ENSOLUM

July 1, 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: Revised Remediation Work Plan
San Juan 28-4 Unit 26A
Hilcorp Energy Company
NMOCD Incident No: nAPP2502156424

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Revised Remediation Work Plan* (Work Plan) for a release at the San Juan 28-4 Unit 26A natural gas production well (Site). The Site is located on United States Forest Service (USFS) land in Rio Arriba County, New Mexico, Unit I, Section 18, Township 28 North, Range 4 West (Figure 1). This Work Plan includes a summary of delineation activities conducted at the Site and the proposed remediation of impacted soil resulting from the release.

SITE BACKGROUND

On January 21, 2025, Hilcorp personnel discovered a release of 24 barrels (bbls) of condensate and 18 bbls of produced water at the Site. During a routine Audio, Visual, and Olfactory (AVO) inspection, a Hilcorp operator observed stained soil surrounding the condensate above-ground storage tank (AST). Upon further inspection a corrosion hole at the bottom of the AST was discovered to be the source of the release. The operator then shut off the oil dump line and gauged the tank, which was found to be empty. Fluids did not migrate horizontally outside of secondary containment; however, no fluids were recovered. Hilcorp submitted the *Notification of Release* to the New Mexico Oil Conservation Division (NMOCD) on January 21, 2025 and the Site was assigned NMOCD Incident Number nAPP2502156424. Hilcorp also notified the USFS and the Bureau of Land Management (BLM) on January 21, 2025.

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.

The nearest significant watercourse, which is also identified as a wetland, to the Site is a dry wash located approximately 550 feet west of the well pad. This feature is a first order tributary to a watercourse represented by a dashed blue line on the USGS 7.5 minute quadrangle map. To assess Site-specific depth-to-groundwater, borehole BH01 was advanced on March 25, 2025, to a depth of 55 feet below ground surface (bgs). Upon completion of the borehole, a temporary well screen and casing were installed in the open borehole and allowed to equilibrate for 72 hours. A water-level indicator was used to assess for the presence or absence of groundwater on March 28, 2025. Groundwater was encountered in the borehole at a depth of 54.75 feet bgs, indicating the depth to groundwater beneath the Site is greater than 50 feet bgs. The nearest constructed freshwater well is NMOSE permitted well SJ-02385, located approximately 3.4 miles east of the Site with a recorded depth to water of 85 feet bgs. Additionally, two cathodic protection wells associated with natural gas production wells 30-039-25286 and 30-039-25431 are located 2,130 feet east and 2,610 feet north of the Site, respectively. Recorded depth to water in these wells is greater than 150 feet bgs. Depth to water documentation is provided in Appendix A.

The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake. 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 Bureau of Land Management). 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
- TPH as a combination of GRO and 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 January 31, 2025. A notification of sampling activities was submitted to the NMOCD prior to the delineation work and is attached as Appendix B. During delineation activities, an Ensolum geologist assessed the soil for petroleum hydrocarbon staining and odors. Soil samples were field screened for the presence of organic vapors using a calibrated photoionization detector (PID) and chloride concentrations with Hach® chloride test strips. Borehole HA01 was advanced immediately adjacent to the condensate aboveground storage tank or AST (source of the release) to evaluate the soil with the greatest potential impacts resulting from the release. This hand auger was advanced to 6 feet bgs where refusal was met on formation sandstone bedrock. Frozen ground outside the release footprint prevented advancement of additional boreholes to assess the lateral extents of impacts.

Based on field screening results, two soil samples from borehole HA01 were collected directly into laboratory-provided jars and immediately placed on ice. Soil samples were collected from depth intervals indicating the greatest impacts based on field screening results and from the terminal depth of the borehole. Soil descriptions were noted in the field book. Samples were submitted to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico for analysis of TPH following United States Environmental Protection Agency (EPA) Method 8015M/D, BTEX following EPA Method 8021B, and chloride following EPA Method 300.0.

Analytical results indicated concentrations of BTEX and TPH in soil exceeded the applicable NMOCD Closure Criteria at depths of 0 to 1 feet and 6 feet bgs from borehole HA01. Photographs documenting delineation activities are provided in Appendix C.

Based on the initial laboratory analytical results, Ensolum conducted additional backhoe pothole delineation activities on February 27, 2025. Five pothole locations (PH01 through PH05) were advanced at the Site. During delineation activities, Ensolum personnel logged lithology and field screened soil in the same manner described above. All potholes were advanced to refusal on formation sandstone bedrock, with depths ranging from 6 feet to 8 feet bgs. Two soil samples were collected from each pothole in the manner described above and submitted to Envirotech Analytical Laboratory (Envirotech) in Farmington, New Mexico for analysis of BTEX, TPH, and chloride by the same methods described above.

One sample collected from PH01 from a depth of 7.5 feet bgs contained TPH and BTEX concentrations exceeding the applicable NMOCD Closure Criteria. Based on analytical results, all other samples collected on February 27, 2025, were in compliance with the NMOCD Table I Closure Criteria.

Due to shallow refusal on bedrock during hand auger and pothole delineation activities, Hilcorp retained Enviro-Drill, Inc. to advance six boreholes (BH01 through BH06) using hollow-stem auger drilling and sampling equipment at the Site. Sampling notifications were provided to the NMOCD prior to delineation work (Appendix B). Boreholes were advanced to depths ranging from 25 feet to 55 feet bgs. At least two samples were collected from each borehole, one from the highest field screening results, and one from the terminus of the borehole. Analytical results indicated COCs were either not detected above laboratory reporting limits or were detected at concentrations below the applicable NMOCD Table I Closure Criteria.

Soil delineation data, including PID field screening results, are summarized in Table 1 and on Figure 2. Photographs taken during delineation activities are provided in Appendix C. Complete laboratory reports are attached in Appendix D. Field boring logs for BH01 through BH06 are included as Appendix E.

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 depth of approximately 12 feet bgs. Analytical results also indicate impacted soil is likely limited to areas within and immediately surrounding the secondary containment berm with an approximate areal extent of 1,100 square feet. Based on these estimates, approximately 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 50 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 50 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 1-gallon, 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. Additionally, discrete surface soil samples will be collected from outside and within 5 feet of the excavation extent in order to confirm that contaminants have not laterally migrated outside of the recorded release extent. These discrete delineation samples will also be analyzed for TPH and BTEX constituents.

SCHEDULE

Within 90 days of NMOCD, USFS, 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 National Forest Service 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

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Senior Managing Geologist
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dmoir@ensolum.com

Cc: National Forest Service

Attachments:

Figure 1: Site Receptor Map
Figure 2: Delineation Soil Samples Map

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
Appendix E: Field Boring Logs

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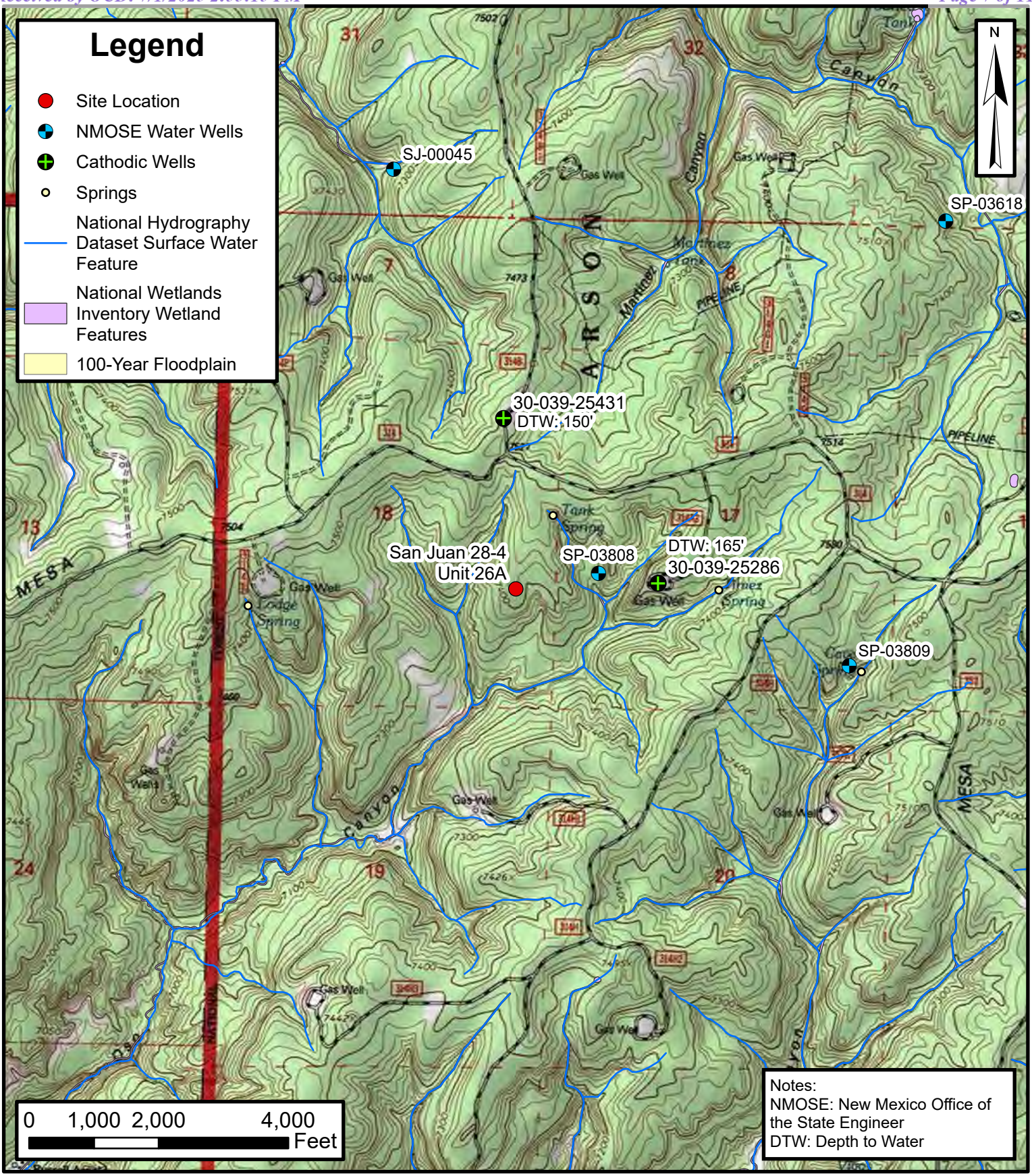
FIGURES



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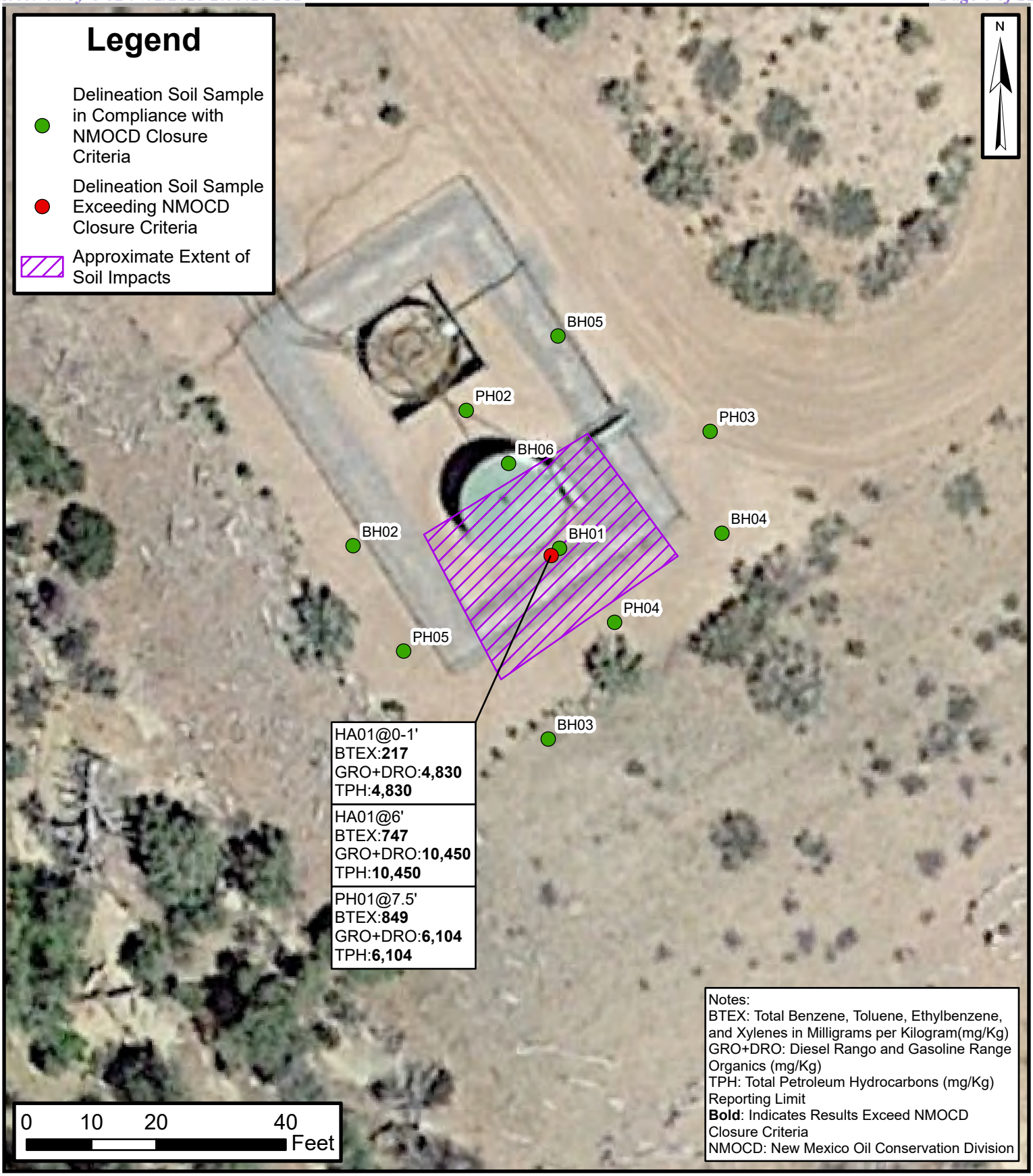
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

San Juan 28-4 Unit 26A
Hilcorp Energy Company
36.65901,-107.28456
Rio Arriba County, New Mexico

FIGURE
1



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Delineation Soil Samples Map

San Juan 28-4 Unit 26A
Hilcorp Energy Company
36.65901,-107.28456
Rio Arriba County, New Mexico

FIGURE
2

Sources: Google Earth (2022)

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
San Juan 28-4 Unit 26A
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)
NMOCD Closure Criteria for Soils Impacted by a Release			NE	**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**
HA01@0-1'	1/31/2025	0 - 1	1,996	1.7	130	19	66	**217**	4,500	330	<46.0	**4,830**	**4,830**	<60.0
HA01@6'	1/31/2025	6.0	1,904	**17**	560	40.0	130	**747**	10,000	450	<46.0	**10,450**	**10,450**	<60.0
PH01@7.5'	2/27/2025	7.5	1,579	**29**	649	38.9	132	**849**	5,470	634	<50.0	**6,104**	**6,104**	<20.0
PH02@2'	2/27/2025	2.0	23.1	<0.0250	0.0271	<0.0250	<0.0250	0.0271	<20.0	<25.0	<50.0	<50.0	<50.0	<20.0
PH02@6.5'	2/27/2025	6.5	7.6	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0	<20.0
PH03@6'	2/27/2025	6.0	3.4	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<20.0
PH03@8'	2/27/2025	8.0	1.6	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<20.0
PH04@4'	2/27/2025	4.0	38.6	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<20.0
PH04@7'	2/27/2025	7.0	50.1	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<20.0
PH05@2'	2/27/2025	2.0	7.3	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<20.0
PH05@6'	2/27/2025	6.0	34.9	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<20.0
BH01@15'	3/25/2025	15.0	1,919	<0.025	0.063	<0.050	0.29	0.353	72	15	<50	87	87	<60
BH01@20'	3/25/2025	20.0	2,358	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.7	<48	<48	<48	<60
BH01@25'	3/25/2025	25.0	677.2	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	10	<47	10	10	<60
BH02@20'	3/25/2025	20.0	13.5	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.3	<47	<47	<47	<60
BH02@30'	3/25/2025	30.0	7.8	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	27	<47	27	27	<60
BH03@10'	3/25/2025	10.0	23.6	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	23	<48	23	23	<60
BH03@35'	3/25/2025	35.0	2.0	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.5	<48	<48	<48	<60
BH04@15'	3/25/2025	15.0	48.5	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.7	<48	<48	<48	<60
BH04@35'	3/26/2025	35.0	5.8	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.7	<49	<49	<49	<60
BH05@30'	3/26/2025	30.0	12.3	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	20	<48	20	20	<60
BH05@35'	3/26/2025	35.0	15.1	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	13	<45	13	13	<60
BH06@5'	3/26/2025	5.0	38.2	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	26	<47	26	26	<60
BH06@25'	3/26/2025	25.0	6.9	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.4	<47	<47	<47	<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
< : 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*

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APPENDIX A

Depth to Water Determination

DAILY DRILLING REPORT

JOB COMPLETED ☐ YES ☑ NO

NO. JOBS THIS DAY 1

Client Ensolum Date 3-25-25 Start: 7:00 End: 5:30

Project San Juan 28-4 #26A Job No. 23825 138

Location _____ City _____

Project Type: ☐ Contract ☐ WT ☐ Enviro ☐ Geotech ☐ Labor Only ☐ Other _____

DRILLING

CLIENT HOLE NO.	DRILL DEPTH FROM –	DRILL DEPTH TO –	PERCOLATION	BIT SIZE	BIT TYPE	NO. OF SAMPLES RING	SPLIT	CA	BN
1	0	55							
2	0	30							
3	0	35	Well						
4	0	25							

FOOTAGE DRILLED _____ DRILL RATE PER HOUR _____ TOTAL SAMPLES _____

FORMATION DRILLED AND DEPTH

- ☑ SAND
- ☑ SILT
- ☑ CLAY
- ☐ CALICHE
- ☑ GRAVEL
- ☐ COBBLES
- ☑ MEDIUM SOFT
- ☑ MEDIUM HARD
- ☐ EXTREMELY HARD
- ☐ REFUSAL

GROUNDWATER TABLE ENCOUNTERED ☐ YES ☑ NO

GROUNDWATER DEPTH _____

FUNCTION	SERVICE PERFORMED	QTY.	RATE	CHARGE
262	MAKE READY / DECONTAMINATION – BEFORE / AFTER JOB	.5		
212	MOBILIZE / DEMOBILIZE EQUIPMENT	1.5		
212	DRILLING INCLUDES: SAFETY MEETING			
	DRILL OPERATIONS	7.0		
	REAMING HOLE(S)			
	MOVING BETWEEN SITE(S)			
	GROUTING, HOURS _____ FEET _____			
	SITE CLEANUP			
212	MISCELLANEOUS LABOR INCLUDES: DECONTAMINATION SERVICES			
	MOVING DRUMS			
	CREW TRAVEL WITHOUT RIG	1.5		
212	LABORER			
212	WELL INSTALLATION			
212	WELL DEVELOPMENT			
212	WELL ABANDONMENT			
250	STANDBY & DELAYS (EXPLAIN)			
212	CREW OVERTIME			
–	PER DIEM			
212	MEAL / MISC. BREAKS (DOT REQUIRED)			
278	CREW BREAK			
276	PERMITS / REPORTS			
277	SUPERVISORY TIME			

REMARKS: _____

MAN-HOUR ALLOCATION		HOURS
OPERATOR	Raul B	10.5
ASSISTANT	Jordan L	10.5
LABORER	Fortino V	10.5

– SIGNATURE APPROVING WORK CONTENT –

CLIENT SIGNATURE: _____

P.O./W.O./JOB NO.: _____

RENTALS / SUPPLIES	QTY.	RATE	CHARGE
SUPPORT VEHICLE / TRAILER	1		
GENERATOR			
TRAILER(S)			
CORING MACHINE / SAW CUT			
BULLET TEETH			
PORTLAND CEMENT			
PRE-MIX			
ASPHALT			
VISQUEEN			
DRUMS	3		
BRASS SLEEVES, SIZE:			
PVC CASING IN. X 5 FT.			
PVC CASING IN. X 10 FT.	5		
SCREEN .0 ___ 0 SLOT IN. X 5 FT.	1		
SCREEN .0 ___ 0 SLOT IN. X 10 FT.	WITH		
TOP LOCKING CAP	1		
BOTTOM CAP	1		
SAND-SACKS, GRADE NO.:			
WELL VAULT, SIZE: IN.			
BENTONITE PELLETS, PAILS:			
BENTONITE POWDER, SACKS:			
JACK HAMMER			
AIR COMPRESSOR, SIZE:			

EQUIPMENT	UNIT NO.	STARTING MILEAGE	ENDING MILEAGE	TOTAL MILES	RATE	CHARGE
RIG	641					
SUPPORT VEHICLE	1131					

RIG / TRUCK DOWN TIME, HOURS (EXPLAIN BELOW)

DAMAGED OR LOST EQUIPMENT: _____

White – Invoicing; Yellow – Client

Enviro-Drill

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Client: SJ 28-4 Unit 26A
Project Name: Hilcorp
Project Location:
Project Manager: Stuart Hyde

BORING LOG NUMBER: BH01
Project No.:

Date Sampled: 03/25/2025
Drilled By: Enviro-Drill
Driller: Rodney Begay
Logged By: O. Froelich

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate: 36°39.528'
West Coordinate: 107°17.093'

Borehole Diameter: 8"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: N/A
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0							
1							
2							
3							
4	1022						
5		1-1-1	5%	455.9	ML	Sandy Silt -Red/grey, dry, very faint odor, non coh/plst,	
6							
7							
8							
9	1025						
10		50-5"	10%	1958	SW-SM	Well graded sand w/ silt -Green/grey/brown, dry, odor strong, v.f.-med sand, some silt/fines	
11							
12							
13							
14	1030						
15		50-4"	30%	1919	ML	Sandy silt ~~Green~~ Brown to green to grey, dry, odor mild, well ~~green~~ graded sand vf-f, some silt, few gravel	
16							
17							
18							
19	1039						
20		50-3"	40%	2358 ~~2344~~	SW	Well graded sand -Green/tan, dry, odor mild/faint, well graded v.f.-med sand w/ few silts/fines	
21							
22							
23							
24	1046						
25		50-2"	40%	677.2	SW-SM	Well graded sand w/ silt -Greenish tan, dry, ~~very~~ faint odor, v.f.-med sand w/ silt, non coh/plst	

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Client: SJ 28-4 Unit [redacted] 26A
Project Name: Hilcorp
Project Location:
Project Manager: S. Hyde

BORING LOG NUMBER: BH01
Project No.:

Date Sampled: 03/25/2025
Drilled By: Enviro-Drill
Driller: Rodney B.
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26							
27							
28							
29	1055						
30		50-3"	35%	846.1	SW-SM	Well graded sand w/ silt -Orangish tan, dry, mild odor, v.f.-med sand w/ some silt	
31							
32							
33							
34							
35	1108	50-3"	60%	41.4	SW-SM	Well graded sand w/ silt -Orange brown, dry, no odor, v.f.-med sand w/ some silt	
36							
37							
38							
39	1118						
40		50-5"	40%	175.7	SW-SM	Well graded sand w silt -Brown w/ reddish, orangish, dry, no odor, v.f.-med sand w/ some silt	
41							
42							
43							
44	1126						
45		50-4"	50%	172.3	SW-SM	Well graded sand w/ silt -tan, dry, no o/s, v.f.-med sand, some silt	
46					ML	Silt -red/brown, dry, no o/s, brittle, non coh, non plst	
47							
48							
49	1137					(Sluff = tan well graded sand w/ silt)	
50		50-6"	50%	~~63.9~~ 66.8	ML	Silt reddish brown, dry, no o/s, brittle	

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 26A
Project Location:
Project Manager: S. Hyde

BORING LOG NUMBER: BH01
Project No.:

Date Sampled: 3/25/25
Drilled By: Enviro-Drill
Driller: Rodney
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
50							
51							
52							
53							
54	1149						
55		50-6"	30%	45.2	ML	Silt Red/brown, dry, no o/s, brittle, non coh/plst	
56							
~~32~~							
~~33~~							
~~34~~							
~~35~~							
~~36~~							
~~37~~							
~~38~~							
~~39~~							
~~40~~							
~~41~~							
~~42~~							
~~43~~							
~~44~~							
~~45~~							
~~46~~							
~~47~~							
~~48~~							
~~49~~							
~~50~~							

#226 30-039-25286
#2 30-039-07419

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO

Operator Meridian O.I. Location: Unit K Sec. 17 Twp 28 Rng 4

Name of Well/Wells or Pipeline Serviced

San Juan 28-4 # 226 + # 2

Elevation — Completion Date 4/13/95 Total Depth 453' Land Type F

Casing Strings, Sizes, Types & Depths

100', 8" PVC, No gas, water or boulders encountered during casing

If Casing Strings are cemented, show amounts & types used

Casing cemented with 21 bags cement

If Cement or Bentonite Plugs have been placed, show depths & amounts used

None

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. None

Depths gas encountered: None

Ground bed depth with type & amount of coke breeze used:

453', 62 bags loresco

Depths anodes placed: 410, 385, 370, 325, 310, 300, 290, 280, 270, 260, 250
240, 195, 185, 165

Depths vent pipes placed: 453'

Vent pipe perforations: Bottom 300'

Remarks:

RECEIVED
JAN 11 1996
OIL CON. DIV.
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

#201 30-039-25431

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO

Operator Meridian Oil Inc. Location: Unit A Sec. 18 Twp 28 Rng 04

Name of Well/Wells or Pipeline Serviced
San Juan 28-4 #201

Elevation 7508' Completion Date _____ Total Depth _____ Land Type F

Casing Strings, Sizes, Types & Depths 3/22 Set 99' of 8" PVC Casing.
No Gas, Water, or Boulders Were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented
With 19 Sacks.

If Cement or Bentonite Plugs have been placed, show depths & amounts used
NA

Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. NA - Damp Maybe at 150'

Depths gas encountered: No

Ground bed depth with type & amount of coke breeze used: 487' deep
with 6500 lbs Loresco Type SW

Depths anodes placed: 440, 431, 415, 406, 397, 388, 379, 370 361, 352, 343, 334, 325
316 307

Depths vent pipes placed: 487'

Vent pipe perforations: bottom 350

Remarks:

RECEIVED
JAN 11 1996
OIL CON. DIV.
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

ENSOLUM

APPENDIX B

Agency Correspondence

From: Stuart Hyde
To: Wes Weichert
Subject: Fw: The Oil Conservation Division (OCD) has accepted the application, Application ID: 424641
Date: Monday, January 27, 2025 10:59:18 AM

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
(970) 903-1607
Ensolum, LLC

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Friday, January 24, 2025 4:27:48 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 424641

[**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#) nAPP2502156424.

The sampling event is expected to take place:

When: 01/31/2025 @ 09:00
Where: I-18-28N-04W 1750 FSL 530 FEL (36.65901,-107.28456)

Additional Information: Contact Pm- Stuart Hyde (970)403-6023

Additional Instructions: San Juan 28-4 Unit 26A (36.658808, -107.284805). Hand Auger delineation hand sampling. Number of samples is estimated.

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

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

If 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

Wes Weichert

From: Stuart Hyde
Sent: Thursday, February 20, 2025 10:32 AM
To: Wes Weichert
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 433870

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

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

---

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, February 20, 2025 10:24 AM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 433870

[**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#) nAPP2502156424.

The sampling event is expected to take place:

When: 02/27/2025 @ 09:00
Where: I-18-28N-04W 1750 FSL 530 FEL (36.65901,-107.28456)

Additional Information: Contact PM Stuart Hyde 970-903-1607

Additional Instructions: San Juan 28-4 Unit 26A (30-039-27636). Coordinates of the site are 36.65878, -107.28376. Delineation and Excavation Sampling

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
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 443037
Date: Monday, March 17, 2025 11:04:17 AM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2502156424.

The sampling event is expected to take place:

When: 03/24/2025 @ 09:00
Where: I-18-28N-04W 1750 FSL 530 FEL (36.65901,-107.28456)

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

Additional Instructions: San Juan 28-4 #26A well pad, coordinates 36.65901,-107.28456

Sampling will take place on 3/24/2025 and 3/25/2025 starting at 9 AM each day.

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
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 443931
Date: Wednesday, March 19, 2025 12:47:56 PM

[**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#) nAPP2502156424.

The sampling event is expected to take place:

When: 03/26/2025 @ 09:00
Where: I-18-28N-04W 1750 FSL 530 FEL (36.65901,-107.28456)

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

Additional Instructions: San Juan 28-4 #26A well pad, coordinates 36.65901,-107.28456

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

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APPENDIX C

Photographic Log

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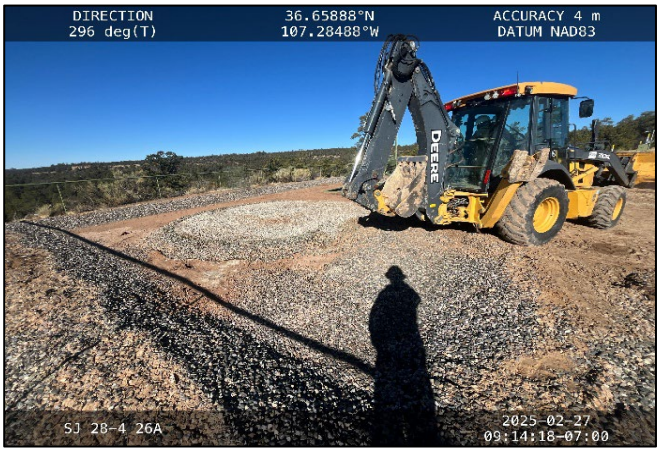
Photographic Log
Hilcorp Energy Company
San Juan 28-4 Unit 26A
Rio Arriba County, New Mexico

Photograph: 1 Date: 1/31/2025
Description: Initial release point and soil staining
View: West



Photograph: 2 Date: 2/27/2025
Description: AST removed prior to potholing
View: Northwest

Photograph: 3 Date: 3/26/2025
Description: Boring BH05@5' split spoon interval
View: North

Photograph: 4 Date: 3/28/2025
Description: BH01 DTW ~54.75' BGS
View: N/A

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APPENDIX D

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/12/2025 10:33:51 AM

JOB DESCRIPTION

San Juan 28-4 Unit 26A

JOB NUMBER

885-19169-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

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
2/12/2025 10:33:51 AM

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

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Laboratory Job ID: 885-19169-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy Job ID: 885-19169-1
Project/Site: San Juan 28-4 Unit 26A

Qualifiers

GC VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: San Juan 28-4 Unit 26A

Job ID: 885-19169-1

Job ID: 885-19169-1 Eurofins Albuquerque

Job Narrative
885-19169-1

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 2/1/2025 7:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

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

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

Diesel Range Organics
Method 8015D_DRO: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-20298 and analytical batch 885-20239 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.

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-19169-1

Client Sample ID: HA01@ 0-1

Date Collected: 01/31/25 13:20
Date Received: 02/01/25 07:40

Lab Sample ID: 885-19169-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	4500		95		mg/Kg		02/04/25 09:52	02/06/25 16:56	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*192*	*S1+*	*35 - 166*	*02/04/25 09:52*	*02/06/25 16:56*	*20*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.7		0.48		mg/Kg		02/04/25 09:52	02/06/25 16:56	20
Ethylbenzene	19		0.95		mg/Kg		02/04/25 09:52	02/06/25 16:56	20
Toluene	130		9.5		mg/Kg		02/04/25 09:52	02/06/25 17:18	200
Xylenes, Total	66		1.9		mg/Kg		02/04/25 09:52	02/06/25 16:56	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*48 - 145*	*02/04/25 09:52*	*02/06/25 16:56*	*20*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	330		9.1		mg/Kg		02/04/25 14:09	02/04/25 21:24	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		02/04/25 14:09	02/04/25 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*	*02/04/25 14:09*	*02/04/25 21:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		02/04/25 11:56	02/04/25 17:57	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-19169-1

Client Sample ID: HA01@ 6

Date Collected: 01/31/25 13:22
Date Received: 02/01/25 07:40

Lab Sample ID: 885-19169-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	10000		470		mg/Kg		02/04/25 09:52	02/06/25 16:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*35 - 166*	*02/04/25 09:52*	*02/06/25 16:35*	*100*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	17		2.3		mg/Kg		02/04/25 09:52	02/06/25 16:35	100
Ethylbenzene	40		4.7		mg/Kg		02/04/25 09:52	02/06/25 16:35	100
Toluene	560		9.3		mg/Kg		02/04/25 09:52	02/07/25 11:55	200
Xylenes, Total	130		9.3		mg/Kg		02/04/25 09:52	02/06/25 16:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*48 - 145*	*02/04/25 09:52*	*02/06/25 16:35*	*100*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	450		9.2		mg/Kg		02/04/25 14:09	02/04/25 21:34	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		02/04/25 14:09	02/04/25 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*94*		*62 - 134*	*02/04/25 14:09*	*02/04/25 21:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		02/04/25 11:56	02/04/25 18:28	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-19169-1

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

Lab Sample ID: MB 885-20264/1-A
Matrix: Solid
Analysis Batch: 20452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20264

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		02/04/25 09:52	02/06/25 16:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*02/04/25 09:52*	*02/06/25 16:13*	*1*

Lab Sample ID: LCS 885-20264/2-A
Matrix: Solid
Analysis Batch: 20452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20264

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.5		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*194*		*35 - 166*

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

Lab Sample ID: MB 885-20298/1-A
Matrix: Solid
Analysis Batch: 20239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20298

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		02/04/25 14:09	02/04/25 18:41	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		02/04/25 14:09	02/04/25 18:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*91*		*62 - 134*	*02/04/25 14:09*	*02/04/25 18:41*	*1*

Lab Sample ID: LCS 885-20298/2-A
Matrix: Solid
Analysis Batch: 20239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20298

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	50.3		mg/Kg		101	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-20285/1-A
Matrix: Solid
Analysis Batch: 20268

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20285

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		02/04/25 11:56	02/04/25 15:11	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-19169-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-20285/2-A
Matrix: Solid
Analysis Batch: 20268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20285

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	30.9		mg/Kg		103	90 - 110		

Lab Sample ID: 885-19169-1 MS
Matrix: Solid
Analysis Batch: 20268

Client Sample ID: HA01@ 0-1
Prep Type: Total/NA
Prep Batch: 20285

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		29.7	71.6		mg/Kg		NC	50 - 150		

Lab Sample ID: 885-19169-1 MSD
Matrix: Solid
Analysis Batch: 20268

Client Sample ID: HA01@ 0-1
Prep Type: Total/NA
Prep Batch: 20285

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		29.8	71.8		mg/Kg		NC	50 - 150	0	20

QC Association Summary

Client: Hilcorp Energy
Job ID: 885-19169-1
Project/Site: San Juan 28-4 Unit 26A

GC VOA

Prep Batch: 20264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-1	HA01@ 0-1	Total/NA	Solid	5030C	
885-19169-2	HA01@ 6	Total/NA	Solid	5030C	
MB 885-20264/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-20264/2-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 20452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-1	HA01@ 0-1	Total/NA	Solid	8015M/D	20264
885-19169-2	HA01@ 6	Total/NA	Solid	8015M/D	20264
MB 885-20264/1-A	Method Blank	Total/NA	Solid	8015M/D	20264
LCS 885-20264/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	20264

Analysis Batch: 20453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-1	HA01@ 0-1	Total/NA	Solid	8021B	20264
885-19169-1	HA01@ 0-1	Total/NA	Solid	8021B	20264
885-19169-2	HA01@ 6	Total/NA	Solid	8021B	20264

Analysis Batch: 20491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-2	HA01@ 6	Total/NA	Solid	8021B	20264

GC Semi VOA

Analysis Batch: 20239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-1	HA01@ 0-1	Total/NA	Solid	8015M/D	20298
885-19169-2	HA01@ 6	Total/NA	Solid	8015M/D	20298
MB 885-20298/1-A	Method Blank	Total/NA	Solid	8015M/D	20298
LCS 885-20298/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	20298

Prep Batch: 20298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-1	HA01@ 0-1	Total/NA	Solid	SHAKE	
885-19169-2	HA01@ 6	Total/NA	Solid	SHAKE	
MB 885-20298/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-20298/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Analysis Batch: 20268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-1	HA01@ 0-1	Total/NA	Solid	300.0	20285
885-19169-2	HA01@ 6	Total/NA	Solid	300.0	20285
MB 885-20285/1-A	Method Blank	Total/NA	Solid	300.0	20285
LCS 885-20285/2-A	Lab Control Sample	Total/NA	Solid	300.0	20285
885-19169-1 MS	HA01@ 0-1	Total/NA	Solid	300.0	20285
885-19169-1 MSD	HA01@ 0-1	Total/NA	Solid	300.0	20285

Prep Batch: 20285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-1	HA01@ 0-1	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Hilcorp Energy
Job ID: 885-19169-1
Project/Site: San Juan 28-4 Unit 26A

HPLC/IC (Continued)

Prep Batch: 20285 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19169-2	HA01@ 6	Total/NA	Solid	300_Prep	
MB 885-20285/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-20285/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-19169-1 MS	HA01@ 0-1	Total/NA	Solid	300_Prep	
885-19169-1 MSD	HA01@ 0-1	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-19169-1
Project/Site: San Juan 28-4 Unit 26A

Client Sample ID: HA01@ 0-1
Lab Sample ID: 885-19169-1
Date Collected: 01/31/25 13:20
Matrix: Solid
Date Received: 02/01/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8015M/D		20	20452	AT	EET ALB	02/06/25 16:56
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		20	20453	AT	EET ALB	02/06/25 16:56
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		200	20453	AT	EET ALB	02/06/25 17:18
Total/NA	Prep	SHAKE			20298	MI	EET ALB	02/04/25 14:09
Total/NA	Analysis	8015M/D		1	20239	MI	EET ALB	02/04/25 21:24
Total/NA	Prep	300_Prep			20285	ES	EET ALB	02/04/25 11:56
Total/NA	Analysis	300.0		20	20268	ES	EET ALB	02/04/25 17:57

Client Sample ID: HA01@ 6
Lab Sample ID: 885-19169-2
Date Collected: 01/31/25 13:22
Matrix: Solid
Date Received: 02/01/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8015M/D		100	20452	AT	EET ALB	02/06/25 16:35
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		100	20453	AT	EET ALB	02/06/25 16:35
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		200	20491	AT	EET ALB	02/07/25 11:55
Total/NA	Prep	SHAKE			20298	MI	EET ALB	02/04/25 14:09
Total/NA	Analysis	8015M/D		1	20239	MI	EET ALB	02/04/25 21:34
Total/NA	Prep	300_Prep			20285	ES	EET ALB	02/04/25 11:56
Total/NA	Analysis	300.0		20	20268	ES	EET ALB	02/04/25 18:28

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-19169-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [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	02-25-25

Chain-of-Custody Record

Client: HEC

Attn: Kate Kaufman

Mailing Address:

Phone #:

email or Fax#: KKaufman@Hilcorp.com

QA/QC Package.

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☑ Standard 5day ☐ Rush

Project Name: San Juan 28-4 Unit 26A

Project #:

Project Manager: Stuart Hyde SHyde@ensolum.com

Sampler: Peter Anderson

On Ice: ☑ Yes ☐ No 4oz

# of Coolers: 1

Cooler Temp(including CF): 1.6 +0.1 = 1.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABO

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

885-19169 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/31/25	1320	Soil	HA01 @ 0-1	4oz, 1	Cool		X	X					X			
↓	1322	↓	HA01 @ 6	↓	↓		X	X					X			

Date	Time	Relinquished by	Received by	Via	Date	Time
1/31/25	1520				1/31/25	1528
1/31/25	1722			Courier	2/1/25	7:40

Remarks: CC Pandersan WWeichert @ Ensolum.com

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

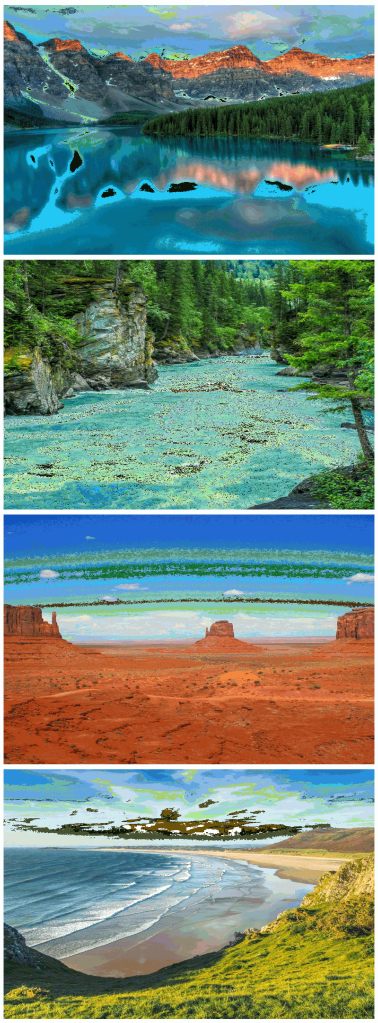
Client: Hilcorp Energy Job Number: 885-19169-1

Login Number: 19169 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

Report to:

Stuart Hyde



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	San Juan 28-4 #26A
Work Order:	E502288
Job Number:	17051-0002
Received:	2/28/2025

Revision: 3

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/4/25

Date Reported: 4/4/25

Stuart Hyde
PO Box 61529
Houston, TX 77208

Project Name: San Juan 28-4 #26A
Workorder: E502288
Date Received: 2/28/2025 1:08:00PM

Stuart Hyde,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/28/2025 1:08:00PM, under the Project Name: San Juan 28-4 #26A.

The analytical test results summarized in this report with the Project Name: San Juan 28-4 #26A apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

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ljarboe@envirotech-inc.com

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Client Representative
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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	04/04/25 09:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
PH01@7.5	E502288-01A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH02@2	E502288-02A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH02@6.5	E502288-03A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH03@6	E502288-04A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH03@8	E502288-05A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH04@4	E502288-06A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH04@7	E502288-07A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH05@2	E502288-08A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.
PH05@6	E502288-09A	Soil	02/27/25	02/28/25	Glass Jar, 4 oz.

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH01@7.5

E502288-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	**29.0**	2.50	100	03/03/25	03/03/25	
Ethylbenzene	**38.9**	2.50	100	03/03/25	03/03/25	
Toluene	**649**	2.50	100	03/03/25	03/03/25	
o-Xylene	**17.7**	2.50	100	03/03/25	03/03/25	
p,m-Xylene	**114**	5.00	100	03/03/25	03/03/25	
Total Xylenes	**132**	2.50	100	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*90.4 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	**5470**	2000	100	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.2 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	**634**	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*404 %*	*61-141*	*03/03/25*	*03/03/25*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH02@2

E502288-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	**0.0271**	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*90.0 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.7 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*111 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH02@6.5

E502288-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	ND	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*88.8 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.7 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*112 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH03@6

E502288-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	ND	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.3 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*109 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH03@8

E502288-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	ND	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.6 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*109 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH04@4

E502288-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	ND	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*95.6 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.0 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*108 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH04@7

E502288-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	ND	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*95.5 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.0 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*111 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH05@2

E502288-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	ND	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*95.9 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.1 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*114 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

PH05@6

E502288-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Benzene	ND	0.0250	1	03/03/25	03/03/25	
Ethylbenzene	ND	0.0250	1	03/03/25	03/03/25	
Toluene	ND	0.0250	1	03/03/25	03/03/25	
o-Xylene	ND	0.0250	1	03/03/25	03/03/25	
p,m-Xylene	ND	0.0500	1	03/03/25	03/03/25	
Total Xylenes	ND	0.0250	1	03/03/25	03/03/25	
Surrogate: 4-Bromochlorobenzene-PID		*96.3 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2510001
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/25	03/03/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.0 %*	*70-130*	*03/03/25*	*03/03/25*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2510004
Diesel Range Organics (C10-C28)	ND	25.0	1	03/03/25	03/03/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/03/25	03/03/25	
Surrogate: n-Nonane		*114 %*	*61-141*	*03/03/25*	*03/03/25*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: AK			Batch: 2510003
Chloride	ND	20.0	1	03/03/25	03/03/25	

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2510001-BLK1)									Prepared: 03/03/25 Analyzed: 03/03/25
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*6.08*		*8.00*		*76.0*	*70-130*			
LCS (2510001-BS1)									Prepared: 03/03/25 Analyzed: 03/03/25
Benzene	4.69	0.0250	5.00		93.9	70-130			
Ethylbenzene	4.58	0.0250	5.00		91.7	70-130			
Toluene	4.67	0.0250	5.00		93.5	70-130			
o-Xylene	4.57	0.0250	5.00		91.4	70-130			
p,m-Xylene	9.32	0.0500	10.0		93.2	70-130			
Total Xylenes	13.9	0.0250	15.0		92.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*6.31*		*8.00*		*78.8*	*70-130*			
LCS Dup (2510001-BSD1)									Prepared: 03/03/25 Analyzed: 03/03/25
Benzene	4.44	0.0250	5.00		88.7	70-130	5.65	20	
Ethylbenzene	4.35	0.0250	5.00		86.9	70-130	5.34	20	
Toluene	4.43	0.0250	5.00		88.5	70-130	5.44	20	
o-Xylene	4.38	0.0250	5.00		87.7	70-130	4.15	20	
p,m-Xylene	8.87	0.0500	10.0		88.7	70-130	5.00	20	
Total Xylenes	13.3	0.0250	15.0		88.3	70-130	4.72	20	
Surrogate: 4-Bromochlorobenzene-PID	*6.41*		*8.00*		*80.1*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2510001-BLK1)									Prepared: 03/03/25 Analyzed: 03/03/25
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.78*		*8.00*		*97.2*	*70-130*			
LCS (2510001-BS2)									Prepared: 03/03/25 Analyzed: 03/03/25
Gasoline Range Organics (C6-C10)	43.8	20.0	50.0		87.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.63*		*8.00*		*95.4*	*70-130*			
LCS Dup (2510001-BSD2)									Prepared: 03/03/25 Analyzed: 03/03/25
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0		87.8	70-130	0.334	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.75*		*8.00*		*96.8*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2510004-BLK1)									Prepared: 03/03/25 Analyzed: 03/03/25
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*61-141*			
LCS (2510004-BS1)									Prepared: 03/03/25 Analyzed: 03/03/25
Diesel Range Organics (C10-C28)	256	25.0	250		103	66-144			
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*61-141*			
Matrix Spike (2510004-MS1)				**Source: E502288-06**					Prepared: 03/03/25 Analyzed: 03/03/25
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	56-156			
Surrogate: n-Nonane	*55.9*		*50.0*		*112*	*61-141*			
Matrix Spike Dup (2510004-MSD1)				**Source: E502288-06**					Prepared: 03/03/25 Analyzed: 03/03/25
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	56-156	1.88	20	
Surrogate: n-Nonane	*58.2*		*50.0*		*116*	*61-141*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	4/4/2025 9:10:34AM

Anions by EPA 300.0/9056A

Analyst: AK

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2510003-BLK1)									Prepared: 03/03/25 Analyzed: 03/03/25
Chloride	ND	20.0							
LCS (2510003-BS1)									Prepared: 03/03/25 Analyzed: 03/03/25
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2510003-MS1)				**Source: E502288-04**					Prepared: 03/03/25 Analyzed: 03/03/25
Chloride	253	20.0	250	ND	101	80-120			
Matrix Spike Dup (2510003-MSD1)				**Source: E502288-04**					Prepared: 03/03/25 Analyzed: 03/03/25
Chloride	253	20.0	250	ND	101	80-120	0.00789	20	

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

Definitions and Notes

Hilcorp Energy Co	Project Name:	San Juan 28-4 #26A	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	04/04/25 09:10

S5	Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
DNR	Did not react with the addition of acid or base.

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

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

Chain of Custody

Client Information		Invoice Information		Lab Use Only		TAT				State				
Client: HEC Attn: Kate Kaufman		Company: HEC Attn: Kate K.		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name: San Juan 28-4 #26A		Address:		E502288	17051-0002	X				X				
Project Manager: Stuart Hyde		City, State, Zip:												
Address:		Phone:												
City, State, Zip:		Email: Kkaufman@hilcorp.com												
Phone:		Miscellaneous:												
Email: Shyde@envirotech.com														

Sample Information							Analysis and Method										EPA Program				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Cation/Anion Pkg		SDWA	CWA	RCRA	
1558	2/27/25	Soil	1,4oz	PH01@7.5		1	X	X	X		X						Compliance	Y	or	N
1556				PH02@2		2											PWSID #				
1554				PH02@6.5		3											Remarks				
1552				PH03@6		4															
1550				PH03@8		5															
1548				PH04@4		6															
1546				PH04@7		7															
1544				PH05@2		8															
1542				PH05@6		9															

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: Peter Anderson

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	2/28/25	07:30	Ecli Carrasco	2/28/25	07:30
Ecli Carrasco	2/28/25	1305	Noe Soto	2-28-25	1308
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Lab Use Only

Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, **v** - VOA

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 2/28/2025 1:46:10PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Hilcorp Energy Co	Date Received:	02/28/25 13:08	Work Order ID:	E502288
Phone:	-	Date Logged In:	02/28/25 13:21	Logged In By:	Noe Soto
Email:	shyde@ensolum.com	Due Date:	03/03/25 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Eric Carroll
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received?	Yes
8. If yes, was cooler received in good condition?	Yes
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
13. If no visible ice, record the temperature. Actual sample temperature: 4°C	

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	No
Collectors name?	No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

envirotech Inc.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/3/2025 9:03:50 AM

JOB DESCRIPTION

San Juan 28-4 Unit 26A

JOB NUMBER

885-22163-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

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
4/3/2025 9:03:50 AM

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

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Laboratory Job ID: 885-22163-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Job ID: 885-22163-1
Project/Site: San Juan 28-4 Unit 26A

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: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Job ID: 885-22163-1 Eurofins Albuquerque

Job Narrative
885-22163-1

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 3/27/2025 7:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C.

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

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

Diesel Range Organics
Method 8015D_DRO: Surrogate recovery for the following samples is outside the upper control limit: (CCV 885-23268/84) and (CCV 885-23268/87). Due to the high bias found in these CCV, associated samples with passing surrogate will be reported and any samples with hits for target analytes with high surrogate will be reran.

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH01@15'

Date Collected: 03/25/25 10:30
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**72**		5.0		mg/Kg		03/27/25 13:09	04/02/25 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*		*35 - 166*	*03/27/25 13:09*	*04/02/25 01:56*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/27/25 13:09	04/02/25 01:56	1
Ethylbenzene	ND		0.050		mg/Kg		03/27/25 13:09	04/02/25 01:56	1
Toluene	**0.063**		0.050		mg/Kg		03/27/25 13:09	04/02/25 01:56	1
Xylenes, Total	**0.29**		0.099		mg/Kg		03/27/25 13:09	04/02/25 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*48 - 145*	*03/27/25 13:09*	*04/02/25 01:56*	*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]	**15**		9.9		mg/Kg		03/28/25 11:29	03/28/25 21:44	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/28/25 11:29	03/28/25 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*109*		*62 - 134*	*03/28/25 11:29*	*03/28/25 21:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59		mg/Kg		03/28/25 08:29	03/28/25 11:48	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH01@20'

Date Collected: 03/25/25 10:39
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		03/27/25 13:09	04/02/25 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*03/27/25 13:09*	*04/02/25 02:17*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 02:17	1
Ethylbenzene	ND		0.047		mg/Kg		03/27/25 13:09	04/02/25 02:17	1
Toluene	ND		0.047		mg/Kg		03/27/25 13:09	04/02/25 02:17	1
Xylenes, Total	ND		0.095		mg/Kg		03/27/25 13:09	04/02/25 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*03/27/25 13:09*	*04/02/25 02:17*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/28/25 11:29	03/28/25 21:55	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/28/25 11:29	03/28/25 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*112*		*62 - 134*	*03/28/25 11:29*	*03/28/25 21:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 12:29	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH01@25'

Date Collected: 03/25/25 10:46
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-3

Matrix: Solid

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		03/27/25 13:09	04/02/25 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*35 - 166*	*03/27/25 13:09*	*04/02/25 02:39*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 02:39	1
Ethylbenzene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 02:39	1
Toluene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 02:39	1
Xylenes, Total	ND		0.096		mg/Kg		03/27/25 13:09	04/02/25 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*48 - 145*	*03/27/25 13:09*	*04/02/25 02:39*	*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]	**10**		9.5		mg/Kg		03/28/25 11:29	03/28/25 22:07	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/28/25 11:29	03/28/25 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*128*		*62 - 134*	*03/28/25 11:29*	*03/28/25 22:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 13:10	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH02@20'

Date Collected: 03/25/25 13:01
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		03/27/25 13:09	04/02/25 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*03/27/25 13:09*	*04/02/25 03:22*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/27/25 13:09	04/02/25 03:22	1
Ethylbenzene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 03:22	1
Toluene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 03:22	1
Xylenes, Total	ND		0.098		mg/Kg		03/27/25 13:09	04/02/25 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*48 - 145*	*03/27/25 13:09*	*04/02/25 03:22*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		03/28/25 11:29	03/28/25 22:19	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/28/25 11:29	03/28/25 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*113*		*62 - 134*	*03/28/25 11:29*	*03/28/25 22:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 13:24	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH02@30'

Date Collected: 03/25/25 13:16
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-5

Matrix: Solid

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		03/27/25 13:09	04/02/25 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*03/27/25 13:09*	*04/02/25 03:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 03:44	1
Ethylbenzene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 03:44	1
Toluene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 03:44	1
Xylenes, Total	ND		0.095		mg/Kg		03/27/25 13:09	04/02/25 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*48 - 145*	*03/27/25 13:09*	*04/02/25 03:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**27**		9.5		mg/Kg		03/28/25 11:29	03/28/25 22:31	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/28/25 11:29	03/28/25 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*117*		*62 - 134*	*03/28/25 11:29*	*03/28/25 22:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 14:05	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH03@10'

Date Collected: 03/25/25 13:53
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-6

Matrix: Solid

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		03/27/25 13:09	04/02/25 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*03/27/25 13:09*	*04/02/25 04:05*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/27/25 13:09	04/02/25 04:05	1
Ethylbenzene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 04:05	1
Toluene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 04:05	1
Xylenes, Total	ND		0.099		mg/Kg		03/27/25 13:09	04/02/25 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*48 - 145*	*03/27/25 13:09*	*04/02/25 04:05*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**23**		9.5		mg/Kg		03/28/25 11:29	03/28/25 22:42	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/28/25 11:29	03/28/25 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*114*		*62 - 134*	*03/28/25 11:29*	*03/28/25 22:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 14:18	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH03@35'

Date Collected: 03/25/25 14:33
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-7

Matrix: Solid

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		03/27/25 13:09	04/02/25 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*03/27/25 13:09*	*04/02/25 04:27*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/27/25 13:09	04/02/25 04:27	1
Ethylbenzene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 04:27	1
Toluene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 04:27	1
Xylenes, Total	ND		0.098		mg/Kg		03/27/25 13:09	04/02/25 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*03/27/25 13:09*	*04/02/25 04:27*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5		mg/Kg		03/28/25 11:29	03/28/25 22:54	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/28/25 11:29	03/28/25 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*	*03/28/25 11:29*	*03/28/25 22:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 14:32	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH04@15'

Date Collected: 03/25/25 15:41
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-8

Matrix: Solid

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		03/27/25 13:09	04/02/25 04:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*35 - 166*	*03/27/25 13:09*	*04/02/25 04:49*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 04:49	1
Ethylbenzene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 04:49	1
Toluene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 04:49	1
Xylenes, Total	ND		0.096		mg/Kg		03/27/25 13:09	04/02/25 04:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*	*03/27/25 13:09*	*04/02/25 04:49*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/28/25 11:29	03/28/25 23:06	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/28/25 11:29	03/28/25 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*109*		*62 - 134*	*03/28/25 11:29*	*03/28/25 23:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 14:45	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH04@35'

Date Collected: 03/26/25 09:05
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		03/27/25 13:09	04/02/25 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*03/27/25 13:09*	*04/02/25 05:10*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 05:10	1
Ethylbenzene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 05:10	1
Toluene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 05:10	1
Xylenes, Total	ND		0.097		mg/Kg		03/27/25 13:09	04/02/25 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*03/27/25 13:09*	*04/02/25 05:10*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/28/25 11:31	03/28/25 23:18	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/28/25 11:31	03/28/25 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*108*		*62 - 134*	*03/28/25 11:31*	*03/28/25 23:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 14:59	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH05@30'

Date Collected: 03/26/25 10:38
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		03/27/25 13:09	04/02/25 05:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*03/27/25 13:09*	*04/02/25 05:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		03/27/25 13:09	04/02/25 05:32	1
Ethylbenzene	ND		0.047		mg/Kg		03/27/25 13:09	04/02/25 05:32	1
Toluene	ND		0.047		mg/Kg		03/27/25 13:09	04/02/25 05:32	1
Xylenes, Total	ND		0.093		mg/Kg		03/27/25 13:09	04/02/25 05:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*03/27/25 13:09*	*04/02/25 05:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**20**		9.5		mg/Kg		03/28/25 11:31	03/28/25 23:41	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/28/25 11:31	03/28/25 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*117*		*62 - 134*	*03/28/25 11:31*	*03/28/25 23:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 15:13	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH05@35'

Date Collected: 03/26/25 10:51
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		03/27/25 13:09	04/02/25 05:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*03/27/25 13:09*	*04/02/25 05:53*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 05:53	1
Ethylbenzene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 05:53	1
Toluene	ND		0.049		mg/Kg		03/27/25 13:09	04/02/25 05:53	1
Xylenes, Total	ND		0.098		mg/Kg		03/27/25 13:09	04/02/25 05:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*48 - 145*	*03/27/25 13:09*	*04/02/25 05:53*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**13**		9.1		mg/Kg		03/28/25 11:31	03/28/25 23:53	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		03/28/25 11:31	03/28/25 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*109*		*62 - 134*	*03/28/25 11:31*	*03/28/25 23:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 15:26	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH06@5'

Date Collected: 03/26/25 11:28
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-15

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		03/27/25 13:09	04/02/25 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*03/27/25 13:09*	*04/02/25 06:15*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 06:15	1
Ethylbenzene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 06:15	1
Toluene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 06:15	1
Xylenes, Total	ND		0.097		mg/Kg		03/27/25 13:09	04/02/25 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*03/27/25 13:09*	*04/02/25 06:15*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/28/25 11:31	03/29/25 00:04	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/28/25 11:31	03/29/25 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*117*		*62 - 134*	*03/28/25 11:31*	*03/29/25 00:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 15:40	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH06@25'

Date Collected: 03/26/25 12:00
Date Received: 03/27/25 07:10

Lab Sample ID: 885-22163-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		03/27/25 13:09	04/02/25 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*03/27/25 13:09*	*04/02/25 06:36*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/27/25 13:09	04/02/25 06:36	1
Ethylbenzene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 06:36	1
Toluene	ND		0.048		mg/Kg		03/27/25 13:09	04/02/25 06:36	1
Xylenes, Total	ND		0.096		mg/Kg		03/27/25 13:09	04/02/25 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*48 - 145*	*03/27/25 13:09*	*04/02/25 06:36*	*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]	**26**		9.5		mg/Kg		03/28/25 11:31	03/29/25 00:16	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/28/25 11:31	03/29/25 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*121*		*62 - 134*	*03/28/25 11:31*	*03/29/25 00:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/28/25 08:29	03/28/25 15:54	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

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

Lab Sample ID: MB 885-23217/1-A
Matrix: Solid
Analysis Batch: 23544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23217

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/27/25 13:09	04/01/25 21:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*03/27/25 13:09*	*04/01/25 21:35*	*1*

Lab Sample ID: LCS 885-23217/2-A
Matrix: Solid
Analysis Batch: 23544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23217

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.6		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*211*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-23217/1-A
Matrix: Solid
Analysis Batch: 23543

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23217

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/27/25 13:09	04/01/25 21:35	1
Ethylbenzene	ND		0.050		mg/Kg		03/27/25 13:09	04/01/25 21:35	1
Toluene	ND		0.050		mg/Kg		03/27/25 13:09	04/01/25 21:35	1
Xylenes, Total	ND		0.10		mg/Kg		03/27/25 13:09	04/01/25 21:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*	*03/27/25 13:09*	*04/01/25 21:35*	*1*

Lab Sample ID: LCS 885-23217/3-A
Matrix: Solid
Analysis Batch: 23543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23217

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.994		mg/Kg		99	70 - 130		
Ethylbenzene			1.00	0.972		mg/Kg		97	70 - 130		
m&p-Xylene			2.00	1.96		mg/Kg		98	70 - 130		
o-Xylene			1.00	0.980		mg/Kg		98	70 - 130		
Toluene			1.00	0.973		mg/Kg		97	70 - 130		
Xylenes, Total			3.00	2.94		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*48 - 145*

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

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

Lab Sample ID: MB 885-23280/1-A
Matrix: Solid
Analysis Batch: 23268

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23280

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/28/25 11:29	03/28/25 19:23	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/28/25 11:29	03/28/25 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*03/28/25 11:29*	*03/28/25 19:23*	*1*

Lab Sample ID: LCS 885-23280/2-A
Matrix: Solid
Analysis Batch: 23268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23280

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	45.9		mg/Kg		92	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-23258/1-A
Matrix: Solid
Analysis Batch: 23272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23258

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		03/28/25 08:29	03/28/25 11:21	1

Lab Sample ID: LCS 885-23258/2-A
Matrix: Solid
Analysis Batch: 23272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23258

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	30.0		mg/Kg		100	90 - 110		

Lab Sample ID: 885-22163-1 MS
Matrix: Solid
Analysis Batch: 23272

Client Sample ID: BH01@15'
Prep Type: Total/NA
Prep Batch: 23258

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

Lab Sample ID: 885-22163-1 MSD
Matrix: Solid
Analysis Batch: 23272

Client Sample ID: BH01@15'
Prep Type: Total/NA
Prep Batch: 23258

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

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-22163-2 MS
Matrix: Solid
Analysis Batch: 23272

Client Sample ID: BH01@20'
Prep Type: Total/NA
Prep Batch: 23258

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

Lab Sample ID: 885-22163-2 MSD
Matrix: Solid
Analysis Batch: 23272

Client Sample ID: BH01@20'
Prep Type: Total/NA
Prep Batch: 23258

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

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

GC VOA

Prep Batch: 23217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-1	BH01@15'	Total/NA	Solid	5030C	
885-22163-2	BH01@20'	Total/NA	Solid	5030C	
885-22163-3	BH01@25'	Total/NA	Solid	5030C	
885-22163-4	BH02@20'	Total/NA	Solid	5030C	
885-22163-5	BH02@30'	Total/NA	Solid	5030C	
885-22163-6	BH03@10'	Total/NA	Solid	5030C	
885-22163-7	BH03@35'	Total/NA	Solid	5030C	
885-22163-8	BH04@15'	Total/NA	Solid	5030C	
885-22163-12	BH04@35'	Total/NA	Solid	5030C	
885-22163-13	BH05@30'	Total/NA	Solid	5030C	
885-22163-14	BH05@35'	Total/NA	Solid	5030C	
885-22163-15	BH06@5'	Total/NA	Solid	5030C	
885-22163-16	BH06@25'	Total/NA	Solid	5030C	
MB 885-23217/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-23217/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-23217/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 23543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-1	BH01@15'	Total/NA	Solid	8021B	23217
885-22163-2	BH01@20'	Total/NA	Solid	8021B	23217
885-22163-3	BH01@25'	Total/NA	Solid	8021B	23217
885-22163-4	BH02@20'	Total/NA	Solid	8021B	23217
885-22163-5	BH02@30'	Total/NA	Solid	8021B	23217
885-22163-6	BH03@10'	Total/NA	Solid	8021B	23217
885-22163-7	BH03@35'	Total/NA	Solid	8021B	23217
885-22163-8	BH04@15'	Total/NA	Solid	8021B	23217
885-22163-12	BH04@35'	Total/NA	Solid	8021B	23217
885-22163-13	BH05@30'	Total/NA	Solid	8021B	23217
885-22163-14	BH05@35'	Total/NA	Solid	8021B	23217
885-22163-15	BH06@5'	Total/NA	Solid	8021B	23217
885-22163-16	BH06@25'	Total/NA	Solid	8021B	23217
MB 885-23217/1-A	Method Blank	Total/NA	Solid	8021B	23217
LCS 885-23217/3-A	Lab Control Sample	Total/NA	Solid	8021B	23217

Analysis Batch: 23544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-1	BH01@15'	Total/NA	Solid	8015M/D	23217
885-22163-2	BH01@20'	Total/NA	Solid	8015M/D	23217
885-22163-3	BH01@25'	Total/NA	Solid	8015M/D	23217
885-22163-4	BH02@20'	Total/NA	Solid	8015M/D	23217
885-22163-5	BH02@30'	Total/NA	Solid	8015M/D	23217
885-22163-6	BH03@10'	Total/NA	Solid	8015M/D	23217
885-22163-7	BH03@35'	Total/NA	Solid	8015M/D	23217
885-22163-8	BH04@15'	Total/NA	Solid	8015M/D	23217
885-22163-12	BH04@35'	Total/NA	Solid	8015M/D	23217
885-22163-13	BH05@30'	Total/NA	Solid	8015M/D	23217
885-22163-14	BH05@35'	Total/NA	Solid	8015M/D	23217
885-22163-15	BH06@5'	Total/NA	Solid	8015M/D	23217
885-22163-16	BH06@25'	Total/NA	Solid	8015M/D	23217
MB 885-23217/1-A	Method Blank	Total/NA	Solid	8015M/D	23217

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

GC VOA (Continued)

Analysis Batch: 23544 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-23217/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	23217

GC Semi VOA

Analysis Batch: 23268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-1	BH01@15'	Total/NA	Solid	8015M/D	23280
885-22163-2	BH01@20'	Total/NA	Solid	8015M/D	23280
885-22163-3	BH01@25'	Total/NA	Solid	8015M/D	23280
885-22163-4	BH02@20'	Total/NA	Solid	8015M/D	23280
885-22163-5	BH02@30'	Total/NA	Solid	8015M/D	23280
885-22163-6	BH03@10'	Total/NA	Solid	8015M/D	23280
885-22163-7	BH03@35'	Total/NA	Solid	8015M/D	23280
885-22163-8	BH04@15'	Total/NA	Solid	8015M/D	23280
885-22163-12	BH04@35'	Total/NA	Solid	8015M/D	23280
885-22163-13	BH05@30'	Total/NA	Solid	8015M/D	23280
885-22163-14	BH05@35'	Total/NA	Solid	8015M/D	23280
885-22163-15	BH06@5'	Total/NA	Solid	8015M/D	23280
885-22163-16	BH06@25'	Total/NA	Solid	8015M/D	23280
MB 885-23280/1-A	Method Blank	Total/NA	Solid	8015M/D	23280
LCS 885-23280/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	23280

Prep Batch: 23280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-1	BH01@15'	Total/NA	Solid	SHAKE	
885-22163-2	BH01@20'	Total/NA	Solid	SHAKE	
885-22163-3	BH01@25'	Total/NA	Solid	SHAKE	
885-22163-4	BH02@20'	Total/NA	Solid	SHAKE	
885-22163-5	BH02@30'	Total/NA	Solid	SHAKE	
885-22163-6	BH03@10'	Total/NA	Solid	SHAKE	
885-22163-7	BH03@35'	Total/NA	Solid	SHAKE	
885-22163-8	BH04@15'	Total/NA	Solid	SHAKE	
885-22163-12	BH04@35'	Total/NA	Solid	SHAKE	
885-22163-13	BH05@30'	Total/NA	Solid	SHAKE	
885-22163-14	BH05@35'	Total/NA	Solid	SHAKE	
885-22163-15	BH06@5'	Total/NA	Solid	SHAKE	
885-22163-16	BH06@25'	Total/NA	Solid	SHAKE	
MB 885-23280/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-23280/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 23258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-1	BH01@15'	Total/NA	Solid	300_Prep	
885-22163-2	BH01@20'	Total/NA	Solid	300_Prep	
885-22163-3	BH01@25'	Total/NA	Solid	300_Prep	
885-22163-4	BH02@20'	Total/NA	Solid	300_Prep	
885-22163-5	BH02@30'	Total/NA	Solid	300_Prep	
885-22163-6	BH03@10'	Total/NA	Solid	300_Prep	
885-22163-7	BH03@35'	Total/NA	Solid	300_Prep	
885-22163-8	BH04@15'	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Hilcorp Energy
Job ID: 885-22163-1
Project/Site: San Juan 28-4 Unit 26A

HPLC/IC (Continued)

Prep Batch: 23258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-12	BH04@35'	Total/NA	Solid	300_Prep	
885-22163-13	BH05@30'	Total/NA	Solid	300_Prep	
885-22163-14	BH05@35'	Total/NA	Solid	300_Prep	
885-22163-15	BH06@5'	Total/NA	Solid	300_Prep	
885-22163-16	BH06@25'	Total/NA	Solid	300_Prep	
MB 885-23258/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-23258/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-22163-1 MS	BH01@15'	Total/NA	Solid	300_Prep	
885-22163-1 MSD	BH01@15'	Total/NA	Solid	300_Prep	
885-22163-2 MS	BH01@20'	Total/NA	Solid	300_Prep	
885-22163-2 MSD	BH01@20'	Total/NA	Solid	300_Prep	

Analysis Batch: 23272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22163-1	BH01@15'	Total/NA	Solid	300.0	23258
885-22163-2	BH01@20'	Total/NA	Solid	300.0	23258
885-22163-3	BH01@25'	Total/NA	Solid	300.0	23258
885-22163-4	BH02@20'	Total/NA	Solid	300.0	23258
885-22163-5	BH02@30'	Total/NA	Solid	300.0	23258
885-22163-6	BH03@10'	Total/NA	Solid	300.0	23258
885-22163-7	BH03@35'	Total/NA	Solid	300.0	23258
885-22163-8	BH04@15'	Total/NA	Solid	300.0	23258
885-22163-12	BH04@35'	Total/NA	Solid	300.0	23258
885-22163-13	BH05@30'	Total/NA	Solid	300.0	23258
885-22163-14	BH05@35'	Total/NA	Solid	300.0	23258
885-22163-15	BH06@5'	Total/NA	Solid	300.0	23258
885-22163-16	BH06@25'	Total/NA	Solid	300.0	23258
MB 885-23258/1-A	Method Blank	Total/NA	Solid	300.0	23258
LCS 885-23258/2-A	Lab Control Sample	Total/NA	Solid	300.0	23258
885-22163-1 MS	BH01@15'	Total/NA	Solid	300.0	23258
885-22163-1 MSD	BH01@15'	Total/NA	Solid	300.0	23258
885-22163-2 MS	BH01@20'	Total/NA	Solid	300.0	23258
885-22163-2 MSD	BH01@20'	Total/NA	Solid	300.0	23258

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH01@15'

Lab Sample ID: 885-22163-1
Matrix: Solid
Date Collected: 03/25/25 10:30
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 01:56
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 01:56
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 21:44
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 11:48

Client Sample ID: BH01@20'

Lab Sample ID: 885-22163-2
Matrix: Solid
Date Collected: 03/25/25 10:39
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 02:17
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 02:17
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 21:55
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 12:29

Client Sample ID: BH01@25'

Lab Sample ID: 885-22163-3
Matrix: Solid
Date Collected: 03/25/25 10:46
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 02:39
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 02:39
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 22:07
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 13:10

Client Sample ID: BH02@20'

Lab Sample ID: 885-22163-4
Matrix: Solid
Date Collected: 03/25/25 13:01
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 03:22

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH02@20'

Lab Sample ID: 885-22163-4
Matrix: Solid
Date Collected: 03/25/25 13:01
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 03:22
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 22:19
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 13:24

Client Sample ID: BH02@30'

Lab Sample ID: 885-22163-5
Matrix: Solid
Date Collected: 03/25/25 13:16
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 03:44
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 03:44
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 22:31
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 14:05

Client Sample ID: BH03@10'

Lab Sample ID: 885-22163-6
Matrix: Solid
Date Collected: 03/25/25 13:53
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 04:05
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 04:05
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 22:42
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 14:18

Client Sample ID: BH03@35'

Lab Sample ID: 885-22163-7
Matrix: Solid
Date Collected: 03/25/25 14:33
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 04:27
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 04:27

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH03@35'

Lab Sample ID: 885-22163-7
Matrix: Solid
Date Collected: 03/25/25 14:33
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 22:54
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 14:32

Client Sample ID: BH04@15'

Lab Sample ID: 885-22163-8
Matrix: Solid
Date Collected: 03/25/25 15:41
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 04:49
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 04:49
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:29
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 23:06
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 14:45

Client Sample ID: BH04@35'

Lab Sample ID: 885-22163-12
Matrix: Solid
Date Collected: 03/26/25 09:05
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 05:10
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 05:10
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:31
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 23:18
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 14:59

Client Sample ID: BH05@30'

Lab Sample ID: 885-22163-13
Matrix: Solid
Date Collected: 03/26/25 10:38
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 05:32
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 05:32
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:31
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 23:41

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Client Sample ID: BH05@30'

Lab Sample ID: 885-22163-13
Matrix: Solid
Date Collected: 03/26/25 10:38
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 15:13

Client Sample ID: BH05@35'

Lab Sample ID: 885-22163-14
Matrix: Solid
Date Collected: 03/26/25 10:51
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 05:53
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 05:53
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:31
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/28/25 23:53
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 15:26

Client Sample ID: BH06@5'

Lab Sample ID: 885-22163-15
Matrix: Solid
Date Collected: 03/26/25 11:28
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 06:15
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 06:15
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:31
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/29/25 00:04
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 15:40

Client Sample ID: BH06@25'

Lab Sample ID: 885-22163-16
Matrix: Solid
Date Collected: 03/26/25 12:00
Date Received: 03/27/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8015M/D		1	23544	AT	EET ALB	04/02/25 06:36
Total/NA	Prep	5030C			23217	AT	EET ALB	03/27/25 13:09
Total/NA	Analysis	8021B		1	23543	AT	EET ALB	04/02/25 06:36
Total/NA	Prep	SHAKE			23280	EM	EET ALB	03/28/25 11:31
Total/NA	Analysis	8015M/D		1	23268	MI	EET ALB	03/29/25 00:16
Total/NA	Prep	300_Prep			23258	DL	EET ALB	03/28/25 08:29
Total/NA	Analysis	300.0		20	23272	RC	EET ALB	03/28/25 15:54

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 28-4 Unit 26A

Job ID: 885-22163-1

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Job ID: 885-22163-1
Project/Site: San Juan 28-4 Unit 26A

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
Mitch Killough
Mailing Address:
Phone #:
email or Fax#: mkillough@hilcorp.com
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 5 day
☒ Standard ☐ Rush
Project Name: San Juan 28-4 Unit 26A
Project #:
Project Manager: Stuart Hyde
shyde@ensolum.com
Sampler: Osgood Froelich
On Ice: ☑ Yes ☐ No
# of Coolers: 1 (Mod)
Cooler Temp(Including CF): 1.4+0.2=1.6 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 8710
Tel. 505-345-3975 Fax 505-345-4107
885-22163 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX	MTBE / TMB's (8021)	TPH.8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)		Place on Hold				
3/25/25	1030	Soil	BH01@15'	4 oz, one	on ice		X		X					X									
	1039		BH01@20'																				
	1046		BH01@25'																				
	1301		BH02@20'																				
	1316		BH02@30'																				
	1353		BH03@10'																				
	1433		BH03@35'																				
	1541		BH04@15'																				
3/25/25	1055	Soil	BH01@30'	4 oz, one	on ice		X		X					X					X				
3/25/25	1108		BH01@35'				X		X					X					X				
3/25/25	1149		BH01@55'				X		X					X					X				

Date	Time	Relinquished by	Received by	Via	Date	Time
3/26/25	1636			Walk	3/26/25	1636
3/26/25	1719			Courier	3/27/25	7:10

Remarks:
cc: shyde@ensolum.com
ofroelich@ensolum.com

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.

Chain-of-Custody Record

Client: Hilcorp

Mitch Killough

Mailing Address:

Phone #:

email or Fax#: mkillough@hilcorp.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
5day
☒ Standard ☐ Rush

Project Name:
San Juan 28-4 Unit 26A

Project #:

Project Manager:
Stuart Hyde
shyde@ensolum.com

Sampler: Osgood Froelich

On Ice: ☐ Yes ☐ No

# of Coolers: 1 Mojo

Cooler Temp(Including CF): 1.4+0.2=1.6 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	(BTEX) MTBE / TMB's (8021)	TPH:8015D GRO / DRO / MRO	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl) F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/26/25	0905	Soil	BH04@35'	4 oz, one	on ice		X	X					X			
	1038		BH05@30'													
	1051		BH05@35'													
	1128		BH06@5'													
	1200		BH06@25'													

Date	Time	Relinquished by	Received by	Via	Date	Time
3/26/25	1636			Walk	3/26/25	1634
3/26/25	1719			courier	3/27/25	7:10

Remarks:
cc: shyde@ensolum.com
ofroelich@ensolum.com

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: 885-22163-1

Login Number: 22163 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

ENSOLUM

APPENDIX E

Field Boring Logs

ENSOLUM

Client: SJ 28-4 Unit 26A
Project Name: Hilcorp
Project Location:
Project Manager: Stuart Hyde

BORING LOG NUMBER: BH01
Project No.:

Date Sampled: 03/25/2025
Drilled By: Enviro-Drill
Driller: Rodney Begay
Logged By: O. Froelich

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate: 36°39.528'
West Coordinate: 107°17.093'

Borehole Diameter: 8"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: N/A
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0							
1							
2							
3							
4	1022						
5		1-1-1	5%	455.9	ML	Sandy Silt -Red/grey, dry, very faint odor, non coh/plst,	
6							
7							
8							
9	1025						
10		50-5"	10%	1958	SW-SM	Well graded sand w/ silt -Green/grey/brown, dry, odor strong, v.f.-med sand, some silt/fines	
11							
12							
13							
14	1030						
15		50-4"	30%	1919	ML	Sandy silt ~~Green~~ Brown to green to grey, dry, odor mild, well ~~green~~ graded sand vf-f, some silt, few gravel	
16							
17							
18							
19	1039						
20		50-3"	40%	2358 ~~2344~~	SW	Well graded sand -Green/tan, dry, odor mild/faint, well graded v.f.-med sand w/ few silts/fines	
21							
22							
23							
24	1046						
25		50-2"	40%	677.2	SW-SM	Well graded sand w/ silt -Greenish tan, dry, ~~very~~ faint odor, v.f.-med sand w/ silt, non coh/plst	

ENSOLUM

Client: SJ 28-4 Unit [redacted] 26A
Project Name: Hilcorp
Project Location:
Project Manager: S. Hyde

BORING LOG NUMBER: BH01
Project No.:

Date Sampled: 03/25/2025
Drilled By: Enviro-Drill
Driller: Rodney B.
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26							
27							
28							
29	1055						
30		50-3"	35%	846.1	SW-SM	Well graded sand w/ silt -Orangish tan, dry, mild odor, v.f.-med sand w/ some silt	
31							
32							
33							
34							
35	1108	50-3"	60%	41.4	SW-SM	Well graded sand w/ silt -Orange brown, dry, no odor, v.f.-med sand w/ some silt	
36							
37							
38							
39	1118						
40		50-5"	40%	175.7	SW-SM	Well graded sand w silt -Brown w/ reddish, orangish, dry, no odor, v.f.-med sand w/ some silt	
41							
42							
43							
44	1126						
45		50-4"	50%	172.3	SW-SM	Well graded sand w/ silt -tan, dry, no o/s, v.f.-med sand, some silt	
46					ML	Silt -red/brown, dry, no o/s, brittle, non coh, non plst	
47							
48						(Slufff = tan well graded sand w/ silt)	
49	1137						
50		50-6"	50%	~~63.9~~ 66.8	ML	Silt reddish brown, dry, no o/s, brittle	

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 26A
Project Location:
Project Manager: S. Hyde

BORING LOG NUMBER: BH01
Project No.:

Date Sampled: 3/25/25
Drilled By: Enviro-Drill
Driller: Rodney
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
50							
51							
52							
53							
54	1149						
55		50-6"	30%	45.2	ML	Silt Red/brown, dry, no o/s, brittle, non coh/plst	
56							
~~32~~							
~~33~~							
~~34~~							
~~35~~							
~~36~~							
~~37~~							
~~38~~							
~~39~~							
~~40~~							
~~41~~							
~~42~~							
~~43~~							
~~44~~							
~~45~~							
~~46~~							
~~47~~							
~~48~~							
~~49~~							
~~50~~							

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 Unit 26A
Project Location:
Project Manager: Stuart Hyde

BORING LOG NUMBER: BH02
Project No.:

Date Sampled: 03/25/2025
Drilled By: Enviro-Drill
Driller: Rodney Begay
Logged By: O. Froelich

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate: 36°39.528'
West Coordinate: 107°17.099'

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0							
1							
2							
3							
4	1245						
5		2-3-7	75%	6.2	SM	~~Sandy Silt~~ Silty Sand	
6						-brown, dry, no o/s, well graded sand v.f.-med w/ silt, non coh/plst	
7							
8							
9	1250						
10		50-3"	30%	4.1	SW-SM	Well graded sand w/ silt	
11						Brown to light tan, dry, v.f.-med sand w/ some silt, non plst/coh	
12							
13							
14	1255						
15		50-4"	30%	6.5	SW	Well graded sand	
16						Tan, dry, no o/s, v.f.-coarse sand, ~~some~~ few silt, non plst/coh, few gravels	
17							
18							
19	1301						
20		50-3"	40%	13.5	SW-SM	Well graded sand w/ silt	
21						Tan, dry, no o/s, v.f.-med sand w/ some silt, non plst/coh	
22							
23							
24	1308					Well graded sand with silt.	
25		50-3"	40%	11.8	SW-SM	-Tan, dry, no o/s, v.f.-med sand w/ more silt than before, non coh/plst	

ENSOLUM

Client:
Project Name: SJ 28-4 26A
Project Location:
Project Manager: S.Hyde

BORING LOG NUMBER: BH02
Project No.:

Date Sampled: 03/25/25
Drilled By: Enviro-Drill
Driller: Rodney
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26							
27							
28							
29	1316						
30		50-3"	15%	7.8	SW-SM	Well graded sand w/ silt Brown, dry, no o/s, v.f.-med sand w/ silt, few gravel	
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 26A
Project Location:
Project Manager: Stuart Hyde

BORING LOG NUMBER: BH03
Project No.:

Date Sampled: 03/25/2025
Drilled By: Enviro-Drill
Driller: Rodney Begay
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate: 36° 39.523'
West Coordinate: 107° 17.093'

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0–3							
4	1348						
5–6		11-11-20	75%	6.8	ML	Sandy silt Brown / light brown, dry, organic odor, no stain, silt w/ v.f.-med sand, non coh/plst, brittle, trace clays	
7–8							
9	1353						
10–11		50-3"	25%	23.6	SW-SM	Well graded sand w/ silt + gravel Tan, dry, v.f.-med sand, some silt + gravel, no o/s, non coh/plst, trace organics	
12–13							
14	1400						
15–16		50-3"	50%	4.8	SW-SM	Well graded sand w/ silt Tan, dry, no o/s, v.f.-med sand with some silt and few gravel	
17–18							
19	1408						
20–21		50-3"	40%	4.3	SW-SM	Well graded sand w/ silt Tan, dry, no o/s, v.f.-med. sand w/ silt, non coh/plst	
22–23							
24	1415						
25		13,50-2"	50%	9.0	SW-SM	Well graded sand w/ silt SAA	

ENSOLUM

Client: SJ 28-4 26A
Project Name:
Project Location:
Project Manager: S. Hyde

BORING LOG NUMBER: BH03
Project No.:

Date Sampled: 3/25/25
Drilled By: Enviro-Drill
Driller: Rodney B.
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: ~~MS~~ HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26							
27							
28							
29	1424						
30		50-3"	10%	2.7	SW-SM	Well graded sand w/ silt Tan, dry, no o/s, v.f.-med sand w/ silt, non coh/plst	
31							
32							
33							
34	1433						
35		50-3%	40%	2.0	SW-SM	Well graded sand w/ silt Tan, dry, no o/s, v.f.-med sand w/ some silt and few coarse sand/gravel, non coh/plst	
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 26A
Project Location:
Project Manager: Stuart Hyde

BORING LOG NUMBER: BH04
Project No.:

Date Sampled: 03/25/2025
Drilled By: Enviro-Drill
Driller: Rodney Begay
Logged By: O. Froelich

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate: 36° 39.529'
West Coordinate: 107° 17.087'

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0							
1							
2							
3							
4	1522						
5		3-5-6	75%	11.4	ML	Sandy Silt Brown, dry, no o/s, silt w/ v.f-med sand, firm, non coh/plst, redish	
6							
7							
8							
9	1527						
10		50-4"	25%	22.6		Well graded sand w/ silt Tan/brown, dry, organic odor, no stain, v.f.-med sand w/ silt, non plst/coh	
11							
12							
13							
14	1541						
15		50-4"	50%	48.5		Well graded sand w/ silt Tan, dry, no o/s, v.f.-med sand w/ silt, non plst/coh	
16							
17							
18							
19	1548						
20		50-4"	30%	20.0		Well graded sand w/ silt SAA	
21							
22							
23							
24	1555						
25		50-3"	40%	2.2		Well graded sand w/ silt SAA	

Stop for 3/25

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 26A
Project Location:
Project Manager: S. Hyde

BORING LOG NUMBER: BH04
Project No.:

Date Sampled: 03/26/2025
Drilled By: Enviro-Drill
Driller: Rodney
Logged By: O.F.

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							
26							
27							
28							
29	0913						
30		50-4"	40%	6.9		Well graded sand w/ silt. Tan, dry, no o/s, v.f.-med sand w/ silt and few coarse sand + trace gravel. Non coh/plst	
31							
32							
33							
34	0919						
35		50-3"	50%	5.8		Well graded sand w/ silt + gravel Tan, dry, no o/s, v.f.-med sand w/ some silt, coarse sand, + gravel, non plst/coh.	
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 Unit 26A
Project Location:
Project Manager: Stuart Hyde

BORING LOG NUMBER: BH05
Project No.:

Date Sampled: 03/26/2025
Drilled By: Enviro-Drill
Driller: Rodney Begay
Logged By: O. Froelich

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate: 36° 39.534'
West Coordinate: 107° 17.093'

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0							
1							
2							
3							
4	0952				ML	Sandy silt : brown, dry, no o/s, silt w/ some v.f.-med sand, non coh/plst	
5		12,50-3"	80%	6.9	SW-SM	Well graded sand w/ silt	
6						Tan, dry, v.f-med sand w/ silts, no o/s, non coh/plst	
7							
8							
9	0957						
10		50-3"	20%	7.1	SW	Well graded sand	
11						Tan, dry, no o/s, F-med sand w/ some v.f. sand and few silts	
12							
13							
14	1003						
15		50-4"	20%	2.5	SW-SM	Well graded sand w/ silt	
16						Tan w/ whites + greens, no o/s, dry, v.f. - med sand w/ silts, non coh/plst	
17							
18							
19	1020						
20		50-2"	50%	7.8	SW-SM	Well graded sand w/ silt	
21						-Brownish/greenish tan, dry, no o/s, v.f.- med sand, few silts, trace gravel	
22							
23							
24	1027						
25		50-2"	25%	6.7	SW-SM	Well graded sand w/ silt	
						SAA	

ENSOLUM

Client: Hilcorp
Project Name: SJ 28-4 26A
Project Location:
Project Manager: S. Hyde

BORING LOG NUMBER: BH05
Project No.:

Date Sampled: 03/26/25
Drilled By: Enviro-Drill
Driller: Rodney B
Logged By: O.F.

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:

Borehole Diameter: 8"
Casing Diameter:
Well Materials:
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26							
27							
28							
29	1038						
30		50-3"	20%	12.3	SW-SM	Well graded sand w/ silt Tan w/ reds, dry, no o/s, v.f.-med sand w/ silts, non coh/plst	
31							
32							
33							
34	1051						
35		50-3"	25%	15.1	SW-SM	Well graded sand w/ silt Tan, dry, no o/s, v.f.-med sand w/ silt and few gravel, non coh/pst	
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

ENSOLUM

Client: Hilcorp
Project Name: San Juan 28-4 Unit 26A
Project Location:
Project Manager: Stuart Hyde

BORING LOG NUMBER: BH06 / SV04
Project No.:

Date Sampled: 03/26/2025
Drilled By: Enviro-Drill
Driller: Rodney Begay
Logged By: O. Froelich

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate: 36° 39.530'
West Coordinate: 107° 17.094'

Borehole Diameter: 8"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion:
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION
4	1128					
5		50-6"	75%	38.2	ML	Silt w/ Sand Reddish brown, dry no odor/stain, silt w/ some v.f.-med sand, non coh/plst
6					SW-SM	Well graded sand w/ silt Tan/grey, dry, no o/s, v.f.-med sand w/ silt, non coh/plst
9	1132					(Sluff: reddish brown silt, no/s, dry)
10		50-3"	50%	17.4	SW	Well graded sand Tan, dry, no o/s
13						(Sluff: ~~color~~ SAA - reddish brown silt, dry, no o/s)
14	1139					
15		50-3"	30%	9.8	SW-SM	Well graded sand w/ silt Tan, dry, no o/s, v.f.-med sand w/ silt, non coh/plst
19	1147					
20		50-3"	40%	7.6	SW-SM	Well graded sand w/ silt Tan/brown, dry, no o/s, v.f.-med sand w/ silt, non coh/plst
24	1200					
25		50-3"	25%	6.9	SW-SM	Well graded sand w/ silt SAA

BORING/WELL COMPLETION

- 2' bentonite plug
- sand to 13'
- screen From 15' to 25'
- vapor well set to 25'

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 480793

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 480793
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2502156424**
Incident Name	**NAPP2502156424 SAN JUAN 28-4 UNIT 26A @ 30-039-27636**
Incident Type	**Oil Release**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-039-27636] SAN JUAN 28 4 UNIT #026A**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SAN JUAN 28-4 UNIT 26A
Date Release Discovered	01/21/2025
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Corrosion | Production Tank | Produced Water | Released: 18 BBL | Recovered: 0 BBL | Lost: 18 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Corrosion | Production Tank | Condensate | Released: 24 BBL | Recovered: 0 BBL | Lost: 24 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)	41.72-bbl release (23.84-bbl condensate & 17.88-bbl produced water) due to corrosion.

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Santa Fe, NM 87505

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 480793
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. 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	N/A

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

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 07/01/2025

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QUESTIONS (continued)

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

QUESTIONS

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

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	0
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	10450
GRO+DRO (EPA SW-846 Method 8015M)	10450
BTEX (EPA SW-846 Method 8021B or 8260B)	849
Benzene (EPA SW-846 Method 8021B or 8260B)	29
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	09/01/2025
On what date will (or did) the final sampling or liner inspection occur	09/15/2025
On what date will (or was) the remediation complete(d)	09/15/2025
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	1430
What is the estimated volume (in cubic yards) that will be remediated	635
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Yes
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 07/01/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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QUESTIONS

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

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QUESTIONS (continued)

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QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**443931**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**03/26/2025**
What was the (estimated) number of samples that were to be gathered	**12**
What was the sampling surface area in square feet	**1000**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 480793
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
scwells	Remediation plan approved with the following conditions: 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 of ND. Submit remediation closure report to the OCD by 9/30/2025.	7/2/2025