ENSOLUM

May 15, 2025

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

Re: Remediation Work Plan
San Juan 29-6 Unit 86
Rio Arriba County, New Mexico
Hilcorp Energy Company
NMOCD Incident No: nAPP2401932449

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Work Plan* (Work Plan) for a release at the San Juan 29-6 Unit 86 natural gas production well (Site). The Site is located on private land in Unit N, Section 27, Township 29 North, Range 6 West, Rio Arriba County, New Mexico (Figure 1). This proposed Work Plan includes a summary of delineation activities performed at the Site and the proposed remediation of impacted soil originating from the release of condensate and produced water.

SITE BACKGROUND

On January 18, 2024, during Audio, Visual, and Olfactory (AVO) inspections, a Hilcorp operator noticed melted snow and identified a split dump line, likely cracked from freeze thaw cycles. The operator immediately bull plugged the tank and shut off the dump, stopping the release. Based on tank gauging data, it is estimated that 17 barrels (bbls) of produced water and 16 bbls of condensate were released. Fluids stayed within the secondary containment, and no fluids were able to be recovered, upon discovery of the release.

Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) within 24 hours of discovery via email and submission of a Notification of Release (NOR) both on January 19, 2024. In addition, an initial Form C-141 was submitted on January 29, 2024. NMOCD assigned the release incident number nAPP2401932449.

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 in 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 hydrogeologic 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, National Wetland Inventory (NWI), National Hydrography Dataset (NHD) Geographic Information System (GIS) maps, New Mexico Office of the State Engineer (NMOSE) database, aerial photographs, and Site-specific observations.

The nearest significant watercourse to the Site is an intermittent stream approximately 215 feet northeast of the wellhead and is identified by a dashed blue line on a USGS 7.5-minute quadrangle map. The Site is also less than 300 feet from the nearest wetland (Figure 1). The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake. The nearest fresh water well is USGS well 364049107271901, located 4,250 feet south of the Site with a depth to water of approximately 300 feet below ground surface (bgs). The next closest well with depth to water information is NMOSE permitted well SJ-00059-S-3 (Point of Diversion Summary included as Appendix A), located approximately 7,950 feet east of the Site. The recorded depth to water on the NMOSE database is 146 feet bgs. Based on this information, depth to groundwater at the Site is estimated to be greater than 100 feet bgs. No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile radius from the Site. The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as low potential karst by the Bureau of Land Management (BLM)). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site.

SITE CLOSURE CRITERIA

Based on the information presented above and in accordance with 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:

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

DELINEATION AND SOIL SAMPLING ACTIVITIES

Ensolum personnel conducted initial delineation potholing activities with a hand auger on January 30, 2024. Sampling location HA01 was advanced within the center of the secondary containment berm to a depth of 1.5 feet bgs. Sampling locations HA02 through HA06 were advanced to a depth of 0.5 feet bgs in all cardinal directions surrounding the berm as depicted in Figure 2. Hand auger refusal was encountered between 0.5 feet and 1-foot bgs at all locations.

During delineation activities, Ensolum field screened for the presence of volatile organic compounds (VOCs) using a calibrated photoionization detector (PID). Soil composition consisted of medium to coarse sand interbedded with clay and fine sand.

One soil sample was collected from each hand auger location in order to laterally delineate shallow impacts at the Site. A sample was not submitted from hand auger borehole, HA02, because field screening results were similar to those of HA01 and it was assumed that this borehole contained similar concentrations from ground surface to 0.5-feet bgs. 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 TPH in soil exceeded the applicable NMOCD Closure Criteria at depths of 1-foot to 1.5 feet bgs in sampling location HA01.

Based on the initial laboratory analytical results, Ensolum and Hilcorp returned to the Site on February 5, 2024, with a backhoe in an attempt to vertically delineate impacts. One pothole (PH01) was advanced to a depth of 17 feet bgs, which was the maximum reach of the backhoe. Two samples were collected from PH01 utilizing methods described above and submitted to Eurofins for analysis of BTEX, TPH, and chloride. Analytical results from both samples collected at PH01 exceeded the NMOCD Closure Criteria for TPH. Because vertical impacts were not delineated, Ensolum and Hilcorp returned to the Site on February 22, 2024, with a larger excavator to attempt to delineate vertically; however, refusal with the excavator was encountered at a depth of 19 feet bgs. One sample was collected from the terminus of PH02 and submitted to Eurofins for analysis of BTEX, TPH, and chloride. Laboratory analytical results from this sample also exceeded the NMOCD Closure Criteria for TPH.

Based on the initial pothole sampling results, Ensolum and Hilcorp returned to the Site from April 8 to April 10, 2024, to conduct additional delineation efforts with a hollow stem auger rig with split-spoon sampling capabilities. Additionally, based on the soil composition and TPH concentrations previously detected, soil vapor extraction (SVE) well installation was proposed contemporaneous to drilling. Six boreholes (BH01 through BH06) were advanced to depths varying between 24 feet to 35 feet bgs. During delineation drilling activities, Ensolum personnel logged lithology and field screened soil in the same manner described above. Borehole logs with soil descriptions are included in Appendix B. Several soil samples were collected from each borehole and placed directly into laboratory-provided jars and immediately placed on ice. Samples were submitted to Eurofins for analysis of BTEX, TPH, and chloride by the same methods described above.

Based on field screening results, SVE wells were installed in boreholes BH01, BH03, BH04, BH05, and BH06. Screen intervals were strategically picked based on field screening results and visual impacts. Photographs taken during delineation activities are also provided in Appendix C. Soil samples locations are presented on Figure 2. Sampling notifications provided to the NMOCD are included as Appendix D.

TPH was only detected above the NMOCD Closure Criteria at BH01 at a depth of 10 feet bgs. BTEX, TPH, and chloride were either not detected above laboratory reporting limits or was detected at concentrations below the applicable Closure Criteria in the remaining analyzed samples. Analytical results are summarized in Table 1 and presented on Figure 2. Complete laboratory reports are attached as Appendix E.

CONCLUSIONS REMEDIATION WORK PLAN

Based on soil sampling results described above, it is estimated that impacted soil is present at the Site between the ground surface to a depth of approximately 10 feet bgs. Of note, analytical results from potholes PH01 and PH02 indicate TPH impacted soil is present to depth up to 19 feet bgs; however, based on the extensive sampling performed during the drilling effort, sample results indicate that impacted soil is only present to depths of approximately 10 feet bgs. It is believed that during the advancement of the potholes, impacted soil from the top 10 feet sloughed into the pothole as it was advanced and this impacted soil was incidentally included in the samples collected at depth. Analytical results also indicate TPH impacted soil is likely limited to areas within the immediate vicinity of the secondary containment berm with an approximate areal extent of 1,600 square feet.

Due to the limited vertical and lateral extent of soil impacts, the SVE system will not undergo pilot testing, and the SVE wells will be abandoned. To meet NMOCD Closure Criteria, Hilcorp plans to excavate TPH-impacted soil to the approximate extent shown on Figure 2. Impacted soil will be excavated and transported off-Site for treatment at the Envirotech commercial landfarm located in San Juan County, New Mexico. Based on delineation results, approximately 600 cubic yards of impacted soil is present at the Site requiring excavation and treatment/disposal.

Once field screening indicates impacted soil has been removed, 5-point composite soil samples will be collected at least every 200 square feet from the floor and sidewalls of the excavation. 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. Based on previous analytical results and no prior Closure Criteria exceedances of chloride, Hilcorp is requesting soil samples only be analyzed for TPH and BTEX during confirmation sampling. Once confirmed impacted soil has been removed, the excavation will be backfilled with clean soil and recontoured to match pre-existing conditions at the Site.

Hilcorp will complete the excavation and soil sampling activities within 90 days of the date of approval of this Work Plan by the NMOCD.

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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Attachments:

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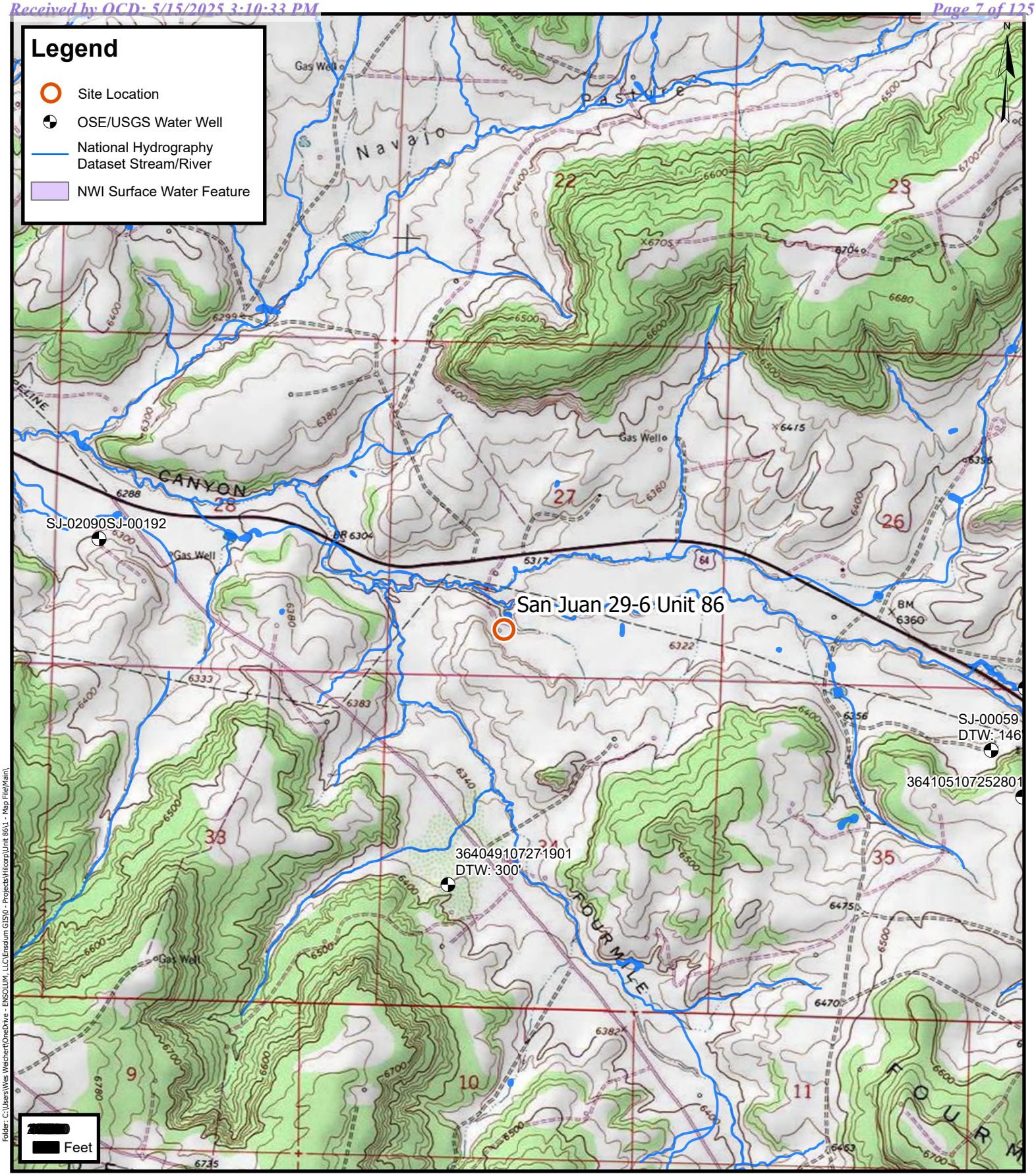
FIGURES



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Site Receptor Map

Hilcorp Energy Company
San Juan 29-6 Unit 86
Incident Number: nAPP2401932449
Unit N, Sec 27, T29N, R6W
Rio Arriba, New Mexico, United States

FIGURE 1

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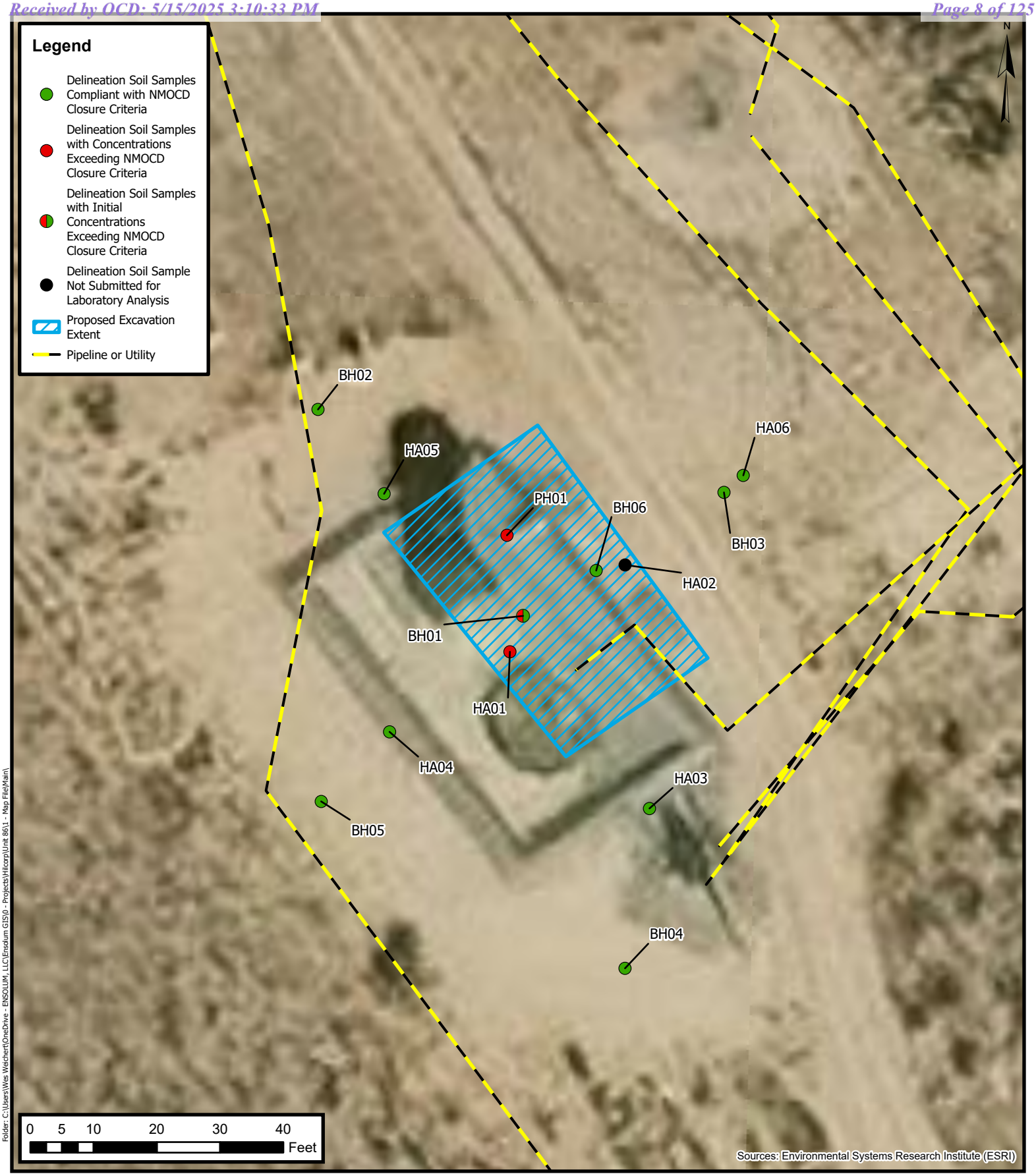

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Environmental, Engineering and Hydrogeologic Consultants

Delineation Soil Sample Locations and Proposed Excavation Extent

Hilcorp Energy Company
San Juan 29-6 Unit 86
Incident Number: nAPP2401932449
Unit N, Sec 27, T29N, R6W
Rio Arriba, New Mexico, United States

FIGURE 2

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TABLES

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TABLE 1
DELINEATION SOIL SAMPLE ANALYTICAL RESULTS
San Juan 29-6 Unit 86
Hilcorp Energy Company
Rio Arriba County, New Mexico

Sample ID	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			**10**	NE	NE	NE	**50**	NE	NE	NE	**100**	**600**
HA01@1-1.5'	1/30/2024	1-1.5	<0.47	6.7	4.3	81	**92.0**	1,300	1,100	<460	**2,400**	<60
HA03@0-0.5'	1/30/2024	0-0.5	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.7	<48	<48	<59
HA04@0-0.5'	1/30/2024	0-0.5	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.2	<46	<46	<60
HA05@0-0.5'	1/30/2024	0-0.5	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.3	<46	<46	<59
HA06@0-0.5'	1/30/2024	0-0.5	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.2	<46	<46	<60
PH01@7'	2/5/2024	7	0.64	34	12	220	**266.64**	2,800	2,100	<490	**4,900**	<60
PH01@17'	2/5/2024	17	<0.025	<0.049	0.11	1.4	1.51	49	83	<48	**132**	<60
PH02@19'	2/22/2024	19	<0.024	0.15	0.24	4.7	5.09	97	160	<42	**257**	<60
BH01@10	4/8/2024	10	<0.040	<1.0	1.4	22	23.4	590	990	<49	**1,580**	<5.0
BH01@15	4/8/2024	15	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.1	<46	<46	<5.0
BH01@20	4/8/2024	20	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	11	<47	11	<5.0
BH01@25	4/8/2024	25	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.2	<46	<46	7.4
BH01@30	4/8/2024	30	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.1	<46	<46	5.1
BH02@15	4/8/2024	15	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.2	<46	<46	11
BH02@30	4/8/2024	30	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.5	<48	<48	<5.0
BH03@15	4/9/2024	15	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.2	<46	<46	<5.0
BH03@24	4/9/2024	24	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<8.8	<44	<44	18
BH04@10	4/9/2024	10	<0.024	<0.049	0.051	<0.097	0.051	20	33	<48	53	17
BH04@15	4/9/2024	15	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<8.6	<43	<43	5.6
BH04@20	4/9/2024	20	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.2	<46	<46	5.1
BH04@25	4/9/2024	25	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.3	<46	<46	13
BH05@10	4/9/2024	10	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.2	<46	<46	<5.0
BH05@15	4/9/2024	15	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<8.8	<44	<44	<5.0
BH05@20	4/9/2024	20	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.0	<45	<45	<5.0
BH05@30	4/9/2024	30	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<8.7	<43	<43	<5.0
BH06@5	4/10/2024	5	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<8.8	<44	<44	<5.1
BH06@15	4/10/2024	15	<0.025	<0.049	<0.049	<0.099	<0.099	11	18	<49	29	<5.1
BH06@30	4/10/2024	30	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.6	<48	<48	9.4

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
': feet
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
MRO: Motor Oil/Lube Oil Range Organics
TPH: Total Petroleum Hydrocarbon
< : 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

NMOSE Point of Diversion Summary

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	SJ 00059 S-3	3	2	2	35	29N	06W	283171	4062865*

Driller License:	713	**Driller Company:**	MANESS, INC.		
Driller Name:	JAMES MANESS				
Drill Start Date:	04/09/1980	**Drill Finish Date:**	05/13/1980	**Plug Date:**	
Log File Date:	07/13/1982	**PCW Rcv Date:**	06/27/1984	**Source:**	Shallow
Pump Type:	SUBMER	**Pipe Discharge Size:**	2	**Estimated Yield:**	37 GPM
Casing Size:	13.38	**Depth Well:**	561 feet	**Depth Water:**	146 feet

Water Bearing Stratifications:	Top	Bottom	Description
	95	100	Shallow Alluvium/Basin Fill
	115	150	Shallow Alluvium/Basin Fill
	495	561	Shallow Alluvium/Basin Fill

Casing Perforations:	Top	Bottom
	115	150
	490	558

***UTM location was derived from PLSS - see Help**

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APPENDIX B

Borehole Logs

Nested

ENSOLUM

Client: Hilcorp
Project Name: San Juan 29-6 U 86
Project Location: "
Project Manager: S. Hyde

BORING LOG NUMBER: BH 02
Project No.:

Date Sampled: 4-8-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: AT

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: Hollow Stem

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
6	X	50/5	30%	>5000	SW	loose Tan, well graded sand, moist, massive, strong odor, no stain	B / S
10				SAA2			
11	X	50/5	60%	7[illegible]K	SW	SAA, sharp contact @ 11'	
12					CL	grayish brown, lean clay, dry massive, med-plasticity, slight odor	S
16	X	22 50/6	50%	1755	CL	SAA, AT Gray, slight odor	B
20	X	50/1	20%	258	CL	stiff, gray, lean clay, dry, massive cohesive siltstone?	B / S

ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 Unit 86
Project Location: "
Project Manager: S. Hyde

BORING LOG NUMBER: BH01
Project No:

Date Sampled: 4-8-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26	X	50/2	20%	70	SW	tan, well graded sand, dense, moist, no odor	S
27							
28							S
29							
30							
31	X	50/1	20%	140	SW	SAA	
32							
33							cuttings
34							
35							
36	X	50/6	20%	33	SC	loose, well graded sand w/ clay moist, no odor	
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 U86
Project Location: 11
Project Manager: S. Hyde

BORING LOG NUMBER: BH02
Project No.:

Date Sampled: 4-8-24
Drilled By: Enviodrill
Driller: Ryan
Logged By: AT

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0–5							No Well
6	X	50/6	25%	4.0	SW	loose, tan, well graded sand, moist, massive, no odor no stain	
11	X	19 50/4	30%	9	CL	grayish brown, lean clay, dry, massive, med-plasticity ~~stiff~~ No HC odor, No stain med-stiff	
16	X	9, 19, 36	65%	41	CL	SAA, gray, moist, stiff	
21	X	50/1	10%	37	CL	AT ~~Stiff~~ very stiff, SAA cohesive	
22–25							

ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 v 86
Project Location: "
Project Manager: S. Hyde

BORING LOG NUMBER: BH02
Project No.:

Date Sampled: 4-8-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26	X	50/4	40%	21	CL	SAA, sharp contact @ 26'	
27					SW	med-dense, light tan well graded S moist, no odor	
28							NO well
29							
30							
31	X	50/3	15%	15	SW	med-dense, gray, well graded sand, moist, no odor	
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 29-6 UBG
Project Location: SJ 29-6 U86
Project Manager: S. Hyde

BORING LOG NUMBER: BH03
Project No.:

Date Sampled: 4-9-24
Drilled By: Enviodrill
Driller: Ryan
Logged By: AT

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
0							G
1							
2							
3							
4							
5	X	50/2	10%	2	SW	med-dense, reddish brown well graded sand, moist, massive, few fines, No odor, some FeO_3 no stain	
6							
7							
8							
9							
10	X	50/5	20%	1	CL	medium, light brown/olive, lean clay, dry, massive No odor, No stain	Grout
11							
12							
13							
14							
15	X	15, 28, 50/5	100%	3	CL	SAA, light gray No odor, No stain	
16							
17							
18							
19							G
20							B
21	X	50/3	15%	3	CL	SAA	
22							B
23							
24	X	50/4	15%	5	SW	Dense, gray, well graded sand, moist, No odor, no stain Refusal @ 24' AT	S
25							

G
Grout
G
B
B
S

ENSOLUM

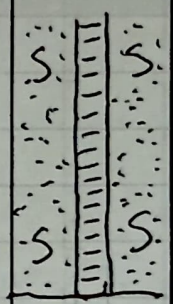
Client: Hilcorp
Project Name: SJ 29-6 U86
Project Location: ''
Project Manager: S. Hyde

BORING LOG NUMBER: BH03
Project No.:

Date Sampled: 4-9-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4''
Casing Diameter: 2''
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25–50						Re-drilled BH03, initially refusal @24'. Re-drill got all the way to 30' but no additional samples.	

ENSOLUM

Client: HEC
Project Name: SJ 29-6 U 86
Project Location: SJ 29-6 U86
Project Manager: S. Hyde

BORING LOG NUMBER: BH04
Project No.:

Date Sampled: 4-9-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION
6		50/5	10%	6	SW	Loose, tan/brown well graded sand, moist, massive, No odor, No stain
10						
11		18, 50/5	20%	2550	SW	SAA, sharp contact @ 11'
12					CL	soft, brown lean clay, moist, massive, ~~No~~ odor, No stain strong
15						
16		18, 32, 50/5	50%	420	CL	stiff gray lean clay, dry, massive, some FeO_3 strong odor
20						
21		50/6	10%	320	CL	SAA, light gray, cohesive slight odor

BORING/WELL COMPLETION

ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 U 86
Project Location: "
Project Manager: S. Hyde

BORING LOG NUMBER: BH04
Project No.:

Date Sampled: 4-9-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26	X	50/2	15%	75	CL	SAA, sharp contact @ 26'	Clean Backfill
27					SW	tan well graded sand, dense, moist, massive, no odor/stain	
28							
29							
30							
31	X	50/3	20%	31	SW	Gray well graded sand, dense moist, massive, no odor/stain	
32							
33							
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ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 U 86
Project Location: 11
Project Manager: S. Hyde

BORING LOG NUMBER: BH05
Project No.:

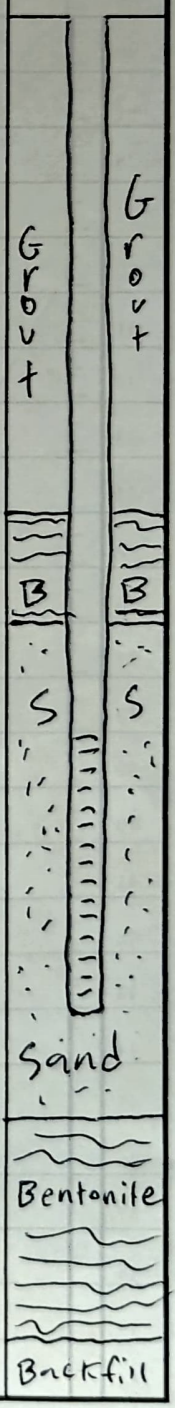
Date Sampled: 4-9-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thonson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION
5	X	50/5	15%	4	SW	Tan/brown, loose, well graded sand moist, massive, few gravel, no odor, no stain
11	X	19, 22, 29	85%	685	CL	Dark brown, soft, lean clay moist, massive, med-plasticity slight odor, no stain
16	X	22, 21, 29	80%	2040	CL	SAA, light brown, dry
21	X	50/3	10%	37	CL	Stiff, gray lean clay, dry massive cohesive slight odor

BORING/WELL COMPLETION



ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 U86
Project Location: "
Project Manager: S. Hyde

BORING LOG NUMBER: BH05
Project No.:

Date Sampled: 4-9-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25–27		50/1	5%	105	CL	stiff, gray lean clay massive, cohesive, dry slight odor	clean cuttings
30–32		50/1	10%	147	SW	med-dense, gray well graded sand, moist, No odor	

B 30-24, S 24-21, Screen

Nested

ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 U86
Project Location: "
Project Manager: S. Hyde

BORING LOG NUMBER: BH06
Project No.:

Date Sampled: 4-10-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION
5		50/5	15%	325	SW	red-dense, tan well graded Sand, moist, massive, slight odor, no stain
10		18, 50	40%	195	CL	~~soft~~ stiff, brown lean clay, moist massive mod odor
15		17, 22, 28	70%	2900	CL	medium, gray lean clay, moist, massive Strong odor
20		40, 50/4	50%	795	CL	SAA Mod odor

BORING/WELL COMPLETION

- ft screen bottom, 6-11

ENSOLUM

Client: Hilcorp
Project Name: SJ 29-6 U 86
Project Location: "
Project Manager: S. Hyde

BORING LOG NUMBER: BH06
Project No:

Date Sampled: 4-10-24
Drilled By: Envirodrill
Driller: Ryan
Logged By: Al Thomson

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

Borehole Diameter: 4"
Casing Diameter: 2"
Well Materials: PVC
Surface Completion: Flush
Boring Method: HSA

DEPTH (FEET)	SAMPLE INTERVAL	BLOW COUNT	RECOVERY (%)	FID/PID READING (PPM)	USCS SYMBOL	GEOLOGIC DESCRIPTION	BORING/WELL COMPLETION
25							
26	X	50/2	10%	388	CL	SAA, sharp contact @26'	
27					SW	tan, well graded sand, dense, moist, mod odor	S
28							
29							S
30	X	50/1	10%	108	SW	SAA, No odor	
31							
32							
33							
34							
35							
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ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
Hilcorp Energy Company
San Juan 29-6 Unit 86
Rio Arriba County, New Mexico

Photograph: 1 Date: 2/5/2024
Description: Pothole PH01
View: West

Photograph: 2 Date: 2/22/2024
Description: Pothole PH02
View: West

Photograph: 3 Date: 4/10/2024
Description: Boring BH01 completed as SVE well
View: South

Photograph: 4 Date: 4/10/2024
Description: Borings BH01 and BH06 as SVE wells
View: Southwest

ENSOLUM

APPENDIX D

Sampling Notifications

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 306958
Date: Tuesday, January 23, 2024 2:55:56 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#) nAPP2401932449.

The sampling event is expected to take place:

When: 01/30/2024 @ 08:30
Where: N-27-29N-06W 790 FSL 1800 FWL (36.6916161,-107.4531784)

Additional Information: Stuart Hyde 970-903-1607 delineation sampling, sampling surface area not representative of release extent.

Additional Instructions: API #: 30-039-07516 (36.691501, -107.45259)

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: 310112
Date: Wednesday, January 31, 2024 3:24:25 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#) nAPP2401932449.

The sampling event is expected to take place:

When: 02/05/2024 @ 08:30
Where: N-27-29N-06W 790 FSL 1800 FWL (36.6916161,-107.4531784)

Additional Information: Stuart Hyde (970) 903-1607
Delineation sampling, the sampling surface area maybe less than 30,000 sq ft

Additional Instructions: 36.6916161,-107.4531784

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: 315250
Date: Friday, February 16, 2024 1:42:11 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#) nAPP2401932449.

The sampling event is expected to take place:

When: 02/22/2024 @ 08:30
Where: N-27-29N-06W 790 FSL 1800 FWL (36.6916161,-107.4531784)

Additional Information: Stuart Hyde
970-903-1607
Delineation sampling only. Sampling surface area and number of samples may be less than 30,000 sq ft and 20 samples.

Additional Instructions: San Juan 29-6 Unit 86 (API: 30-039-07516) in Rio Arriba County (36.6916161,-107.4531784)

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: 328715
Date: Tuesday, April 2, 2024 8:12:11 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#) nAPP2401932449.

The sampling event is expected to take place:

When: 04/08/2024 @ 08:30
Where: N-27-29N-06W 790 FSL 1800 FWL (36.6916161,-107.4531784)

Additional Information: Contact PM Stuart Hyde; 970-903-1607; delineation drilling, sampling surface area is based one call utility locate area where drilling will occur. Five boreholes proposed with 2 samples each.

Additional Instructions: San Juan 29-6 Unit 86 (API: 30-039-07516) in Rio Arriba County (36.6916161,-107.4531784).

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: 328718
Date: Tuesday, April 2, 2024 8:13:26 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#) nAPP2401932449.

The sampling event is expected to take place:

When: 04/09/2024 @ 08:30
Where: N-27-29N-06W 790 FSL 1800 FWL (36.6916161,-107.4531784)

Additional Information: Contact PM Stuart Hyde; 970-903-1607; delineation drilling, sampling surface area is based one call utility locate area where drilling will occur. Five boreholes proposed with 2 samples each.

Additional Instructions: San Juan 29-6 Unit 86 (API: 30-039-07516) in Rio Arriba County (36.6916161,-107.4531784).

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: 328723
Date: Tuesday, April 2, 2024 8:14:55 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#) nAPP2401932449.

The sampling event is expected to take place:

When: 04/10/2024 @ 08:30
Where: N-27-29N-06W 790 FSL 1800 FWL (36.6916161,-107.4531784)

Additional Information: Contact PM Stuart Hyde; 970-903-1607; delineation drilling, sampling surface area is based one call utility locate area where drilling will occur. Five boreholes proposed with 2 samples each.

Additional Instructions: San Juan 29-6 Unit 86 (API: 30-039-07516) in Rio Arriba County (36.6916161,-107.4531784).

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: Velez, Nelson, EMNRD
To: Stuart Hyde
Cc: Kate Kaufman; Wes Weichert
Subject: Re: [EXTERNAL] nAPP2401932449 - Hilcorp Energy Company San Juan 29-6 Unit 86 Extension Request
Date: Tuesday, May 13, 2025 7:28:59 AM
Attachments: image001.png
image002.png
image003.png
Outlook-qzkduccc.png

[**EXTERNAL EMAIL**]
Good morning Stuart,

Thanks for the correspondence. My apology for the late response.

Your 30-day time extension is approved. Remediation Due date has been updated to June 4, 2025.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Regards,

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Stuart Hyde <shyde@ensolum.com>
Sent: Friday, May 2, 2025 10:46 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Kate Kaufman <kkaufman@hilcorp.com>; Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] nAPP2401932449 - Hilcorp Energy Company San Juan 29-6 Unit 86 Extension Request

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

Nelson,

On behalf of Hilcorp Energy Company, we are submitting this extension request for the San Juan 29-6 Unit 86 site located in Rio Arriba County. At this time, we have received a denial from the BLM to construct a small landfarm on BLM surface. As such, we are working with the landowner on the proposed remediation technique before finalizing the remediation work plan.

We request a 30-day extension to the reporting deadline of May 5, 2025, with a new reporting deadline of June 4, 2025.

Please let us know if you have any questions.

Thanks,

Stuart Hyde, PG
(Licensed in TX, WA, & WY)
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

ENSOLUM

APPENDIX E

Laboratory Analytical Reports

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 13, 2024

Samantha Grabert
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX:

RE: SJ 29 6 Unit 86 OrderNo.: 2401B92

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 6 sample(s) on 1/31/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2401B92**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: HA01@1-1.5'
Project: SJ 29 6 Unit 86
Collection Date: 1/30/2024 9:18:00 AM
Lab ID: 2401B92-001 **Matrix:** SOIL **Received Date:** 1/31/2024 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	1100	92		mg/Kg	10	2/5/2024 11:52:00 AM
Motor Oil Range Organics (MRO)	ND	460	D	mg/Kg	10	2/5/2024 11:52:00 AM
Surr: DNOP	0	61.2-134	S	%Rec	10	2/5/2024 11:52:00 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	1300	94		mg/Kg	20	2/5/2024 3:25:09 PM
Surr: BFB	448	15-244	S	%Rec	20	2/5/2024 3:25:09 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.47		mg/Kg	20	2/5/2024 3:25:09 PM
Toluene	6.7	0.94		mg/Kg	20	2/5/2024 3:25:09 PM
Ethylbenzene	4.3	0.94		mg/Kg	20	2/5/2024 3:25:09 PM
Xylenes, Total	81	1.9		mg/Kg	20	2/5/2024 3:25:09 PM
Surr: 4-Bromofluorobenzene	109	39.1-146		%Rec	20	2/5/2024 3:25:09 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	2/3/2024 12:25:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2401B92**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: HA03@0-0.5'
Project: SJ 29 6 Unit 86
Collection Date: 1/30/2024 10:07:00 AM
Lab ID: 2401B92-003 **Matrix:** SOIL **Received Date:** 1/31/2024 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/2/2024 5:04:26 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/2/2024 5:04:26 PM
Surr: DNOP	108	61.2-134		%Rec	1	2/2/2024 5:04:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/5/2024 1:01:15 PM
Surr: BFB	104	15-244		%Rec	1	2/5/2024 1:01:15 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	2/5/2024 1:01:15 PM
Toluene	ND	0.046		mg/Kg	1	2/5/2024 1:01:15 PM
Ethylbenzene	ND	0.046		mg/Kg	1	2/5/2024 1:01:15 PM
Xylenes, Total	ND	0.092		mg/Kg	1	2/5/2024 1:01:15 PM
Surr: 4-Bromofluorobenzene	91.4	39.1-146		%Rec	1	2/5/2024 1:01:15 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	59		mg/Kg	20	2/3/2024 12:38:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2401B92**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: HA04@0-0.5'
Project: SJ 29 6 Unit 86
Collection Date: 1/30/2024 10:21:00 AM
Lab ID: 2401B92-004 **Matrix:** SOIL **Received Date:** 1/31/2024 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	2/2/2024 5:28:04 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/2/2024 5:28:04 PM
Surr: DNOP	105	61.2-134		%Rec	1	2/2/2024 5:28:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/5/2024 1:25:06 PM
Surr: BFB	106	15-244		%Rec	1	2/5/2024 1:25:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/5/2024 1:25:06 PM
Toluene	ND	0.048		mg/Kg	1	2/5/2024 1:25:06 PM
Ethylbenzene	ND	0.048		mg/Kg	1	2/5/2024 1:25:06 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/5/2024 1:25:06 PM
Surr: 4-Bromofluorobenzene	91.4	39.1-146		%Rec	1	2/5/2024 1:25:06 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	2/3/2024 1:17:14 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2401B92**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: HA05@0-0.5'
Project: SJ 29 6 Unit 86
Collection Date: 1/30/2024 10:30:00 AM
Lab ID: 2401B92-005 **Matrix:** SOIL **Received Date:** 1/31/2024 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	2/2/2024 5:51:44 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/2/2024 5:51:44 PM
Surr: DNOP	108	61.2-134		%Rec	1	2/2/2024 5:51:44 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/5/2024 1:49:01 PM
Surr: BFB	106	15-244		%Rec	1	2/5/2024 1:49:01 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/5/2024 1:49:01 PM
Toluene	ND	0.049		mg/Kg	1	2/5/2024 1:49:01 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/5/2024 1:49:01 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/5/2024 1:49:01 PM
Surr: 4-Bromofluorobenzene	92.0	39.1-146		%Rec	1	2/5/2024 1:49:01 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	59		mg/Kg	20	2/3/2024 1:30:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2401B92**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: HA06@0-0.5'
Project: SJ 29 6 Unit 86
Collection Date: 1/30/2024 11:11:00 AM
Lab ID: 2401B92-006 **Matrix:** SOIL **Received Date:** 1/31/2024 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	2/2/2024 6:15:21 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/2/2024 6:15:21 PM
Surr: DNOP	108	61.2-134		%Rec	1	2/2/2024 6:15:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/5/2024 2:12:58 PM
Surr: BFB	102	15-244		%Rec	1	2/5/2024 2:12:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	2/5/2024 2:12:58 PM
Toluene	ND	0.047		mg/Kg	1	2/5/2024 2:12:58 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/5/2024 2:12:58 PM
Xylenes, Total	ND	0.094		mg/Kg	1	2/5/2024 2:12:58 PM
Surr: 4-Bromofluorobenzene	89.6	39.1-146		%Rec	1	2/5/2024 2:12:58 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	2/3/2024 1:42:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B92**

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **MB-80236**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **80236**	RunNo: **102858**
Prep Date: **2/2/2024**	Analysis Date: **2/3/2024**	SeqNo: **3800520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-80236**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **80236**	RunNo: **102858**
Prep Date: **2/2/2024**	Analysis Date: **2/3/2024**	SeqNo: **3800521** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B92**

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **MB-80224**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80224**	RunNo: **102843**
Prep Date: **2/1/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800103** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		123	61.2	134			

Sample ID: **LCS-80224**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80224**	RunNo: **102843**
Prep Date: **2/1/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800104** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.4		5.000		127	69	147			

Sample ID: **MB-80220**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80220**	RunNo: **102843**
Prep Date: **2/1/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	61.2	134			

Sample ID: **LCS-80220**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80220**	RunNo: **102843**
Prep Date: **2/1/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800109** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	117	61.9	130			
Surr: DNOP	5.9		5.000		119	69	147			

Sample ID: **MB-80223**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80223**	RunNo: **102856**
Prep Date: **2/1/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800484** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		107	61.2	134			

Sample ID: **LCS-80223**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80223**	RunNo: **102856**
Prep Date: **2/1/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800485** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B92**

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **LCS-80223**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80223**	RunNo: **102856**
Prep Date: **2/1/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800485** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.3	59.7	135			
Surr: DNOP	5.1		5.000		102	61.2	134			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B92**

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **lcs-80192**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **80192**	RunNo: **102837**
Prep Date: **1/31/2024**	Analysis Date: **2/2/2024**	SeqNo: **3799767** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	70	130			
Surr: BFB	2200		1000		222	15	244			

Sample ID: **mb-80192**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **80192**	RunNo: **102837**
Prep Date: **1/31/2024**	Analysis Date: **2/2/2024**	SeqNo: **3799768** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	15	244			

Sample ID: **lcs-80203**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3800986** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	2100		1000		206	15	244			

Sample ID: **mb-80203**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3800987** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.1	15	244			

Sample ID: **2401b92-003ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **HA03@0-0.5'**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3801432** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.6	23.06	0	96.8	70	130			
Surr: BFB	1900		922.5		208	15	244			

Sample ID: **2401b92-003amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **HA03@0-0.5'**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3801433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B92**

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **2401b92-003amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **HA03@0-0.5'**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3801433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.6	23.17	0	97.5	70	130	1.20	20	
Surr: BFB	1900		926.8		210	15	244	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B92**

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **LCS-80192**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80192**	RunNo: **102837**
Prep Date: **1/31/2024**	Analysis Date: **2/2/2024**	SeqNo: **3799772** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.0	70	130			
Toluene	0.89	0.050	1.000	0	88.8	70	130			
Ethylbenzene	0.89	0.050	1.000	0	88.8	70	130			
Xylenes, Total	2.7	0.10	3.000	0	89.2	70	130			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.6	39.1	146			

Sample ID: **mb-80192**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80192**	RunNo: **102837**
Prep Date: **1/31/2024**	Analysis Date: **2/2/2024**	SeqNo: **3799773** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.0	39.1	146			

Sample ID: **LCS-80203**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3800993** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.4	70	130			
Toluene	0.84	0.050	1.000	0	84.2	70	130			
Ethylbenzene	0.85	0.050	1.000	0	85.4	70	130			
Xylenes, Total	2.6	0.10	3.000	0	85.8	70	130			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.1	39.1	146			

Sample ID: **mb-80203**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3800994** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		88.6	39.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B92**

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **2401b92-004ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **HA04@0-0.5'**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/5/2024**	SeqNo: **3801492** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.74	0.024	0.9634	0	77.1	70	130			
Toluene	0.76	0.048	0.9634	0	78.5	70	130			
Ethylbenzene	0.77	0.048	0.9634	0.01027	78.9	70	130			
Xylenes, Total	2.4	0.096	2.890	0.06783	80.4	70	130			
Surr: 4-Bromofluorobenzene	0.87		0.9634		90.5	39.1	146			

Sample ID: **2401b92-004amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **HA04@0-0.5'**	Batch ID: **80203**	RunNo: **102873**
Prep Date: **2/1/2024**	Analysis Date: **2/6/2024**	SeqNo: **3801494** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.71	0.024	0.9653	0	74.0	70	130	3.89	20	
Toluene	0.74	0.048	0.9653	0	76.2	70	130	2.74	20	
Ethylbenzene	0.74	0.048	0.9653	0.01027	76.0	70	130	3.48	20	
Xylenes, Total	2.3	0.097	2.896	0.06783	78.5	70	130	2.14	20	
Surr: 4-Bromofluorobenzene	0.88		0.9653		91.4	39.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2401B92 RcptNo: 1

Received By: Tracy Casarrubias 1/31/2024 7:00:00 AM

Completed By: Tracy Casarrubias 1/31/2024 7:57:08 AM

Reviewed By: SCM 1/31/24

Chain of Custody

1. Is Chain of Custody complete?	Yes ☐	No ☑	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: TMC 1/31/24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

Mailing address is missing on COC- TMC 1/31/24

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.6	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Hilcorp Energy Company

Attn: Samantha Grabert

Mailing Address:

Phone #: 337-781-9630

email or Fax#: samantha.grabert@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: SJ 29-6 Unit 86

Project #:

Project Manager: S. Hyde

Sampler: Al Thomson

On Ice: ☑ Yes ☐ No Yogi

# of Coolers: 1

Cooler Temp(including CF): 4.7 -0.1 = 4.6 (°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. 2401B92	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)	Hold
1-30	9:18	soil	HA01@1-1.5'	1x 4oz	Cool	001	X	X					X				
	9:50		HA02@0-0.5'			002											X
	10:07		HA03@0-0.5'			003	X	X					X				
	1021		HA04@0-0.5'			004											
	1030		HA05@0-0.5'			005											
	11:11		HA06@0-0.5'			006											

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1-30	1500	Al Thomson			1/30/24	1500
1/30/24	1728			courier	1/31/24	7:00

Remarks: Please CC: shyde@ensolum.com

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.

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Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 15, 2024

Samantha Grabert
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX:

RE: San Juan 29 6 Unit 86 OrderNo.: 2402216

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 2 sample(s) on 2/6/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2402216**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH01@7'
Project: San Juan 29 6 Unit 86
Collection Date: 2/5/2024 9:40:00 AM
Lab ID: 2402216-001 **Matrix:** SOIL
Received Date: 2/6/2024 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	2100	97		mg/Kg	10	2/9/2024 12:19:47 PM
Motor Oil Range Organics (MRO)	ND	490	D	mg/Kg	10	2/9/2024 12:19:47 PM
Surr: DNOP	0	61.2-134	S	%Rec	10	2/9/2024 12:19:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	2800	49		mg/Kg	10	2/11/2024 8:59:55 PM
Surr: BFB	1120	15-244	S	%Rec	10	2/11/2024 8:59:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	0.64	0.25		mg/Kg	10	2/11/2024 8:59:55 PM
Toluene	34	0.49		mg/Kg	10	2/11/2024 8:59:55 PM
Ethylbenzene	12	0.49		mg/Kg	10	2/11/2024 8:59:55 PM
Xylenes, Total	220	9.9		mg/Kg	100	2/12/2024 1:07:41 PM
Surr: 4-Bromofluorobenzene	134	39.1-146		%Rec	10	2/11/2024 8:59:55 PM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/9/2024 1:24:49 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402216**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH01@17'
Project: San Juan 29 6 Unit 86
Collection Date: 2/5/2024 10:00:00 AM
Lab ID: 2402216-002 **Matrix:** SOIL
Received Date: 2/6/2024 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	83	9.5		mg/Kg	1	2/9/2024 12:07:57 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2024 12:07:57 PM
Surr: DNOP	88.7	61.2-134		%Rec	1	2/9/2024 12:07:57 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	49	4.9		mg/Kg	1	2/12/2024 1:31:22 PM
Surr: BFB	367	15-244	S	%Rec	1	2/12/2024 1:31:22 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/12/2024 1:31:22 PM
Toluene	ND	0.049		mg/Kg	1	2/12/2024 1:31:22 PM
Ethylbenzene	0.11	0.049		mg/Kg	1	2/12/2024 1:31:22 PM
Xylenes, Total	1.4	0.099		mg/Kg	1	2/12/2024 1:31:22 PM
Surr: 4-Bromofluorobenzene	98.2	39.1-146		%Rec	1	2/12/2024 1:31:22 PM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/9/2024 1:37:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402216**

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 29 6 Unit 86

Sample ID: **MB-80358**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **80358**	RunNo: **103010**
Prep Date: **2/9/2024**	Analysis Date: **2/9/2024**	SeqNo: **3807709** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-80358**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **80358**	RunNo: **103010**
Prep Date: **2/9/2024**	Analysis Date: **2/9/2024**	SeqNo: **3807710** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402216**

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 29 6 Unit 86

Sample ID: **MB-80330**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80330**	RunNo: **102994**
Prep Date: **2/7/2024**	Analysis Date: **2/8/2024**	SeqNo: **3806975** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		112	61.2	134			

Sample ID: **LCS-80330**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80330**	RunNo: **102994**
Prep Date: **2/7/2024**	Analysis Date: **2/8/2024**	SeqNo: **3806976** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	62	10	50.00	0	123	59.7	135			
Surr: DNOP	5.3		5.000		105	61.2	134			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402216**

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 29 6 Unit 86

Sample ID: **lcs-80289**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **80289**	RunNo: **103014**							
Prep Date: **2/7/2024**	Analysis Date: **2/11/2024**	SeqNo: **3807952**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	70	130			
Surr: BFB	2000		1000		203	15	244			

Sample ID: **mb-80289**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **80289**	RunNo: **103014**							
Prep Date: **2/7/2024**	Analysis Date: **2/11/2024**	SeqNo: **3807953**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.7	15	244			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402216**

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 29 6 Unit 86

Sample ID: **LCS-80289**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80289**	RunNo: **103014**
Prep Date: **2/7/2024**	Analysis Date: **2/11/2024**	SeqNo: **3807961** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.1	70	130			
Toluene	0.87	0.050	1.000	0	87.0	70	130			
Ethylbenzene	0.88	0.050	1.000	0	87.7	70	130			
Xylenes, Total	2.6	0.10	3.000	0	87.9	70	130			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.8	39.1	146			

Sample ID: **mb-80289**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80289**	RunNo: **103014**
Prep Date: **2/7/2024**	Analysis Date: **2/11/2024**	SeqNo: **3807962** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	39.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Hilcorp Energy** Work Order Number: **2402216** RcptNo: **1**

Received By: **Tracy Casarrubias** **2/6/2024 6:40:00 AM**

Completed By: **Tracy Casarrubias** **2/6/2024 7:39:21 AM**

Reviewed By: 2/6/24

Chain of Custody

1. Is Chain of Custody complete?	Yes ☐	No ☑	Not Present ☐	
2. How was the sample delivered?	Courier			

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: TMC 2/6/24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address and phone number are missing on COC- TMC 2/6/24

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Hilcorp Energy Company

Attn: Samantha Grabert

Mailing Address:

Phone #:

email or Fax#: Samantha.Grabert@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 29-6 unit 86

Project #:

Project Manager: Stuart Hyde

Sampler: Al Thomson

On Ice: ☑ Yes ☐ No 4.0g

# of Coolers: 1

Cooler Temp(Including CF): 1.4 + 0 = 1.4 (°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. 2407216	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)
2-5	9:40	Soil	PH01@7'	1x 4oz	Cool	001	X	X					X			
↓	10:00	↓	PH01@17'	↓	↓	002	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2-5	1235	Al Thomson				
2/5/24	1742			courier	2/6/24	0940

Remarks: Please CC:
shyde@ensolum.com
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.

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Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 06, 2024

Samantha Grabert
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX

RE: SJ 29 6 Unit 86 OrderNo.: 2402B40

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 1 sample(s) on 2/23/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2402B40**
Date Reported: **3/6/2024**

CLIENT: HILCORP ENERGY
Client Sample ID: PH02@19'
Project: SJ 29 6 Unit 86
Collection Date: 2/22/2024 12:02:00 PM
Lab ID: 2402B40-001 **Matrix:** SOIL
Received Date: 2/23/2024 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	160	8.4		mg/Kg	1	2/28/2024 12:15:43 PM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	2/28/2024 12:15:43 PM
Surr: DNOP	93.0	61.2-134		%Rec	1	2/28/2024 12:15:43 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	97	4.8		mg/Kg	1	2/29/2024 5:00:42 PM
Surr: BFB	320	15-244	S	%Rec	1	2/29/2024 5:00:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/29/2024 5:00:42 PM
Toluene	0.15	0.048		mg/Kg	1	2/29/2024 5:00:42 PM
Ethylbenzene	0.24	0.048		mg/Kg	1	2/29/2024 5:00:42 PM
Xylenes, Total	4.7	0.096		mg/Kg	1	2/29/2024 5:00:42 PM
Surr: 4-Bromofluorobenzene	123	39.1-146		%Rec	1	2/29/2024 5:00:42 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	2/28/2024 4:56:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402B40**

06-Mar-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **LCS-80683**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **80683**	RunNo: **103398**							
Prep Date: **2/28/2024**	Analysis Date: **2/28/2024**	SeqNo: **3825355**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402B40**

06-Mar-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **MB-80670**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80670**	RunNo: **103382**
Prep Date: **2/27/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824505** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	61.2	134			

Sample ID: **LCS-80670**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80670**	RunNo: **103382**
Prep Date: **2/27/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824506** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	107	59.7	135			
Surr: DNOP	6.1		5.000		122	61.2	134			

Sample ID: **MB-80688**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80688**	RunNo: **103382**
Prep Date: **2/28/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824817** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		95.2	61.2	134			

Sample ID: **LCS-80688**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80688**	RunNo: **103382**
Prep Date: **2/28/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824818** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.2	61.2	134			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402B40**

06-Mar-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **lcs-80637**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **80637**	RunNo: **103380**
Prep Date: **2/26/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824465** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	70	130			
Surr: BFB	2000		1000		199	15	244			

Sample ID: **mb-80637**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **80637**	RunNo: **103380**
Prep Date: **2/26/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824466** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	15	244			

Sample ID: **lcs-80684**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **80684**	RunNo: **103426**
Prep Date: **2/28/2024**	Analysis Date: **2/29/2024**	SeqNo: **3826793** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		204	15	244			

Sample ID: **mb-80684**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **80684**	RunNo: **103426**
Prep Date: **2/28/2024**	Analysis Date: **2/29/2024**	SeqNo: **3826794** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	15	244			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402B40**

06-Mar-24

Client: HILCORP ENERGY

Project: SJ 29 6 Unit 86

Sample ID: **LCS-80637**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80637**	RunNo: **103380**
Prep Date: **2/26/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.5	70	130			
Toluene	0.93	0.050	1.000	0	93.5	70	130			
Ethylbenzene	0.95	0.050	1.000	0	95.0	70	130			
Xylenes, Total	2.9	0.10	3.000	0	96.4	70	130			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	39.1	146			

Sample ID: **mb-80637**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80637**	RunNo: **103380**
Prep Date: **2/26/2024**	Analysis Date: **2/28/2024**	SeqNo: **3824471** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	39.1	146			

Sample ID: **LCS-80684**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80684**	RunNo: **103426**
Prep Date: **2/28/2024**	Analysis Date: **2/29/2024**	SeqNo: **3826808** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	39.1	146			

Sample ID: **mb-80684**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80684**	RunNo: **103426**
Prep Date: **2/28/2024**	Analysis Date: **2/29/2024**	SeqNo: **3826809** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	39.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **HILCORP ENERGY** Work Order Number: **2402B40** RcptNo: **1**

Received By: **Juan Rojas** **2/23/2024 7:35:00 AM**

Completed By: **Desiree Dominguez** **2/23/2024 8:02:15 AM**

Reviewed By: SCM 2/23/24

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JM 2/23/24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes	Yogi		

Chain-of-Custody Record

Client: HEC

Attn: Samantha Grabert

Mailing Address:

Phone #:

email or Fax#: SGrabert@Hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard (5 day) ☐ Rush

Project Name: SJ 29-6 Unit 86

Project #:

Project Manager: S. Hyde

Sampler: Peter Anderson

On Ice: ☐ Yes ☐ No

# of Coolers: 1 (Ice)

Cooler Temp(Including CF): 1.9-0=1.9 (°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. 2402B40	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)
2-22-24	1202	Soil	PH02@19'	1-4 oz	Cold	-001	X	X					X			

Date	Time	Relinquished by	Received by	Via	Date	Time
2/22/24	1540				2/22/24	1540
2/22/24	1737			courier	2/23/24	7:35

Remarks:
CC: SHyde
WWeichert@Ensolum.com
Panderson

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.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Samantha Grabert
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 4/28/2024 8:04:17 PM

JOB DESCRIPTION

San Juan 29-6 Unit 86

JOB NUMBER

885-2774-1

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
4/28/2024 8:04:17 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Laboratory Job ID: 885-2774-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

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 29-6 Unit 86

Job ID: 885-2774-1

Job ID: 885-2774-1 Eurofins Albuquerque

Job Narrative
885-2774-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 4/12/2024 6:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.3°C.

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

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

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78410 and analytical batch 880-78517 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.

BH01@10 (885-2774-2), BH01@15 (885-2774-3), BH01@20 (885-2774-4), BH01@25 (885-2774-5), BH01@30 (885-2774-6), BH02@15 (885-2774-8), BH02@30 (885-2774-9) and BH05@10 (885-2774-11)

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 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH01@10

Date Collected: 04/08/24 12:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**590**		100		mg/Kg		04/12/24 13:27	04/16/24 17:01	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*319*	*S1+*	*15 - 244*	*04/12/24 13:27*	*04/16/24 17:01*	*20*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.040		mg/Kg		04/12/24 13:27	04/16/24 17:01	20
Ethylbenzene	**1.4**		1.0		mg/Kg		04/12/24 13:27	04/16/24 17:01	20
Toluene	ND		1.0		mg/Kg		04/12/24 13:27	04/16/24 17:01	20
Xylenes, Total	**22**		2.0		mg/Kg		04/12/24 13:27	04/16/24 17:01	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*		*39 - 146*	*04/12/24 13:27*	*04/16/24 17:01*	*20*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**990**		9.9		mg/Kg		04/12/24 16:06	04/15/24 14:30	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		04/12/24 16:06	04/15/24 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*04/12/24 16:06*	*04/15/24 14:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 17:28	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH01@15

Date Collected: 04/08/24 13:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-3

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 13:27	04/16/24 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*15 - 244*	*04/12/24 13:27*	*04/16/24 17:23*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		04/12/24 13:27	04/16/24 17:23	1
Ethylbenzene	ND		0.047		mg/Kg		04/12/24 13:27	04/16/24 17:23	1
Toluene	ND		0.047		mg/Kg		04/12/24 13:27	04/16/24 17:23	1
Xylenes, Total	ND		0.094		mg/Kg		04/12/24 13:27	04/16/24 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*39 - 146*	*04/12/24 13:27*	*04/16/24 17:23*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		04/12/24 16:06	04/15/24 16:35	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/12/24 16:06	04/15/24 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*04/12/24 16:06*	*04/15/24 16:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 17:42	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH01@20

Date Collected: 04/08/24 13:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6		mg/Kg		04/12/24 13:27	04/16/24 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*15 - 244*	*04/12/24 13:27*	*04/16/24 17:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		04/12/24 13:27	04/16/24 17:45	1
Ethylbenzene	ND		0.046		mg/Kg		04/12/24 13:27	04/16/24 17:45	1
Toluene	ND		0.046		mg/Kg		04/12/24 13:27	04/16/24 17:45	1
Xylenes, Total	ND		0.093		mg/Kg		04/12/24 13:27	04/16/24 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*39 - 146*	*04/12/24 13:27*	*04/16/24 17:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**11**		9.5		mg/Kg		04/12/24 16:06	04/15/24 16:48	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		04/12/24 16:06	04/15/24 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*04/12/24 16:06*	*04/15/24 16:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 17:47	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH01@25

Date Collected: 04/08/24 13:30
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-5

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 13:27	04/16/24 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*15 - 244*	*04/12/24 13:27*	*04/16/24 18:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 13:27	04/16/24 18:08	1
Ethylbenzene	ND		0.049		mg/Kg		04/12/24 13:27	04/16/24 18:08	1
Toluene	ND		0.049		mg/Kg		04/12/24 13:27	04/16/24 18:08	1
Xylenes, Total	ND		0.098		mg/Kg		04/12/24 13:27	04/16/24 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*39 - 146*	*04/12/24 13:27*	*04/16/24 18:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		04/12/24 16:06	04/15/24 17:00	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/12/24 16:06	04/15/24 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*04/12/24 16:06*	*04/15/24 17:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.4**		5.0		mg/Kg			04/17/24 17:52	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH01@30

Date Collected: 04/08/24 13:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-6

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 13:27	04/16/24 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*15 - 244*	*04/12/24 13:27*	*04/16/24 18:30*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 13:27	04/16/24 18:30	1
Ethylbenzene	ND		0.049		mg/Kg		04/12/24 13:27	04/16/24 18:30	1
Toluene	ND		0.049		mg/Kg		04/12/24 13:27	04/16/24 18:30	1
Xylenes, Total	ND		0.098		mg/Kg		04/12/24 13:27	04/16/24 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*39 - 146*	*04/12/24 13:27*	*04/16/24 18:30*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		04/12/24 16:06	04/15/24 17:12	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/12/24 16:06	04/15/24 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*04/12/24 16:06*	*04/15/24 17:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.1**		5.0		mg/Kg			04/17/24 17:57	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH02@15

Date Collected: 04/08/24 14:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-8

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 13:27	04/16/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*15 - 244*	*04/12/24 13:27*	*04/16/24 18:52*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		04/12/24 13:27	04/16/24 18:52	1
Ethylbenzene	ND		0.047		mg/Kg		04/12/24 13:27	04/16/24 18:52	1
Toluene	ND		0.047		mg/Kg		04/12/24 13:27	04/16/24 18:52	1
Xylenes, Total	ND		0.094		mg/Kg		04/12/24 13:27	04/16/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*39 - 146*	*04/12/24 13:27*	*04/16/24 18:52*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		04/12/24 16:06	04/15/24 17:25	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/12/24 16:06	04/15/24 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*	*04/12/24 16:06*	*04/15/24 17:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		5.0		mg/Kg			04/17/24 18:02	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH02@30
Date Collected: 04/08/24 15:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-9
Matrix: Solid

Method: SW846 8015D - 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		04/12/24 13:27	04/16/24 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*15 - 244*	*04/12/24 13:27*	*04/16/24 19:15*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 13:27	04/16/24 19:15	1
Ethylbenzene	ND		0.048		mg/Kg		04/12/24 13:27	04/16/24 19:15	1
Toluene	ND		0.048		mg/Kg		04/12/24 13:27	04/16/24 19:15	1
Xylenes, Total	ND		0.096		mg/Kg		04/12/24 13:27	04/16/24 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*04/12/24 13:27*	*04/16/24 19:15*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5		mg/Kg		04/12/24 16:06	04/15/24 17:37	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		04/12/24 16:06	04/15/24 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*04/12/24 16:06*	*04/15/24 17:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 18:07	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH05@10

Date Collected: 04/09/24 10:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-11

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*15 - 244*	*04/12/24 17:15*	*04/17/24 00:48*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 17:15	04/17/24 00:48	1
Ethylbenzene	ND		0.048		mg/Kg		04/12/24 17:15	04/17/24 00:48	1
Toluene	ND		0.048		mg/Kg		04/12/24 17:15	04/17/24 00:48	1
Xylenes, Total	ND		0.095		mg/Kg		04/12/24 17:15	04/17/24 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*04/12/24 17:15*	*04/17/24 00:48*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		04/15/24 13:24	04/15/24 20:18	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/15/24 13:24	04/15/24 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*04/15/24 13:24*	*04/15/24 20:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 18:12	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH05@15

Date Collected: 04/09/24 10:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		04/12/24 17:15	04/17/24 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*15 - 244*	*04/12/24 17:15*	*04/17/24 01:10*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		04/12/24 17:15	04/17/24 01:10	1
Ethylbenzene	ND		0.050		mg/Kg		04/12/24 17:15	04/17/24 01:10	1
Toluene	ND		0.050		mg/Kg		04/12/24 17:15	04/17/24 01:10	1
Xylenes, Total	ND		0.10		mg/Kg		04/12/24 17:15	04/17/24 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*04/12/24 17:15*	*04/17/24 01:10*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8		mg/Kg		04/15/24 13:24	04/15/24 20:31	1
Motor Oil Range Organics [C28-C40]	ND		44		mg/Kg		04/15/24 13:24	04/15/24 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*92*		*62 - 134*	*04/15/24 13:24*	*04/15/24 20:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 18:50	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH05@20
Date Collected: 04/09/24 10:30
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-13
Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 244*	*04/12/24 17:15*	*04/17/24 01:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		04/12/24 17:15	04/17/24 01:32	1
Ethylbenzene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 01:32	1
Toluene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 01:32	1
Xylenes, Total	ND		0.094		mg/Kg		04/12/24 17:15	04/17/24 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*39 - 146*	*04/12/24 17:15*	*04/17/24 01:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0		mg/Kg		04/15/24 13:24	04/15/24 20:55	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		04/15/24 13:24	04/15/24 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*93*		*62 - 134*	*04/15/24 13:24*	*04/15/24 20:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 19:05	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH05@30

Date Collected: 04/09/24 10:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-15

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*15 - 244*	*04/12/24 17:15*	*04/17/24 01:54*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 17:15	04/17/24 01:54	1
Ethylbenzene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 01:54	1
Toluene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 01:54	1
Xylenes, Total	ND		0.095		mg/Kg		04/12/24 17:15	04/17/24 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*04/12/24 17:15*	*04/17/24 01:54*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.7		mg/Kg		04/15/24 13:24	04/15/24 21:08	1
Motor Oil Range Organics [C28-C40]	ND		43		mg/Kg		04/15/24 13:24	04/15/24 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*	*04/15/24 13:24*	*04/15/24 21:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 19:10	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH04@10

Date Collected: 04/09/24 12:40
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**20**		4.9		mg/Kg		04/12/24 17:15	04/17/24 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*235*		*15 - 244*	*04/12/24 17:15*	*04/17/24 02:16*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 17:15	04/17/24 02:16	1
Ethylbenzene	**0.051**		0.049		mg/Kg		04/12/24 17:15	04/17/24 02:16	1
Toluene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 02:16	1
Xylenes, Total	ND		0.097		mg/Kg		04/12/24 17:15	04/17/24 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*39 - 146*	*04/12/24 17:15*	*04/17/24 02:16*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**33**		9.6		mg/Kg		04/15/24 13:24	04/15/24 21:20	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		04/15/24 13:24	04/15/24 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*95*		*62 - 134*	*04/15/24 13:24*	*04/15/24 21:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17**		5.0		mg/Kg			04/17/24 19:15	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH04@15

Date Collected: 04/09/24 12:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-18

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*15 - 244*	*04/12/24 17:15*	*04/17/24 03:00*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		04/12/24 17:15	04/17/24 03:00	1
Ethylbenzene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 03:00	1
Toluene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 03:00	1
Xylenes, Total	ND		0.099		mg/Kg		04/12/24 17:15	04/17/24 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*39 - 146*	*04/12/24 17:15*	*04/17/24 03:00*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.6		mg/Kg		04/15/24 13:24	04/15/24 21:32	1
Motor Oil Range Organics [C28-C40]	ND		43		mg/Kg		04/15/24 13:24	04/15/24 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*94*		*62 - 134*	*04/15/24 13:24*	*04/15/24 21:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.6**		5.0		mg/Kg			04/17/24 19:19	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH04@20

Date Collected: 04/09/24 13:00
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-19

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 244*	*04/12/24 17:15*	*04/17/24 03:22*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 17:15	04/17/24 03:22	1
Ethylbenzene	ND		0.048		mg/Kg		04/12/24 17:15	04/17/24 03:22	1
Toluene	ND		0.048		mg/Kg		04/12/24 17:15	04/17/24 03:22	1
Xylenes, Total	ND		0.096		mg/Kg		04/12/24 17:15	04/17/24 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*39 - 146*	*04/12/24 17:15*	*04/17/24 03:22*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		04/15/24 13:24	04/15/24 21:44	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/15/24 13:24	04/15/24 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*	*04/15/24 13:24*	*04/15/24 21:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.1**		5.0		mg/Kg			04/17/24 19:34	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH04@25

Date Collected: 04/09/24 13:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-20

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		04/12/24 17:15	04/17/24 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*15 - 244*	*04/12/24 17:15*	*04/17/24 03:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		04/12/24 17:15	04/17/24 03:44	1
Ethylbenzene	ND		0.050		mg/Kg		04/12/24 17:15	04/17/24 03:44	1
Toluene	ND		0.050		mg/Kg		04/12/24 17:15	04/17/24 03:44	1
Xylenes, Total	ND		0.10		mg/Kg		04/12/24 17:15	04/17/24 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*39 - 146*	*04/12/24 17:15*	*04/17/24 03:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		04/15/24 13:24	04/15/24 21:57	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/15/24 13:24	04/15/24 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*94*		*62 - 134*	*04/15/24 13:24*	*04/15/24 21:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		5.0		mg/Kg			04/17/24 19:39	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH03@15

Date Collected: 04/09/24 14:00
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-22

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 244*	*04/12/24 17:15*	*04/17/24 04:06*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 17:15	04/17/24 04:06	1
Ethylbenzene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 04:06	1
Toluene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 04:06	1
Xylenes, Total	ND		0.094		mg/Kg		04/12/24 17:15	04/17/24 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*04/12/24 17:15*	*04/17/24 04:06*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		04/15/24 13:24	04/15/24 22:09	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		04/15/24 13:24	04/15/24 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*	*04/15/24 13:24*	*04/15/24 22:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 19:44	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH03@24

Date Collected: 04/09/24 14:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-23

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 04:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 244*	*04/12/24 17:15*	*04/17/24 04:28*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 17:15	04/17/24 04:28	1
Ethylbenzene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 04:28	1
Toluene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 04:28	1
Xylenes, Total	ND		0.098		mg/Kg		04/12/24 17:15	04/17/24 04:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*04/12/24 17:15*	*04/17/24 04:28*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8		mg/Kg		04/15/24 13:24	04/15/24 22:21	1
Motor Oil Range Organics [C28-C40]	ND		44		mg/Kg		04/15/24 13:24	04/15/24 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*97*		*62 - 134*	*04/15/24 13:24*	*04/15/24 22:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18**		5.1		mg/Kg			04/17/24 19:48	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH06@5

Date Collected: 04/10/24 10:30
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-24

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*15 - 244*	*04/12/24 17:15*	*04/17/24 04:50*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		04/12/24 17:15	04/17/24 04:50	1
Ethylbenzene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 04:50	1
Toluene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 04:50	1
Xylenes, Total	ND		0.099		mg/Kg		04/12/24 17:15	04/17/24 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*39 - 146*	*04/12/24 17:15*	*04/17/24 04:50*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8		mg/Kg		04/15/24 13:24	04/15/24 22:33	1
Motor Oil Range Organics [C28-C40]	ND		44		mg/Kg		04/15/24 13:24	04/15/24 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*04/15/24 13:24*	*04/15/24 22:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.1		mg/Kg			04/17/24 19:53	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH06@15

Date Collected: 04/10/24 10:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-26

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	11		4.9		mg/Kg		04/12/24 17:15	04/17/24 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*166*		*15 - 244*	*04/12/24 17:15*	*04/17/24 05:12*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		04/12/24 17:15	04/17/24 05:12	1
Ethylbenzene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 05:12	1
Toluene	ND		0.049		mg/Kg		04/12/24 17:15	04/17/24 05:12	1
Xylenes, Total	ND		0.099		mg/Kg		04/12/24 17:15	04/17/24 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*39 - 146*	*04/12/24 17:15*	*04/17/24 05:12*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18		9.8		mg/Kg		04/16/24 11:49	04/17/24 12:17	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		04/16/24 11:49	04/17/24 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*120*		*62 - 134*	*04/16/24 11:49*	*04/17/24 12:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.1		mg/Kg			04/17/24 19:58	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH06@30

Date Collected: 04/10/24 11:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-29

Matrix: Solid

Method: SW846 8015D - 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		04/12/24 17:15	04/17/24 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 244*	*04/12/24 17:15*	*04/17/24 05:34*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		04/12/24 17:15	04/17/24 05:34	1
Ethylbenzene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 05:34	1
Toluene	ND		0.047		mg/Kg		04/12/24 17:15	04/17/24 05:34	1
Xylenes, Total	ND		0.094		mg/Kg		04/12/24 17:15	04/17/24 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*39 - 146*	*04/12/24 17:15*	*04/17/24 05:34*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		04/16/24 11:49	04/17/24 12:29	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		04/16/24 11:49	04/17/24 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*04/16/24 11:49*	*04/17/24 12:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.4**		5.0		mg/Kg			04/17/24 20:13	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

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

Lab Sample ID: MB 885-3206/1-A
Matrix: Solid
Analysis Batch: 3430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3206

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		04/12/24 13:27	04/16/24 10:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*15 - 244*	*04/12/24 13:27*	*04/16/24 10:07*	*1*

Lab Sample ID: LCS 885-3206/2-A
Matrix: Solid
Analysis Batch: 3430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3206

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	26.3		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*229*		*15 - 244*

Lab Sample ID: MB 885-3240/1-A
Matrix: Solid
Analysis Batch: 3430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3240

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		04/12/24 17:15	04/16/24 21:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 244*	*04/12/24 17:15*	*04/16/24 21:06*	*1*

Lab Sample ID: LCS 885-3240/2-A
Matrix: Solid
Analysis Batch: 3430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3240

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	26.9		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*226*		*15 - 244*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3206/1-A
Matrix: Solid
Analysis Batch: 3432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3206

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Ethylbenzene	ND		0.050		mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Toluene	ND		0.050		mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Xylenes, Total	ND		0.10		mg/Kg		04/12/24 13:27	04/16/24 10:07	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

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

Lab Sample ID: MB 885-3206/1-A
Matrix: Solid
Analysis Batch: 3432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3206

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		39 - 146	04/12/24 13:27	04/16/24 10:07	1

Lab Sample ID: LCS 885-3206/3-A
Matrix: Solid
Analysis Batch: 3432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.968		mg/Kg		97	70 - 130
Ethylbenzene	1.00	0.969		mg/Kg		97	70 - 130
m&p-Xylene	2.00	1.94		mg/Kg		97	70 - 130
o-Xylene	1.00	0.973		mg/Kg		97	70 - 130
Toluene	1.00	0.963		mg/Kg		96	70 - 130
Xylenes, Total	3.00	2.91		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		39 - 146

Lab Sample ID: MB 885-3240/1-A
Matrix: Solid
Analysis Batch: 3432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3240

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Toluene	ND		0.050	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 17:15	04/16/24 21:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146	04/12/24 17:15	04/16/24 21:06	1

Lab Sample ID: LCS 885-3240/3-A
Matrix: Solid
Analysis Batch: 3432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.962		mg/Kg		96	70 - 130
Ethylbenzene	1.00	0.971		mg/Kg		97	70 - 130
m&p-Xylene	2.00	1.95		mg/Kg		98	70 - 130
o-Xylene	1.00	0.988		mg/Kg		99	70 - 130
Toluene	1.00	0.956		mg/Kg		96	70 - 130
Xylenes, Total	3.00	2.94		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		39 - 146

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

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

Lab Sample ID: MB 885-3233/1-A
Matrix: Solid
Analysis Batch: 3332

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3233

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		04/12/24 16:06	04/15/24 11:00	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		04/12/24 16:06	04/15/24 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*04/12/24 16:06*	*04/15/24 11:00*	*1*

Lab Sample ID: LCS 885-3233/2-A
Matrix: Solid
Analysis Batch: 3332

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3233

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	49.0		mg/Kg		98	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*109*		*62 - 134*

Lab Sample ID: MB 885-3301/1-A
Matrix: Solid
Analysis Batch: 3332

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3301

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		04/15/24 13:24	04/15/24 18:02	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		04/15/24 13:24	04/15/24 18:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*	*04/15/24 13:24*	*04/15/24 18:02*	*1*

Lab Sample ID: LCS 885-3301/2-A
Matrix: Solid
Analysis Batch: 3332

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3301

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	47.4		mg/Kg		95	60 - 135		

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

Lab Sample ID: 885-2774-24 MS
Matrix: Solid
Analysis Batch: 3332

Client Sample ID: BH06@5
Prep Type: Total/NA
Prep Batch: 3301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	ND		46.9	43.5		mg/Kg		93	44 - 136		

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

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

Lab Sample ID: 885-2774-24 MS
Matrix: Solid
Analysis Batch: 3332

Client Sample ID: BH06@5
Prep Type: Total/NA
Prep Batch: 3301

Surrogate	MS %Recovery	MS Qualifier	Limits
Di-n-octyl phthalate (Surr)	105		62 - 134

Lab Sample ID: 885-2774-24 MSD
Matrix: Solid
Analysis Batch: 3332

Client Sample ID: BH06@5
Prep Type: Total/NA
Prep Batch: 3301

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		45.4	43.4		mg/Kg		96	44 - 136	0	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Di-n-octyl phthalate (Surr)	104		62 - 134

Lab Sample ID: MB 885-3340/1-A
Matrix: Solid
Analysis Batch: 3484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3340

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		04/16/24 11:49	04/17/24 16:58	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		04/16/24 11:49	04/17/24 16:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	129		62 - 134	04/16/24 11:49	04/17/24 16:58	1

Lab Sample ID: LCS 885-3340/2-A
Matrix: Solid
Analysis Batch: 3484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3340

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	63.7		mg/Kg		127	60 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	127		62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78410/1-A
Matrix: Solid
Analysis Batch: 78517

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 15:46	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-78410/2-A
Matrix: Solid
Analysis Batch: 78517

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	250		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-78410/3-A
Matrix: Solid
Analysis Batch: 78517

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	256		mg/Kg		102	90 - 110	3	20

Lab Sample ID: MB 880-78411/1-A
Matrix: Solid
Analysis Batch: 78519

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0		mg/Kg			04/17/24 18:36	1

Lab Sample ID: LCS 880-78411/2-A
Matrix: Solid
Analysis Batch: 78519

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-78411/3-A
Matrix: Solid
Analysis Batch: 78519

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 885-2774-12 MS
Matrix: Solid
Analysis Batch: 78519

Client Sample ID: BH05@15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		252	251		mg/Kg		98	90 - 110		

Lab Sample ID: 885-2774-12 MSD
Matrix: Solid
Analysis Batch: 78519

Client Sample ID: BH05@15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		252	250		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 885-2774-26 MS
Matrix: Solid
Analysis Batch: 78519

Client Sample ID: BH06@15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		253	252		mg/Kg		98	90 - 110		

QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 885-2774-26 MSD
Matrix: Solid
Analysis Batch: 78519

Client Sample ID: BH06@15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		253	251		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

GC VOA

Prep Batch: 3206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-2	BH01@10	Total/NA	Solid	5030C	
885-2774-3	BH01@15	Total/NA	Solid	5030C	
885-2774-4	BH01@20	Total/NA	Solid	5030C	
885-2774-5	BH01@25	Total/NA	Solid	5030C	
885-2774-6	BH01@30	Total/NA	Solid	5030C	
885-2774-8	BH02@15	Total/NA	Solid	5030C	
885-2774-9	BH02@30	Total/NA	Solid	5030C	
MB 885-3206/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3206/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3206/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 3240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-11	BH05@10	Total/NA	Solid	5030C	
885-2774-12	BH05@15	Total/NA	Solid	5030C	
885-2774-13	BH05@20	Total/NA	Solid	5030C	
885-2774-15	BH05@30	Total/NA	Solid	5030C	
885-2774-17	BH04@10	Total/NA	Solid	5030C	
885-2774-18	BH04@15	Total/NA	Solid	5030C	
885-2774-19	BH04@20	Total/NA	Solid	5030C	
885-2774-20	BH04@25	Total/NA	Solid	5030C	
885-2774-22	BH03@15	Total/NA	Solid	5030C	
885-2774-23	BH03@24	Total/NA	Solid	5030C	
885-2774-24	BH06@5	Total/NA	Solid	5030C	
885-2774-26	BH06@15	Total/NA	Solid	5030C	
885-2774-29	BH06@30	Total/NA	Solid	5030C	
MB 885-3240/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3240/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3240/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 3430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-2	BH01@10	Total/NA	Solid	8015D	3206
885-2774-3	BH01@15	Total/NA	Solid	8015D	3206
885-2774-4	BH01@20	Total/NA	Solid	8015D	3206
885-2774-5	BH01@25	Total/NA	Solid	8015D	3206
885-2774-6	BH01@30	Total/NA	Solid	8015D	3206
885-2774-8	BH02@15	Total/NA	Solid	8015D	3206
885-2774-9	BH02@30	Total/NA	Solid	8015D	3206
885-2774-11	BH05@10	Total/NA	Solid	8015D	3240
885-2774-12	BH05@15	Total/NA	Solid	8015D	3240
885-2774-13	BH05@20	Total/NA	Solid	8015D	3240
885-2774-15	BH05@30	Total/NA	Solid	8015D	3240
885-2774-17	BH04@10	Total/NA	Solid	8015D	3240
885-2774-18	BH04@15	Total/NA	Solid	8015D	3240
885-2774-19	BH04@20	Total/NA	Solid	8015D	3240
885-2774-20	BH04@25	Total/NA	Solid	8015D	3240
885-2774-22	BH03@15	Total/NA	Solid	8015D	3240
885-2774-23	BH03@24	Total/NA	Solid	8015D	3240
885-2774-24	BH06@5	Total/NA	Solid	8015D	3240
885-2774-26	BH06@15	Total/NA	Solid	8015D	3240

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

GC VOA (Continued)

Analysis Batch: 3430 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-29	BH06@30	Total/NA	Solid	8015D	3240
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8015D	3206
MB 885-3240/1-A	Method Blank	Total/NA	Solid	8015D	3240
LCS 885-3206/2-A	Lab Control Sample	Total/NA	Solid	8015D	3206
LCS 885-3240/2-A	Lab Control Sample	Total/NA	Solid	8015D	3240

Analysis Batch: 3432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-2	BH01@10	Total/NA	Solid	8021B	3206
885-2774-3	BH01@15	Total/NA	Solid	8021B	3206
885-2774-4	BH01@20	Total/NA	Solid	8021B	3206
885-2774-5	BH01@25	Total/NA	Solid	8021B	3206
885-2774-6	BH01@30	Total/NA	Solid	8021B	3206
885-2774-8	BH02@15	Total/NA	Solid	8021B	3206
885-2774-9	BH02@30	Total/NA	Solid	8021B	3206
885-2774-11	BH05@10	Total/NA	Solid	8021B	3240
885-2774-12	BH05@15	Total/NA	Solid	8021B	3240
885-2774-13	BH05@20	Total/NA	Solid	8021B	3240
885-2774-15	BH05@30	Total/NA	Solid	8021B	3240
885-2774-17	BH04@10	Total/NA	Solid	8021B	3240
885-2774-18	BH04@15	Total/NA	Solid	8021B	3240
885-2774-19	BH04@20	Total/NA	Solid	8021B	3240
885-2774-20	BH04@25	Total/NA	Solid	8021B	3240
885-2774-22	BH03@15	Total/NA	Solid	8021B	3240
885-2774-23	BH03@24	Total/NA	Solid	8021B	3240
885-2774-24	BH06@5	Total/NA	Solid	8021B	3240
885-2774-26	BH06@15	Total/NA	Solid	8021B	3240
885-2774-29	BH06@30	Total/NA	Solid	8021B	3240
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8021B	3206
MB 885-3240/1-A	Method Blank	Total/NA	Solid	8021B	3240
LCS 885-3206/3-A	Lab Control Sample	Total/NA	Solid	8021B	3206
LCS 885-3240/3-A	Lab Control Sample	Total/NA	Solid	8021B	3240

GC Semi VOA

Prep Batch: 3233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-2	BH01@10	Total/NA	Solid	SHAKE	
885-2774-3	BH01@15	Total/NA	Solid	SHAKE	
885-2774-4	BH01@20	Total/NA	Solid	SHAKE	
885-2774-5	BH01@25	Total/NA	Solid	SHAKE	
885-2774-6	BH01@30	Total/NA	Solid	SHAKE	
885-2774-8	BH02@15	Total/NA	Solid	SHAKE	
885-2774-9	BH02@30	Total/NA	Solid	SHAKE	
MB 885-3233/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3233/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 3301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-11	BH05@10	Total/NA	Solid	SHAKE	
885-2774-12	BH05@15	Total/NA	Solid	SHAKE	

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

GC Semi VOA (Continued)

Prep Batch: 3301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-13	BH05@20	Total/NA	Solid	SHAKE	
885-2774-15	BH05@30	Total/NA	Solid	SHAKE	
885-2774-17	BH04@10	Total/NA	Solid	SHAKE	
885-2774-18	BH04@15	Total/NA	Solid	SHAKE	
885-2774-19	BH04@20	Total/NA	Solid	SHAKE	
885-2774-20	BH04@25	Total/NA	Solid	SHAKE	
885-2774-22	BH03@15	Total/NA	Solid	SHAKE	
885-2774-23	BH03@24	Total/NA	Solid	SHAKE	
885-2774-24	BH06@5	Total/NA	Solid	SHAKE	
MB 885-3301/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3301/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2774-24 MS	BH06@5	Total/NA	Solid	SHAKE	
885-2774-24 MSD	BH06@5	Total/NA	Solid	SHAKE	

Analysis Batch: 3332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-2	BH01@10	Total/NA	Solid	8015D	3233
885-2774-3	BH01@15	Total/NA	Solid	8015D	3233
885-2774-4	BH01@20	Total/NA	Solid	8015D	3233
885-2774-5	BH01@25	Total/NA	Solid	8015D	3233
885-2774-6	BH01@30	Total/NA	Solid	8015D	3233
885-2774-8	BH02@15	Total/NA	Solid	8015D	3233
885-2774-9	BH02@30	Total/NA	Solid	8015D	3233
885-2774-11	BH05@10	Total/NA	Solid	8015D	3301
885-2774-12	BH05@15	Total/NA	Solid	8015D	3301
885-2774-13	BH05@20	Total/NA	Solid	8015D	3301
885-2774-15	BH05@30	Total/NA	Solid	8015D	3301
885-2774-17	BH04@10	Total/NA	Solid	8015D	3301
885-2774-18	BH04@15	Total/NA	Solid	8015D	3301
885-2774-19	BH04@20	Total/NA	Solid	8015D	3301
885-2774-20	BH04@25	Total/NA	Solid	8015D	3301
885-2774-22	BH03@15	Total/NA	Solid	8015D	3301
885-2774-23	BH03@24	Total/NA	Solid	8015D	3301
885-2774-24	BH06@5	Total/NA	Solid	8015D	3301
MB 885-3233/1-A	Method Blank	Total/NA	Solid	8015D	3233
MB 885-3301/1-A	Method Blank	Total/NA	Solid	8015D	3301
LCS 885-3233/2-A	Lab Control Sample	Total/NA	Solid	8015D	3233
LCS 885-3301/2-A	Lab Control Sample	Total/NA	Solid	8015D	3301
885-2774-24 MS	BH06@5	Total/NA	Solid	8015D	3301
885-2774-24 MSD	BH06@5	Total/NA	Solid	8015D	3301

Prep Batch: 3340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-26	BH06@15	Total/NA	Solid	SHAKE	
885-2774-29	BH06@30	Total/NA	Solid	SHAKE	
MB 885-3340/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3340/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-26	BH06@15	Total/NA	Solid	8015D	3340

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

GC Semi VOA (Continued)

Analysis Batch: 3463 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-29	BH06@30	Total/NA	Solid	8015D	3340

Analysis Batch: 3484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3340/1-A	Method Blank	Total/NA	Solid	8015D	3340
LCS 885-3340/2-A	Lab Control Sample	Total/NA	Solid	8015D	3340

HPLC/IC

Leach Batch: 78410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-2	BH01@10	Soluble	Solid	DI Leach	
885-2774-3	BH01@15	Soluble	Solid	DI Leach	
885-2774-4	BH01@20	Soluble	Solid	DI Leach	
885-2774-5	BH01@25	Soluble	Solid	DI Leach	
885-2774-6	BH01@30	Soluble	Solid	DI Leach	
885-2774-8	BH02@15	Soluble	Solid	DI Leach	
885-2774-9	BH02@30	Soluble	Solid	DI Leach	
885-2774-11	BH05@10	Soluble	Solid	DI Leach	
MB 880-78410/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78410/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78410/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 78411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-12	BH05@15	Soluble	Solid	DI Leach	
885-2774-13	BH05@20	Soluble	Solid	DI Leach	
885-2774-15	BH05@30	Soluble	Solid	DI Leach	
885-2774-17	BH04@10	Soluble	Solid	DI Leach	
885-2774-18	BH04@15	Soluble	Solid	DI Leach	
885-2774-19	BH04@20	Soluble	Solid	DI Leach	
885-2774-20	BH04@25	Soluble	Solid	DI Leach	
885-2774-22	BH03@15	Soluble	Solid	DI Leach	
885-2774-23	BH03@24	Soluble	Solid	DI Leach	
885-2774-24	BH06@5	Soluble	Solid	DI Leach	
885-2774-26	BH06@15	Soluble	Solid	DI Leach	
885-2774-29	BH06@30	Soluble	Solid	DI Leach	
MB 880-78411/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78411/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78411/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2774-12 MS	BH05@15	Soluble	Solid	DI Leach	
885-2774-12 MSD	BH05@15	Soluble	Solid	DI Leach	
885-2774-26 MS	BH06@15	Soluble	Solid	DI Leach	
885-2774-26 MSD	BH06@15	Soluble	Solid	DI Leach	

Analysis Batch: 78517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-2	BH01@10	Soluble	Solid	300.0	78410
885-2774-3	BH01@15	Soluble	Solid	300.0	78410
885-2774-4	BH01@20	Soluble	Solid	300.0	78410
885-2774-5	BH01@25	Soluble	Solid	300.0	78410

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

HPLC/IC (Continued)

Analysis Batch: 78517 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-6	BH01@30	Soluble	Solid	300.0	78410
885-2774-8	BH02@15	Soluble	Solid	300.0	78410
885-2774-9	BH02@30	Soluble	Solid	300.0	78410
885-2774-11	BH05@10	Soluble	Solid	300.0	78410
MB 880-78410/1-A	Method Blank	Soluble	Solid	300.0	78410
LCS 880-78410/2-A	Lab Control Sample	Soluble	Solid	300.0	78410
LCSD 880-78410/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78410

Analysis Batch: 78519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2774-12	BH05@15	Soluble	Solid	300.0	78411
885-2774-13	BH05@20	Soluble	Solid	300.0	78411
885-2774-15	BH05@30	Soluble	Solid	300.0	78411
885-2774-17	BH04@10	Soluble	Solid	300.0	78411
885-2774-18	BH04@15	Soluble	Solid	300.0	78411
885-2774-19	BH04@20	Soluble	Solid	300.0	78411
885-2774-20	BH04@25	Soluble	Solid	300.0	78411
885-2774-22	BH03@15	Soluble	Solid	300.0	78411
885-2774-23	BH03@24	Soluble	Solid	300.0	78411
885-2774-24	BH06@5	Soluble	Solid	300.0	78411
885-2774-26	BH06@15	Soluble	Solid	300.0	78411
885-2774-29	BH06@30	Soluble	Solid	300.0	78411
MB 880-78411/1-A	Method Blank	Soluble	Solid	300.0	78411
LCS 880-78411/2-A	Lab Control Sample	Soluble	Solid	300.0	78411
LCSD 880-78411/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78411
885-2774-12 MS	BH05@15	Soluble	Solid	300.0	78411
885-2774-12 MSD	BH05@15	Soluble	Solid	300.0	78411
885-2774-26 MS	BH06@15	Soluble	Solid	300.0	78411
885-2774-26 MSD	BH06@15	Soluble	Solid	300.0	78411

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH01@10
Date Collected: 04/08/24 12:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		20	3430	RA	EET ALB	04/16/24 17:01
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		20	3432	RA	EET ALB	04/16/24 17:01
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 14:30
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 17:28

Client Sample ID: BH01@15
Date Collected: 04/08/24 13:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 17:23
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 17:23
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 16:35
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 17:42

Client Sample ID: BH01@20
Date Collected: 04/08/24 13:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 17:45
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 17:45
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 16:48
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 17:47

Client Sample ID: BH01@25
Date Collected: 04/08/24 13:30
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 18:08

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH01@25
Date Collected: 04/08/24 13:30
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 18:08
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 17:00
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 17:52

Client Sample ID: BH01@30
Date Collected: 04/08/24 13:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 18:30
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 18:30
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 17:12
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 17:57

Client Sample ID: BH02@15
Date Collected: 04/08/24 14:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 18:52
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 18:52
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 17:25
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 18:02

Client Sample ID: BH02@30
Date Collected: 04/08/24 15:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 19:15
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 19:15

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH02@30
Date Collected: 04/08/24 15:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 17:37
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 18:07

Client Sample ID: BH05@10
Date Collected: 04/09/24 10:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 00:48
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 00:48
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 20:18
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 18:12

Client Sample ID: BH05@15
Date Collected: 04/09/24 10:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 01:10
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 01:10
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 20:31
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 18:50

Client Sample ID: BH05@20
Date Collected: 04/09/24 10:30
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 01:32
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 01:32
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 20:55

Lab Chronicle

Client: Hilcorp Energy
Job ID: 885-2774-1
Project/Site: San Juan 29-6 Unit 86

Client Sample ID: BH05@20
Lab Sample ID: 885-2774-13
Date Collected: 04/09/24 10:30
Matrix: Solid
Date Received: 04/12/24 06:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:05

Client Sample ID: BH05@30
Lab Sample ID: 885-2774-15
Date Collected: 04/09/24 10:50
Matrix: Solid
Date Received: 04/12/24 06:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 01:54
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 01:54
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 21:08
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:10

Client Sample ID: BH04@10
Lab Sample ID: 885-2774-17
Date Collected: 04/09/24 12:40
Matrix: Solid
Date Received: 04/12/24 06:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 02:16
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 02:16
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 21:20
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:15

Client Sample ID: BH04@15
Lab Sample ID: 885-2774-18
Date Collected: 04/09/24 12:50
Matrix: Solid
Date Received: 04/12/24 06:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 03:00
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 03:00
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 21:32
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:19

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH04@20
Date Collected: 04/09/24 13:00
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 03:22
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 03:22
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 21:44
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:34

Client Sample ID: BH04@25
Date Collected: 04/09/24 13:10
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 03:44
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 03:44
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 21:57
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:39

Client Sample ID: BH03@15
Date Collected: 04/09/24 14:00
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 04:06
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 04:06
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 22:09
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:44

Client Sample ID: BH03@24
Date Collected: 04/09/24 14:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 04:28

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH03@24
Date Collected: 04/09/24 14:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 04:28
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 22:21
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:48

Client Sample ID: BH06@5
Date Collected: 04/10/24 10:30
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 04:50
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 04:50
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 22:33
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:53

Client Sample ID: BH06@15
Date Collected: 04/10/24 10:50
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 05:12
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 05:12
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 12:17
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 19:58

Client Sample ID: BH06@30
Date Collected: 04/10/24 11:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 05:34
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 05:34

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 29-6 Unit 86

Job ID: 885-2774-1

Client Sample ID: BH06@30

Date Collected: 04/10/24 11:20
Date Received: 04/12/24 06:50

Lab Sample ID: 885-2774-29

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 12:29
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:13

Laboratory References:

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

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Hilcorp Energy
Job ID: 885-2774-1
Project/Site: San Juan 29-6 Unit 86

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
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

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
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	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

Laboratory: Eurofins Midland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

Chain-of-Custody Record

Client: Hilcorp Energy Company
Attn: Samantha Grabert
Mailing Address:
Phone #: 337-781-9630
email or Fax#: samantha.grabert@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 29-6 Unit 86
Project #:
Project Manager: Stuart Hyde
Sampler: Al Thomson
On Ice: ☑ Yes ☐ No ugi
# of Coolers: 1
Cooler Temp(Including CF): 3.3+0=3.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORA
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107
885-2774 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)	Hold
4-8	1240	Soil	BH01@5	1x 4oz	cool	1											X
	1250		BH01@10			2	X	X					X				
	1310		BH01@15			3	X	X					X				
	1320		BH01@20			4	X	X					X				
	1330		BH01@25			5	X	X					X				
	1350		BH01@30			6	X	X					X				
	1400		BH01@35			7											X
	1450		BH02@15			8	X	X					X				
↓	1510	↓	BH02@30	↓	↓	9	X	X					X				

Date	Time	Relinquished by	Received by:	Via	Date	Time
4-11	1500	Al Thomson	Chant Walter		4/11/24	1500
4/11/24	1800	Chant Walter		Via. courier	4/12/24	6:30

Remarks:
cc: shyde@ensolum.com
athomson@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 Energy Company
Attn: Samantha Grabert
Mailing Address:
Phone #: 337-781-9630
email or Fax#: samantha.grabert@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 29-6 Unit 86
Project #:
Project Manager: Stuart Hyde
Sampler: Al Thomson
On Ice: ☒ Yes ☐ No Yogi
# of Coolers: 1
Cooler Temp(Including CF): 3.3 + 0 = 3.3 (°C)

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / ~~MTBE / TMBs~~ (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)	Hold
4-9	1000	soil	BH05@5	9x 4oz	Cool	10											X
	1010		BH05@10			11	X	X					X				
	1020		BH05@15			12	X	X					X				
	1030		BH05@20			13	X	X					X				
	1040		BH05@25			14											X
	1050		BH05@30			15	X	X					X				
	1230		BH04@5			16											X
	1240		BH04@10			17	X	X					X				
	1250		BH04@15			18	X	X					X				
	1300		BH04@20			19	X	X					X				
	1310		BH04@25			20	X	X					X				
	1320		BH04@30			21											X

Date	Time	Relinquished by:	Received by:	Via	Date	Time
4/11	1500	Al Thomson	Chris Walker		4/11/24	1500
4/11/24	1800	Chris Walker		courier	4/12/24	6:50

Remarks: Please CC:
shyde@ensolum.com
athomson@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 Energy Company

Attn: Samantha Grabert

Mailing Address:

Phone #: 337-781-9630

email or Fax#: samantha.grabert@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 29-6 Unit 86

Project #:

Project Manager:
Stuart Hyde

Sampler: Al Thomson
On Ice: ☑ Yes ☐ No 4.0g
# of Coolers: 1
Cooler Temp(including CF): 3.9 +0=3.9 (°C)

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

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)	Hold
4-9	1400	Soil	BH03@15	1x 4oz	Cool	22	X	X					X				
4-9	1420	Soil	BH03@24			23	X	X					X				
4-10	1030		BH06@5			24	X	X					X				
	1040		BH06@10			25											X
	1050		BH06@15			26	X	X					X				
	1100		BH06@20			27											X
	1110		BH06@25			28											X
	1120		BH06@30			29	X	X					X				

Date	Time:	Relinquished by	Received by:	Via.	Date	Time
4-11	1500	Al Thomson	Chris Walker		4/11/24	1506
4/11/24	1800	Chris Walker		Courier	4/12/24	6:50

Remarks: Please CC:
shyde@ensolum.com
athomson@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: 885-2774-1

Login Number: 2774 **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.	True	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	False	Sample splitting required for subcontract purposes.
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-2774-1

Login Number: 2774
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 04/17/24 12:03 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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").	N/A	

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

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 463918
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2401932449**
Incident Name	**NAPP2401932449 SAN JUAN 29-6 UNIT 86 @ 30-039-07516**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**
Incident Well	**[30-039-07516] SAN JUAN 29 6 UNIT #086**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SAN JUAN 29-6 UNIT 86
Date Release Discovered	01/18/2024
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	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: Equipment Failure | Dump Line | Produced Water | Released: 17 BBL | Recovered: 0 BBL | Lost: 17 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Equipment Failure | Dump Line | Condensate | Released: 16 BBL | Recovered: 0 BBL | Lost: 16 BBL.
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 463918
	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: 05/15/2025

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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 463918
	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 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
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 200 and 300 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 200 and 300 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 200 and 300 (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 100 and 200 (ft.)
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)	18
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	4900
GRO+DRO (EPA SW-846 Method 8015M)	4900
BTEX (EPA SW-846 Method 8021B or 8260B)	267
Benzene (EPA SW-846 Method 8021B or 8260B)	0.6
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	06/16/2025
On what date will (or did) the final sampling or liner inspection occur	06/16/2025
On what date will (or was) the remediation complete(d)	06/20/2025
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	1600
What is the estimated volume (in cubic yards) that will be remediated	600
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.	

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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 463918
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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.)	Yes
Which OCD approved facility will be used for **off-site** disposal	ENVIROTECH LANDFARM #2 [fEEM0112336756]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	No
OR is the **off-site** disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
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: 05/15/2025
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)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 463918
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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QUESTIONS (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	372171
	Action Number: 463918
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**468061**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**06/06/2025**
What was the (estimated) number of samples that were to be gathered	**10**
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: 463918
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	The remediation plan is approved as written. Hilcorp has 90-days (August 26, 2025) to submit to OCD its appropriate or final remediation closure report.	5/28/2025