06/15/25 23:04	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		06/14/25 15:05	06/15/25 23:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		62 - 134			06/14/25 15:05	06/15/25 23:04	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:14	06/13/25 20:08	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH06-W2'

Lab Sample ID: 885-26741-11

Date Collected: 06/11/25 16:25

Matrix: Solid

Date Received: 06/13/25 06:45

## 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		06/13/25 10:44	06/19/25 02:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 150			06/13/25 10:44	06/19/25 02:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 10:44	06/19/25 02:14	1
Ethylbenzene	ND		0.049	mg/Kg		06/13/25 10:44	06/19/25 02:14	1
Toluene	ND		0.049	mg/Kg		06/13/25 10:44	06/19/25 02:14	1
Xylenes, Total	ND		0.098	mg/Kg		06/13/25 10:44	06/19/25 02:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			06/13/25 10:44	06/19/25 02:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		06/14/25 15:05	06/15/25 23:16	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		06/14/25 15:05	06/15/25 23:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			06/14/25 15:05	06/15/25 23:16	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:14	06/13/25 20:49	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH06-W4'

Lab Sample ID: 885-26741-12

Date Collected: 06/11/25 16:45

Matrix: Solid

Date Received: 06/13/25 06:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		06/13/25 10:44	06/19/25 02:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			06/13/25 10:44	06/19/25 02:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		06/13/25 10:44	06/19/25 02:38	1
Ethylbenzene	ND		0.048	mg/Kg		06/13/25 10:44	06/19/25 02:38	1
Toluene	ND		0.048	mg/Kg		06/13/25 10:44	06/19/25 02:38	1
Xylenes, Total	ND		0.097	mg/Kg		06/13/25 10:44	06/19/25 02:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			06/13/25 10:44	06/19/25 02:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		06/14/25 15:05	06/15/25 23:27	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		06/14/25 15:05	06/15/25 23:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			06/14/25 15:05	06/15/25 23:27	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/13/25 09:14	06/13/25 21:03	20

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

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

Lab Sample ID: MB 885-28229/1-A

Matrix: Solid

Analysis Batch: 28607

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		06/13/25 06:39	06/18/25 18:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			06/13/25 06:39	06/18/25 18:20	1

Lab Sample ID: LCS 885-28229/2-A

Matrix: Solid

Analysis Batch: 28607

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics [C6 - C10]	25.0	23.9		mg/Kg		96	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	196		15 - 150					

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

Lab Sample ID: MB 885-28229/1-A

Matrix: Solid

Analysis Batch: 28618

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		06/13/25 06:39	06/18/25 18:20	1
Ethylbenzene	ND		0.050	mg/Kg		06/13/25 06:39	06/18/25 18:20	1
Toluene	ND		0.050	mg/Kg		06/13/25 06:39	06/18/25 18:20	1
Xylenes, Total	ND		0.10	mg/Kg		06/13/25 06:39	06/18/25 18:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			06/13/25 06:39	06/18/25 18:20	1

Lab Sample ID: LCS 885-28229/12-A

Matrix: Solid

Analysis Batch: 28618

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	1.00	1.02		mg/Kg		102	70 - 130	
Ethylbenzene	1.00	0.999		mg/Kg		100	70 - 130	
m&p-Xylene	2.00	2.09		mg/Kg		104	70 - 130	
o-Xylene	1.00	1.00		mg/Kg		100	70 - 130	
Toluene	1.00	0.998		mg/Kg		100	70 - 130	
Xylenes, Total	3.00	3.09		mg/Kg		103	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	97		15 - 150					

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

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

Lab Sample ID: 885-26741-5 MS

Matrix: Solid

Analysis Batch: 28618

Client Sample ID: BH03-N2'

Prep Type: Total/NA

Prep Batch: 28229

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.986	0.924		mg/Kg		94	70 - 130
Ethylbenzene	ND		0.986	0.913		mg/Kg		91	70 - 130
m&p-Xylene	ND		1.97	1.93		mg/Kg		98	70 - 130
o-Xylene	ND		0.986	0.916		mg/Kg		93	70 - 130
Toluene	ND		0.986	0.915		mg/Kg		93	70 - 130
Xylenes, Total	ND		2.96	2.85		mg/Kg		96	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	94		15 - 150						

Lab Sample ID: 885-26741-5 MSD

Matrix: Solid

Analysis Batch: 28618

Client Sample ID: BH03-N2'

Prep Type: Total/NA

Prep Batch: 28229

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.992	0.939		mg/Kg		95	70 - 130	2	20
Ethylbenzene	ND		0.992	0.925		mg/Kg		92	70 - 130	1	20
m&p-Xylene	ND		1.98	1.96		mg/Kg		99	70 - 130	2	20
o-Xylene	ND		0.992	0.939		mg/Kg		95	70 - 130	2	20
Toluene	ND		0.992	0.930		mg/Kg		94	70 - 130	2	20
Xylenes, Total	ND		2.98	2.90		mg/Kg		98	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	94		15 - 150								

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

Lab Sample ID: MB 885-28342/1-A

Matrix: Solid

Analysis Batch: 28345

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28342

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		06/14/25 15:05	06/15/25 19:15	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		06/14/25 15:05	06/15/25 19:15	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
Di-n-octyl phthalate (Surr)	111		62 - 134	06/14/25 15:05	06/15/25 19:15	1		

Lab Sample ID: LCS 885-28342/2-A

Matrix: Solid

Analysis Batch: 28345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28342

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	51.3		mg/Kg		103	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	99		62 - 134				

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

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

Lab Sample ID: MB 885-28343/1-A

Matrix: Solid

Analysis Batch: 28345

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28343

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		06/14/25 15:40	06/16/25 00:11	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		06/14/25 15:40	06/16/25 00:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			06/14/25 15:40	06/16/25 00:11	1

Lab Sample ID: LCS 885-28343/2-A

Matrix: Solid

Analysis Batch: 28345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	51.0		mg/Kg		102	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	109		62 - 134				

Lab Sample ID: MB 885-28639/1-A

Matrix: Solid

Analysis Batch: 28634

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28639

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		06/19/25 09:13	06/19/25 10:58	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		06/19/25 09:13	06/19/25 10:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			06/19/25 09:13	06/19/25 10:58	1

Lab Sample ID: LCS 885-28639/2-A

Matrix: Solid

Analysis Batch: 28634

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	48.4		mg/Kg		97	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	104		62 - 134				

Lab Sample ID: 885-26741-4 MS

Matrix: Solid

Analysis Batch: 28634

Client Sample ID: BH02-4'

Prep Type: Total/NA

Prep Batch: 28639

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	910		49.6	1010	4	mg/Kg		183	44 - 136

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## QC Sample Results

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

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

Lab Sample ID: 885-26741-4 MS

Matrix: Solid

Analysis Batch: 28634

Client Sample ID: BH02-4'

Prep Type: Total/NA

Prep Batch: 28639

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	139	S1+	62 - 134

Lab Sample ID: 885-26741-4 MSD

Matrix: Solid

Analysis Batch: 28634

Client Sample ID: BH02-4'

Prep Type: Total/NA

Prep Batch: 28639

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	910		47.9	899	4	mg/Kg		-33	44 - 136	11	32
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
Di-n-octyl phthalate (Surr)	132		62 - 134								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-28239/1-A

Matrix: Solid

Analysis Batch: 28261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28239

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		06/13/25 09:13	06/13/25 12:05	1

Lab Sample ID: LCS 885-28239/2-A

Matrix: Solid

Analysis Batch: 28261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.8		mg/Kg		99	90 - 110

Lab Sample ID: 885-26741-1 MS

Matrix: Solid

Analysis Batch: 28261

Client Sample ID: BH01-2'

Prep Type: Total/NA

Prep Batch: 28239

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

Lab Sample ID: 885-26741-1 MSD

Matrix: Solid

Analysis Batch: 28261

Client Sample ID: BH01-2'

Prep Type: Total/NA

Prep Batch: 28239

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

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## QC Association Summary

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

## GC VOA

## Prep Batch: 28229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-1	BH01-2'	Total/NA	Solid	5030C	
885-26741-2	BH01-4'	Total/NA	Solid	5030C	
885-26741-3	BH02-2'	Total/NA	Solid	5030C	
885-26741-4	BH02-4'	Total/NA	Solid	5030C	
885-26741-5	BH03-N2'	Total/NA	Solid	5030C	
885-26741-6	BH03-N4'	Total/NA	Solid	5030C	
885-26741-7	BH04-E2'	Total/NA	Solid	5030C	
885-26741-8	BH04-E4'	Total/NA	Solid	5030C	
885-26741-9	BH05-S2'	Total/NA	Solid	5030C	
885-26741-10	BH05-S4'	Total/NA	Solid	5030C	
885-26741-11	BH06-W2'	Total/NA	Solid	5030C	
885-26741-12	BH06-W4'	Total/NA	Solid	5030C	
MB 885-28229/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-28229/12-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-28229/2-A	Lab Control Sample	Total/NA	Solid	5030C	
885-26741-5 MS	BH03-N2'	Total/NA	Solid	5030C	
885-26741-5 MSD	BH03-N2'	Total/NA	Solid	5030C	

## Analysis Batch: 28607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-1	BH01-2'	Total/NA	Solid	8015M/D	28229
885-26741-2	BH01-4'	Total/NA	Solid	8015M/D	28229
885-26741-3	BH02-2'	Total/NA	Solid	8015M/D	28229
885-26741-4	BH02-4'	Total/NA	Solid	8015M/D	28229
885-26741-5	BH03-N2'	Total/NA	Solid	8015M/D	28229
885-26741-6	BH03-N4'	Total/NA	Solid	8015M/D	28229
885-26741-7	BH04-E2'	Total/NA	Solid	8015M/D	28229
885-26741-8	BH04-E4'	Total/NA	Solid	8015M/D	28229
885-26741-9	BH05-S2'	Total/NA	Solid	8015M/D	28229
885-26741-10	BH05-S4'	Total/NA	Solid	8015M/D	28229
885-26741-11	BH06-W2'	Total/NA	Solid	8015M/D	28229
885-26741-12	BH06-W4'	Total/NA	Solid	8015M/D	28229
MB 885-28229/1-A	Method Blank	Total/NA	Solid	8015M/D	28229
LCS 885-28229/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	28229

## Analysis Batch: 28618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-1	BH01-2'	Total/NA	Solid	8021B	28229
885-26741-2	BH01-4'	Total/NA	Solid	8021B	28229
885-26741-3	BH02-2'	Total/NA	Solid	8021B	28229
885-26741-4	BH02-4'	Total/NA	Solid	8021B	28229
885-26741-5	BH03-N2'	Total/NA	Solid	8021B	28229
885-26741-6	BH03-N4'	Total/NA	Solid	8021B	28229
885-26741-7	BH04-E2'	Total/NA	Solid	8021B	28229
885-26741-8	BH04-E4'	Total/NA	Solid	8021B	28229
885-26741-9	BH05-S2'	Total/NA	Solid	8021B	28229
885-26741-10	BH05-S4'	Total/NA	Solid	8021B	28229
885-26741-11	BH06-W2'	Total/NA	Solid	8021B	28229
885-26741-12	BH06-W4'	Total/NA	Solid	8021B	28229
MB 885-28229/1-A	Method Blank	Total/NA	Solid	8021B	28229
LCS 885-28229/12-A	Lab Control Sample	Total/NA	Solid	8021B	28229

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## QC Association Summary

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

## GC VOA (Continued)

## Analysis Batch: 28618 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-5 MS	BH03-N2'	Total/NA	Solid	8021B	28229
885-26741-5 MSD	BH03-N2'	Total/NA	Solid	8021B	28229

## GC Semi VOA

## Prep Batch: 28342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-9	BH05-S2'	Total/NA	Solid	SHAKE	
885-26741-10	BH05-S4'	Total/NA	Solid	SHAKE	
885-26741-11	BH06-W2'	Total/NA	Solid	SHAKE	
885-26741-12	BH06-W4'	Total/NA	Solid	SHAKE	
MB 885-28342/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-28342/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Prep Batch: 28343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-2	BH01-4'	Total/NA	Solid	SHAKE	
885-26741-5	BH03-N2'	Total/NA	Solid	SHAKE	
885-26741-6	BH03-N4'	Total/NA	Solid	SHAKE	
885-26741-7	BH04-E2'	Total/NA	Solid	SHAKE	
885-26741-8	BH04-E4'	Total/NA	Solid	SHAKE	
MB 885-28343/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-28343/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 28345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-9	BH05-S2'	Total/NA	Solid	8015M/D	28342
885-26741-10	BH05-S4'	Total/NA	Solid	8015M/D	28342
885-26741-11	BH06-W2'	Total/NA	Solid	8015M/D	28342
885-26741-12	BH06-W4'	Total/NA	Solid	8015M/D	28342
MB 885-28342/1-A	Method Blank	Total/NA	Solid	8015M/D	28342
MB 885-28343/1-A	Method Blank	Total/NA	Solid	8015M/D	28343
LCS 885-28342/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	28342
LCS 885-28343/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	28343

## Analysis Batch: 28356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-2	BH01-4'	Total/NA	Solid	8015M/D	28343
885-26741-5	BH03-N2'	Total/NA	Solid	8015M/D	28343
885-26741-6	BH03-N4'	Total/NA	Solid	8015M/D	28343
885-26741-7	BH04-E2'	Total/NA	Solid	8015M/D	28343
885-26741-8	BH04-E4'	Total/NA	Solid	8015M/D	28343

## Analysis Batch: 28634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-3	BH02-2'	Total/NA	Solid	8015M/D	28639
885-26741-4	BH02-4'	Total/NA	Solid	8015M/D	28639
MB 885-28639/1-A	Method Blank	Total/NA	Solid	8015M/D	28639
LCS 885-28639/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	28639
885-26741-4 MS	BH02-4'	Total/NA	Solid	8015M/D	28639
885-26741-4 MSD	BH02-4'	Total/NA	Solid	8015M/D	28639

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## QC Association Summary

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

## GC Semi VOA

## Prep Batch: 28639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-1	BH01-2'	Total/NA	Solid	SHAKE	
885-26741-3	BH02-2'	Total/NA	Solid	SHAKE	
885-26741-4	BH02-4'	Total/NA	Solid	SHAKE	
MB 885-28639/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-28639/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-26741-4 MS	BH02-4'	Total/NA	Solid	SHAKE	
885-26741-4 MSD	BH02-4'	Total/NA	Solid	SHAKE	

## Analysis Batch: 28706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-1	BH01-2'	Total/NA	Solid	8015M/D	28639

## HPLC/IC

## Prep Batch: 28239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-1	BH01-2'	Total/NA	Solid	300_Prep	
885-26741-2	BH01-4'	Total/NA	Solid	300_Prep	
885-26741-3	BH02-2'	Total/NA	Solid	300_Prep	
885-26741-4	BH02-4'	Total/NA	Solid	300_Prep	
885-26741-5	BH03-N2'	Total/NA	Solid	300_Prep	
885-26741-6	BH03-N4'	Total/NA	Solid	300_Prep	
885-26741-7	BH04-E2'	Total/NA	Solid	300_Prep	
885-26741-8	BH04-E4'	Total/NA	Solid	300_Prep	
885-26741-9	BH05-S2'	Total/NA	Solid	300_Prep	
885-26741-10	BH05-S4'	Total/NA	Solid	300_Prep	
885-26741-11	BH06-W2'	Total/NA	Solid	300_Prep	
885-26741-12	BH06-W4'	Total/NA	Solid	300_Prep	
MB 885-28239/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-28239/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-26741-1 MS	BH01-2'	Total/NA	Solid	300_Prep	
885-26741-1 MSD	BH01-2'	Total/NA	Solid	300_Prep	

## Analysis Batch: 28261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-26741-1	BH01-2'	Total/NA	Solid	300.0	28239
885-26741-2	BH01-4'	Total/NA	Solid	300.0	28239
885-26741-3	BH02-2'	Total/NA	Solid	300.0	28239
885-26741-4	BH02-4'	Total/NA	Solid	300.0	28239
885-26741-5	BH03-N2'	Total/NA	Solid	300.0	28239
885-26741-6	BH03-N4'	Total/NA	Solid	300.0	28239
885-26741-7	BH04-E2'	Total/NA	Solid	300.0	28239
885-26741-8	BH04-E4'	Total/NA	Solid	300.0	28239
885-26741-9	BH05-S2'	Total/NA	Solid	300.0	28239
885-26741-10	BH05-S4'	Total/NA	Solid	300.0	28239
885-26741-11	BH06-W2'	Total/NA	Solid	300.0	28239
885-26741-12	BH06-W4'	Total/NA	Solid	300.0	28239
MB 885-28239/1-A	Method Blank	Total/NA	Solid	300.0	28239
LCS 885-28239/2-A	Lab Control Sample	Total/NA	Solid	300.0	28239
885-26741-1 MS	BH01-2'	Total/NA	Solid	300.0	28239
885-26741-1 MSD	BH01-2'	Total/NA	Solid	300.0	28239

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Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH01-2'  
Date Collected: 06/11/25 14:00  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 06:40
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/18/25 21:06
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 06:40
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/18/25 21:06
Total/NA	Prep	SHAKE			28639	MI	EET ALB	06/19/25 09:13
Total/NA	Analysis	8015M/D		5	28706	EM	EET ALB	06/20/25 15:21
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:13
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 17:11

Client Sample ID: BH01-4'  
Date Collected: 06/11/25 14:15  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/18/25 21:30
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/18/25 21:30
Total/NA	Prep	SHAKE			28343	MI	EET ALB	06/14/25 15:40
Total/NA	Analysis	8015M/D		2	28356	MI	EET ALB	06/16/25 15:46
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:13
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 17:25

Client Sample ID: BH02-2'  
Date Collected: 06/11/25 14:30  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		5	28607	JP	EET ALB	06/18/25 21:54
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		5	28618	JP	EET ALB	06/18/25 21:54
Total/NA	Prep	SHAKE			28639	MI	EET ALB	06/19/25 09:13
Total/NA	Analysis	8015M/D		5	28634	MI	EET ALB	06/19/25 14:04
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:13
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 18:33

Client Sample ID: BH02-4'  
Date Collected: 06/11/25 14:40  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/18/25 22:17

Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH02-4'

Lab Sample ID: 885-26741-4

Date Collected: 06/11/25 14:40

Matrix: Solid

Date Received: 06/13/25 06:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/18/25 22:17
Total/NA	Prep	SHAKE			28639	MI	EET ALB	06/19/25 09:13
Total/NA	Analysis	8015M/D		2	28634	MI	EET ALB	06/19/25 13:20
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:13
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 18:47

Client Sample ID: BH03-N2'

Lab Sample ID: 885-26741-5

Date Collected: 06/11/25 15:00

Matrix: Solid

Date Received: 06/13/25 06:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/18/25 22:41
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/18/25 22:41
Total/NA	Prep	SHAKE			28343	MI	EET ALB	06/14/25 15:40
Total/NA	Analysis	8015M/D		1	28356	MI	EET ALB	06/16/25 11:23
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:13
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 19:00

Client Sample ID: BH03-N4'

Lab Sample ID: 885-26741-6

Date Collected: 06/11/25 15:10

Matrix: Solid

Date Received: 06/13/25 06:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/18/25 23:52
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/18/25 23:52
Total/NA	Prep	SHAKE			28343	MI	EET ALB	06/14/25 15:40
Total/NA	Analysis	8015M/D		1	28356	MI	EET ALB	06/16/25 11:34
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:13
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 19:14

Client Sample ID: BH04-E2'

Lab Sample ID: 885-26741-7

Date Collected: 06/11/25 15:20

Matrix: Solid

Date Received: 06/13/25 06:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/19/25 00:39
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/19/25 00:39

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Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH04-E2'  
Date Collected: 06/11/25 15:20  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			28343	MI	EET ALB	06/14/25 15:40
Total/NA	Analysis	8015M/D		1	28356	MI	EET ALB	06/16/25 11:45
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:13
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 19:28

Client Sample ID: BH04-E4'  
Date Collected: 06/11/25 15:25  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-8  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/19/25 01:03
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/19/25 01:03
Total/NA	Prep	SHAKE			28343	MI	EET ALB	06/14/25 15:40
Total/NA	Analysis	8015M/D		1	28356	MI	EET ALB	06/16/25 11:56
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:14
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 19:41

Client Sample ID: BH05-S2'  
Date Collected: 06/11/25 16:00  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-9  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/19/25 01:27
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/19/25 01:27
Total/NA	Prep	SHAKE			28342	MI	EET ALB	06/14/25 15:05
Total/NA	Analysis	8015M/D		1	28345	MI	EET ALB	06/15/25 22:53
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:14
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 19:55

Client Sample ID: BH05-S4'  
Date Collected: 06/11/25 16:05  
Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/19/25 01:51
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/19/25 01:51
Total/NA	Prep	SHAKE			28342	MI	EET ALB	06/14/25 15:05
Total/NA	Analysis	8015M/D		1	28345	MI	EET ALB	06/15/25 23:04

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Lab Chronicle

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Client Sample ID: BH05-S4'

Date Collected: 06/11/25 16:05

Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:14
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 20:08

Client Sample ID: BH06-W2'

Date Collected: 06/11/25 16:25

Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/19/25 02:14
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/19/25 02:14
Total/NA	Prep	SHAKE			28342	MI	EET ALB	06/14/25 15:05
Total/NA	Analysis	8015M/D		1	28345	MI	EET ALB	06/15/25 23:16
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:14
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 20:49

Client Sample ID: BH06-W4'

Date Collected: 06/11/25 16:45

Date Received: 06/13/25 06:45

Lab Sample ID: 885-26741-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8015M/D		1	28607	JP	EET ALB	06/19/25 02:38
Total/NA	Prep	5030C			28229	JE	EET ALB	06/13/25 10:44
Total/NA	Analysis	8021B		1	28618	JP	EET ALB	06/19/25 02:38
Total/NA	Prep	SHAKE			28342	MI	EET ALB	06/14/25 15:05
Total/NA	Analysis	8015M/D		1	28345	MI	EET ALB	06/15/25 23:27
Total/NA	Prep	300_Prep			28239	DL	EET ALB	06/13/25 09:14
Total/NA	Analysis	300.0		20	28261	RC	EET ALB	06/13/25 21:03

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

Accreditation/Certification Summary

Client: Hilcorp Energy  
Project/Site: Canyon Largo Unit #472

Job ID: 885-26741-1

Laboratory: Eurofins Albuquerque

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

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

## Chain-of-Custody Record

Client: Hilcorp EnergyAttn: Kate Kaufman

Mailing Address:

Turn-Around Time:

5- Day TAT  
☒ Standard ☐ Rush

Project Name:

Canyon Largo Unit #472

Project #:

D7A1988215

Project Manager:

Zach Myers

Sampler:

Arac Lenema

On Ice:

☒ Yes ☐ No mojo

# of Coolers:

1

Cooler Temp (including CF):

3.1 + 0.2 = 3.3 (°C)

Container Type and #

Preservative Type

HEAL No.

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

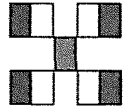
Time

Matrix

Sample Name

Date

Time


**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**


www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

885-26741 COC

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

## Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(C), Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
6/11	1400	Soil	BH01-2'	4oz Jar			X					X			
6/11	1415	Soil	BH01-4'				X					X			
6/11	1430	Soil	BH02-2'				X					X			
6/11	1440	Soil	BH02-4'				X					X			
6/11	1500	Soil	BH03-12'				X					X			
6/11	1510	Soil	BH03-14'				X					X			
6/11	1520	Soil	BH04-12' - E2'				X					X			
6/11	1525	Soil	BH04-14' - E4'				X					X			
6/11	1600	Soil	BH05-12' - S2'				X					X			
6/11	1605	Soil	BH05-14' - S4'				X					X			
6/11	1625	Soil	BH06-12'				X					X			
6/11	1645	Soil	BH06-14'				X					X			

Remarks:

Z Myers  
CC: shydc @ ensdun.com  
W Weichert

Received by: Arac Lenema Date: 6/12/25 Time: 1530Via: noReceived by: Arac Lenema Date: 6/13/25 Time: 0:45Via: noRelinquished by: Arac Lenema Date: 6/23/2025 Time: 1730Relinquished by: Arac Lenema

## Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-26741-1

Login Number: 26741

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

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





Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 7/30/2025 5:43:35 PM

## JOB DESCRIPTION

CLU 472

## JOB NUMBER

885-29187-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
7/30/2025 5:43:35 PM

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

Client: Hilcorp Energy  
Project/Site: CLU 472

Laboratory Job ID: 885-29187-1

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Definitions/Glossary

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

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

Glossary

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

## Case Narrative

Client: Hilcorp Energy  
Project: CLU 472

Job ID: 885-29187-1

**Job ID: 885-29187-1**

**Eurofins Albuquerque**

### Job Narrative 885-29187-1

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

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

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

#### Receipt

The samples were received on 7/19/2025 8:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

#### Gasoline Range Organics

Method 8015D\_GRO: Surrogate recovery for the following sample was outside control limits: BH02 4-6 (885-29187-1). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-30775 and analytical batch 885-30888 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015D\_DRO: The following sample was diluted due to the nature of the sample matrix: BH02 4-6 (885-29187-1). Elevated reporting limits (RLs) are provided.

Method 8015D\_DRO: The following sample required a dilution due to the nature of the sample matrix: BH02 4-6 (885-29187-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

#### HPLC/IC

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

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

Client Sample ID: BH02 4-6

Lab Sample ID: 885-29187-1

Date Collected: 07/16/25 12:10

Matrix: Solid

Date Received: 07/19/25 08:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1400		46	mg/Kg		07/23/25 10:48	07/26/25 15:56	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	277	S1+	15 - 150			07/23/25 10:48	07/26/25 15:56	10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.23	mg/Kg		07/23/25 10:48	07/26/25 15:56	10
Ethylbenzene	7.3		0.46	mg/Kg		07/23/25 10:48	07/26/25 15:56	10
Toluene	22		0.46	mg/Kg		07/23/25 10:48	07/26/25 15:56	10
Xylenes, Total	110		9.3	mg/Kg		07/23/25 10:48	07/28/25 20:07	100
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	131		15 - 150			07/23/25 10:48	07/26/25 15:56	10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2100		99	mg/Kg		07/24/25 07:39	07/25/25 17:49	10
Motor Oil Range Organics [C28-C40]	ND	D	490	mg/Kg		07/24/25 07:39	07/25/25 17:49	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Di-n-octyl phthalate (Surr)	0	D S1-	62 - 134			07/24/25 07:39	07/25/25 17:49	10

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		07/23/25 13:54	07/24/25 14:15	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

Client Sample ID: BH02 8-10

Lab Sample ID: 885-29187-2

Date Collected: 07/16/25 12:30

Matrix: Solid

Date Received: 07/19/25 08:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	4.8		4.7	mg/Kg		07/23/25 10:48	07/28/25 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		15 - 150			07/23/25 10:48	07/28/25 19:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		07/23/25 10:48	07/26/25 16:20	1
Ethylbenzene	ND		0.047	mg/Kg		07/23/25 10:48	07/26/25 16:20	1
Toluene	ND		0.047	mg/Kg		07/23/25 10:48	07/26/25 16:20	1
Xylenes, Total	ND		0.095	mg/Kg		07/23/25 10:48	07/26/25 16:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/23/25 10:48	07/26/25 16:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	140		9.1	mg/Kg		07/24/25 07:39	07/25/25 18:00	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		07/24/25 07:39	07/25/25 18:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			07/24/25 07:39	07/25/25 18:00	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/23/25 13:54	07/24/25 14:29	20

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## Client Sample Results

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

Client Sample ID: BH02 13-15

Lab Sample ID: 885-29187-3

Date Collected: 07/16/25 13:00

Matrix: Solid

Date Received: 07/19/25 08:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		07/23/25 10:48	07/26/25 16:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 150			07/23/25 10:48	07/26/25 16:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		07/23/25 10:48	07/26/25 16:43	1
Ethylbenzene	ND		0.046	mg/Kg		07/23/25 10:48	07/26/25 16:43	1
Toluene	ND		0.046	mg/Kg		07/23/25 10:48	07/26/25 16:43	1
Xylenes, Total	ND		0.093	mg/Kg		07/23/25 10:48	07/26/25 16:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			07/23/25 10:48	07/26/25 16:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		07/24/25 07:39	07/25/25 18:12	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		07/24/25 07:39	07/25/25 18:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			07/24/25 07:39	07/25/25 18:12	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		07/23/25 13:54	07/24/25 14:43	20

Eurofins Albuquerque

## QC Sample Results

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

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

Lab Sample ID: MB 885-30701/1-A

Matrix: Solid

Analysis Batch: 30957

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30701

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		07/23/25 10:48	07/26/25 07:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			07/23/25 10:48	07/26/25 07:41	1

Lab Sample ID: LCS 885-30701/2-A

Matrix: Solid

Analysis Batch: 30957

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 30701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	26.2		mg/Kg		105	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	200		15 - 150				

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

Lab Sample ID: MB 885-30701/1-A

Matrix: Solid

Analysis Batch: 30956

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30701

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		07/23/25 10:48	07/26/25 07:41	1
Ethylbenzene	ND		0.050	mg/Kg		07/23/25 10:48	07/26/25 07:41	1
Toluene	ND		0.050	mg/Kg		07/23/25 10:48	07/26/25 07:41	1
Xylenes, Total	ND		0.10	mg/Kg		07/23/25 10:48	07/26/25 07:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			07/23/25 10:48	07/26/25 07:41	1

Lab Sample ID: LCS 885-30701/3-A

Matrix: Solid

Analysis Batch: 30956

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 30701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.922		mg/Kg		92	70 - 130
Ethylbenzene	1.00	0.919		mg/Kg		92	70 - 130
Toluene	1.00	0.931		mg/Kg		93	70 - 130
Xylenes, Total	3.00	2.81		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	96		15 - 150				

Eurofins Albuquerque

## QC Sample Results

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

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

Lab Sample ID: MB 885-30775/1-A

Matrix: Solid

Analysis Batch: 30888

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30775

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		07/24/25 07:39	07/25/25 10:29	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		07/24/25 07:39	07/25/25 10:29	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			07/24/25 07:39	07/25/25 10:29	1

Lab Sample ID: LCS 885-30775/2-A

Matrix: Solid

Analysis Batch: 30888

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 30775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	48.1		mg/Kg		96	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	105		62 - 134				

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-30730/1-A

Matrix: Solid

Analysis Batch: 30774

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30730

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		07/23/25 13:54	07/24/25 08:07	1

Lab Sample ID: LCS 885-30730/2-A

Matrix: Solid

Analysis Batch: 30774

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 30730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	15.0		mg/Kg		100	90 - 110

Eurofins Albuquerque

## QC Association Summary

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

## GC VOA

## Prep Batch: 30701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	5030C	
885-29187-2	BH02 8-10	Total/NA	Solid	5030C	
885-29187-3	BH02 13-15	Total/NA	Solid	5030C	
MB 885-30701/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-30701/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-30701/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Analysis Batch: 30956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	8021B	30701
885-29187-2	BH02 8-10	Total/NA	Solid	8021B	30701
885-29187-3	BH02 13-15	Total/NA	Solid	8021B	30701
MB 885-30701/1-A	Method Blank	Total/NA	Solid	8021B	30701
LCS 885-30701/3-A	Lab Control Sample	Total/NA	Solid	8021B	30701

## Analysis Batch: 30957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	8015M/D	30701
885-29187-3	BH02 13-15	Total/NA	Solid	8015M/D	30701
MB 885-30701/1-A	Method Blank	Total/NA	Solid	8015M/D	30701
LCS 885-30701/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	30701

## Analysis Batch: 31051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-2	BH02 8-10	Total/NA	Solid	8015M/D	30701

## Analysis Batch: 31052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	8021B	30701

## GC Semi VOA

## Prep Batch: 30775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	SHAKE	
885-29187-2	BH02 8-10	Total/NA	Solid	SHAKE	
885-29187-3	BH02 13-15	Total/NA	Solid	SHAKE	
MB 885-30775/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-30775/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 30888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	8015M/D	30775
885-29187-2	BH02 8-10	Total/NA	Solid	8015M/D	30775
885-29187-3	BH02 13-15	Total/NA	Solid	8015M/D	30775
MB 885-30775/1-A	Method Blank	Total/NA	Solid	8015M/D	30775
LCS 885-30775/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	30775

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

HPLC/IC

Prep Batch: 30730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	300_Prep	
885-29187-2	BH02 8-10	Total/NA	Solid	300_Prep	
885-29187-3	BH02 13-15	Total/NA	Solid	300_Prep	
MB 885-30730/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-30730/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 30774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-29187-1	BH02 4-6	Total/NA	Solid	300.0	30730
885-29187-2	BH02 8-10	Total/NA	Solid	300.0	30730
885-29187-3	BH02 13-15	Total/NA	Solid	300.0	30730
MB 885-30730/1-A	Method Blank	Total/NA	Solid	300.0	30730
LCS 885-30730/2-A	Lab Control Sample	Total/NA	Solid	300.0	30730



## Lab Chronicle

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

Client Sample ID: BH02 4-6

Lab Sample ID: 885-29187-1

Date Collected: 07/16/25 12:10

Matrix: Solid

Date Received: 07/19/25 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			30701	KLS	EET ALB	07/23/25 10:48
Total/NA	Analysis	8015M/D		10	30957	JP	EET ALB	07/26/25 15:56
Total/NA	Prep	5030C			30701	KLS	EET ALB	07/23/25 10:48
Total/NA	Analysis	8021B		10	30956	JP	EET ALB	07/26/25 15:56
Total/NA	Prep	5030C			30701	KLS	EET ALB	07/23/25 10:48
Total/NA	Analysis	8021B		100	31052	JP	EET ALB	07/28/25 20:07
Total/NA	Prep	SHAKE			30775	JM	EET ALB	07/24/25 07:39
Total/NA	Analysis	8015M/D		10	30888	EM	EET ALB	07/25/25 17:49
Total/NA	Prep	300_Prep			30730	RC	EET ALB	07/23/25 13:54
Total/NA	Analysis	300.0		20	30774	RC	EET ALB	07/24/25 14:15

Client Sample ID: BH02 8-10

Lab Sample ID: 885-29187-2

Date Collected: 07/16/25 12:30

Matrix: Solid

Date Received: 07/19/25 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			30701	KLS	EET ALB	07/23/25 10:48
Total/NA	Analysis	8015M/D		1	31051	JP	EET ALB	07/28/25 19:43
Total/NA	Prep	5030C			30701	KLS	EET ALB	07/23/25 10:48
Total/NA	Analysis	8021B		1	30956	JP	EET ALB	07/26/25 16:20
Total/NA	Prep	SHAKE			30775	JM	EET ALB	07/24/25 07:39
Total/NA	Analysis	8015M/D		1	30888	EM	EET ALB	07/25/25 18:00
Total/NA	Prep	300_Prep			30730	RC	EET ALB	07/23/25 13:54
Total/NA	Analysis	300.0		20	30774	RC	EET ALB	07/24/25 14:29

Client Sample ID: BH02 13-15

Lab Sample ID: 885-29187-3

Date Collected: 07/16/25 13:00

Matrix: Solid

Date Received: 07/19/25 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			30701	KLS	EET ALB	07/23/25 10:48
Total/NA	Analysis	8015M/D		1	30957	JP	EET ALB	07/26/25 16:43
Total/NA	Prep	5030C			30701	KLS	EET ALB	07/23/25 10:48
Total/NA	Analysis	8021B		1	30956	JP	EET ALB	07/26/25 16:43
Total/NA	Prep	SHAKE			30775	JM	EET ALB	07/24/25 07:39
Total/NA	Analysis	8015M/D		1	30888	EM	EET ALB	07/25/25 18:12
Total/NA	Prep	300_Prep			30730	RC	EET ALB	07/23/25 13:54
Total/NA	Analysis	300.0		20	30774	RC	EET ALB	07/24/25 14:43

## Laboratory References:

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

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy  
Project/Site: CLU 472

Job ID: 885-29187-1

Laboratory: Eurofins Albuquerque

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

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

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



## Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-29187-1

Login Number: 29187

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

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

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

QUESTIONS

Action 497860

**QUESTIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 497860
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2514946582
Incident Name	NAPP2514946582 CANYON LARGO UNIT COM #472 @ 30-039-30001
Incident Type	Release Other
Incident Status	Remediation Plan Received
Incident Well	[30-039-30001] CANYON LARGO UNIT COM #472

**Location of Release Source***Please answer all the questions in this group.*

Site Name	CANYON LARGO UNIT COM #472
Date Release Discovered	05/27/2025
Surface Owner	Federal

**Incident Details***Please answer all the questions in this group.*

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

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

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Overflow - Tank, Pit, Etc.   Pit (Specify)   Condensate   Released: 42 BBL   Recovered: 20 BBL   Lost: 22 BBL.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 497860

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 497860
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 08/20/2025
----------------------------------------------------	----------------------------------------------------------------------------------------------

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QUESTIONS, Page 3

Action 497860

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 497860
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Site Characterization</b>	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	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 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

<b>Remediation Plan</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	110
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	3500
GRO+DRO (EPA SW-846 Method 8015M)	3500
BTEX (EPA SW-846 Method 8021B or 8260B)	139.3
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	10/01/2025
On what date will (or did) the final sampling or liner inspection occur	10/01/2025
On what date will (or was) the remediation complete(d)	10/07/2025
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	1800
What is the estimated volume (in cubic yards) that will be remediated	500
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	



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QUESTIONS, Page 4

Action 497860

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 497860
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	<i>Not answered.</i>
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<b>Yes</b>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	<i>Not answered.</i>
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	<b>Name: Stuart Hyde</b> <b>Title: Senior Geologist</b> <b>Email: shyde@ensolum.com</b> <b>Date: 08/20/2025</b>
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 497860

QUESTIONS (continued)

Operator:  HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:  372171
	Action Number:  497860
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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**Santa Fe, NM 87505**

QUESTIONS, Page 6

Action 497860

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 497860
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	483892
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/16/2025
What was the (estimated) number of samples that were to be gathered	2
What was the sampling surface area in square feet	10

**Remediation Closure Request**

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	No
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Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

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

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

CONDITIONS

Action 497860

## CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 497860
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

## CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	Remediation plan approved with the following conditions: If any chemical other than hydrogen peroxide is to be used during the soil shredding process, OCD is to be notified and the chemical is required to receive approval prior to its use. Take photographs of the treatment area showing the lined bermed area that will protect against runoff, should a significant precipitation event occur. Provide photographs of the excavated area pursuant to 19.15.29.12(E) NMAC. Ensure horizontal delineation is achieved during the remediation process. The variance is approved to submit samples for laboratory testing for BTEX and TPH only, as all of the delineation samples collected thus far show chloride concentrations well below reclamation standards. Submit remediation closure report to the OCD by 11/28/2025.	8/29/2025