



May 29, 2025

New Mexico Oil Conservation Division

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

Re: Remediation Report and Closure Request

San Juan 30-6 Unit 112Y SWD
Hilcorp Energy Company
NMOCD Incident No: nAPP2502031055

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Report and Closure Request* for a release at the San Juan 30-6 Unit 112Y saltwater disposal well (SWD) site (Site). The Site is located on land managed by the Bureau of Land Management land (BLM) in Rio Arriba County, New Mexico, Unit A, Section 12, Township 30 North, Range 6 West (Figure 1). This report describes the excavation and confirmation soil sampling activities performed at the Site to remediate impacted soil originating from a release of produced water.

SITE BACKGROUND

On January 16, 2025, Hilcorp personnel discovered a release of 8 barrels (bbls) of produced water at the Site. Specifically, while conducting a routine facility inspection, a Hilcorp operator observed water spraying from a ¼-inch hose leading from the wellhead to the chart recorder located inside the wellhead building. The spilled fluids accumulated around the wellhead and flowed out of the wellhead building to the northwest edge of the pad. The spilled fluids followed a small rill down a hillside approximately 92 feet to an old reserve pit area. A total of 5 bbls of produced water were recovered. Hilcorp submitted the *Notification of Release* to the New Mexico Oil Conservation Division (NMOCD) on January 17, 2025. The NMOCD has assigned the Site Incident Number nAPP2502031055.

SITE CHARACTERIZATION

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

GEOLOGY AND HYDROGEOLOGY

The Site is located on Tertiary (Eocene) age San Jose Formation and is underlain by the Nacimiento Geologic Formation. In the report titled "*Hydrogeology and Water Resources of San Juan Basin, New Mexico*" (Stone, et. al., 1983), the San Jose Formation is composed of interbedded sandstones and mudstones and varies in thickness from less than 200 feet to about 2,700 feet. The 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, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, New Mexico Office of the State Engineer (NMOSE) database, aerial photographs, and Site-specific observations.

The nearest significant watercourse to the Site is an intermittent stream located approximately 467 feet northwest of the well pad. The nearest well with depth-to-water information is a cathodic well located at the Site (Appendix A) with a depth to water of approximately 40 feet below ground surface (bgs). The closest NMOSE permitted well, SJ-04279-POD1, located approximately 4,575 feet northeast of the Site has a recorded depth-to-water of 36 feet bgs. As such, depth to water is estimated to be less than 50 feet bgs. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland (Figure 1). No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile from the Site (Figure 1). The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as low potential karst by the BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. A Site receptor map is shown on Figure 1.

SITE CLOSURE CRITERIA

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). In accordance with the *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 NMAC), the following Closure Criteria for constituents of concern (COCs) should be applied to the Site:

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

SITE INVESTIGATION ACTIVITIES

Upon discovery of the release, Hilcorp personnel conducted initial soil sampling activities on January 31, 2025. Sampling and mapping the extent of the release were hindered by snow cover of the Site, however, they were able to map a preliminary release area and take four soil samples (S-1 through S-4) in the affected area. Based on the initial analytical results, Hilcorp retained Ensolum to conduct additional hand auger and surface sample delineation activities on March 3, 2024. In total, 20 surface locations and three hand auger locations were sampled at the Site in attempts to delineate the release. Due to shallow refusal, the hand auger locations were

only able to extend to a maximum depth of 2 feet bgs. Soil samples were submitted to the analytical laboratory for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH following Method 8015M/D, and chloride following EPA Method 300.0.

Based on the laboratory analytical results, TPH concentrations exceeding the NMOCD Table I Closure Criteria were present in sample S-1 at a depth of 0 to 6 inches bgs. Additionally, chloride concentrations exceeding the Closure Criteria were present in samples collected from locations S-2, S-4, SS01, SS11, and HA01. No other COCs were detected above the applicable Closure Criteria during the initial and delineation soil sampling activities. Delineation soil sample results are summarized in Table 1 and Figure 2, with complete laboratory analytical reports attached as Appendix B.

EXCAVATION SOIL SAMPLING ACTIVITIES

Based on the delineation sampling activities described above, initial excavation activities were conducted on April 25 and 28, 2025. To direct excavation activities, Ensolum personnel field screened soil for volatile organic compounds (VOCs) using a calibrated photoionization detector (PID) and a chloride field screening kit. Once field screening indicated impacted soil had been removed, five-point composite soil samples were collected from the floor of the on-pad excavation (FS01 through FS10) and from a small off-site area that initial sampling found high chloride levels (FS11 and FS12). The excavation was advanced to a depth of up to 1-foot bgs. Samples were collected from the excavations at a frequency not exceeding one sample per 200 square feet. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The soil samples were placed into laboratory provided containers and transported under proper chain of custody procedures to the analytical laboratory for analysis of TPH, BTEX, and chloride using the methods described above.

Analytical results from the initial excavation indicated three of the 10 on-pad samples (FS02, FS03, and FS04) contained chloride concentrations greater than the NMOCD Table I Closure Criteria. Chloride concentrations were compliant with the Closure Criteria in all other analytical samples, including the two off-pad sample locations. Additionally, TPH and BTEX concentrations were compliant with the applicable Closure Criteria in all samples collected in April 2025. Due to the exceedances indicated above, additional excavation was conducted on May 19, 2025, in order to remove impacted soil from areas FS02, FS03, and FS04. The excavation was extended to a depth of 1.5 feet bgs in these areas and soil was resampled as FS02R, FS03R, and FS04R. Based on the May 2025 results, all COCs were compliant with the applicable NMOCD Table I Closure Criteria. Impacted soil from the Site was disposed off-Site at the Envirotech Landfarm in San Juan County, New Mexico. In total, approximately 150 cubic yards of soil were removed from the Site.

Excavation soil sample results are summarized in Table 2, with complete laboratory analytical reports also attached as Appendix B. Prior to commencing work, notification to the NMOCD was provided at least two business days prior to conducting remediation and confirmation sampling activities, with correspondence attached in Appendix C. Photographs taken by Ensolum during the excavation work are presented in Appendix D.

CLOSURE REQUEST

Site excavation and sampling activities were conducted at the Site to address the release discovered on January 16, 2025 at the Site. Laboratory analytical results for the excavation confirmation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and the reclamation requirement, and no further remediation is required. Excavation of impacted soil has mitigated impacts at this

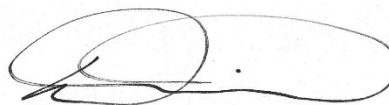
Site and these remedial actions have been protective of human health, the environment, and groundwater. As such, Hilcorp respectfully requests closure for Incident Number nAPP2502031055.

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

Sincerely,
Ensolum, LLC



Stuart Hyde, PG (licensed in WA & TX)
Senior Managing Geologist
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shyde@ensolum.com



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

Attachments:

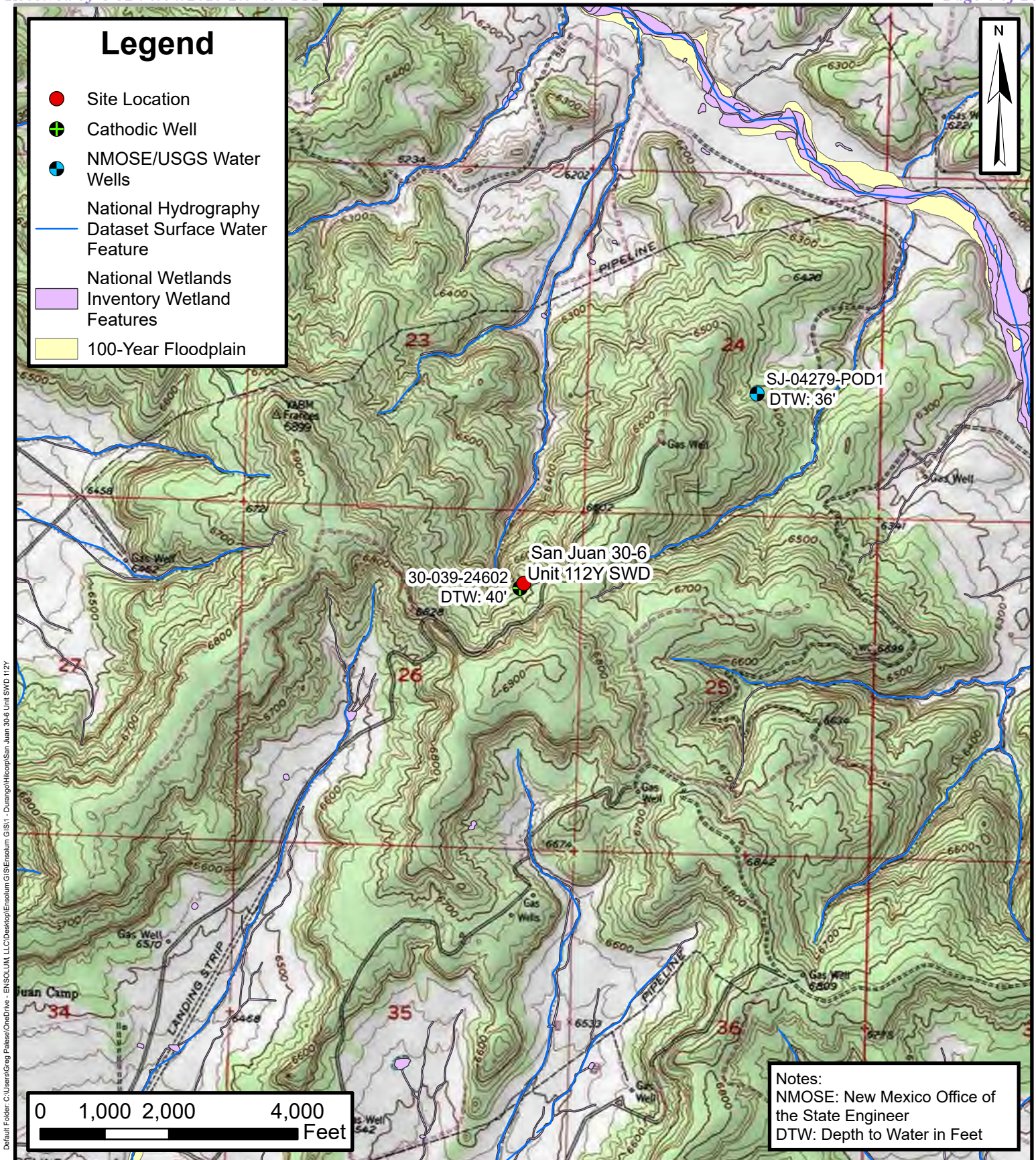
- Figure 1: Site Receptor Map
- Figure 2: Delineation Soil Sample Map
- Figure 3: Excavation Soil Sample Map

- Table 1: Delineation Soil Sample Analytical Results
- Table 2: Excavation Soil Sample Analytical Results

- Appendix A: Depth to Water Determination
- Appendix B: Laboratory Analytical Reports
- Appendix C: Agency Correspondence
- Appendix D: Photographic Log



FIGURES



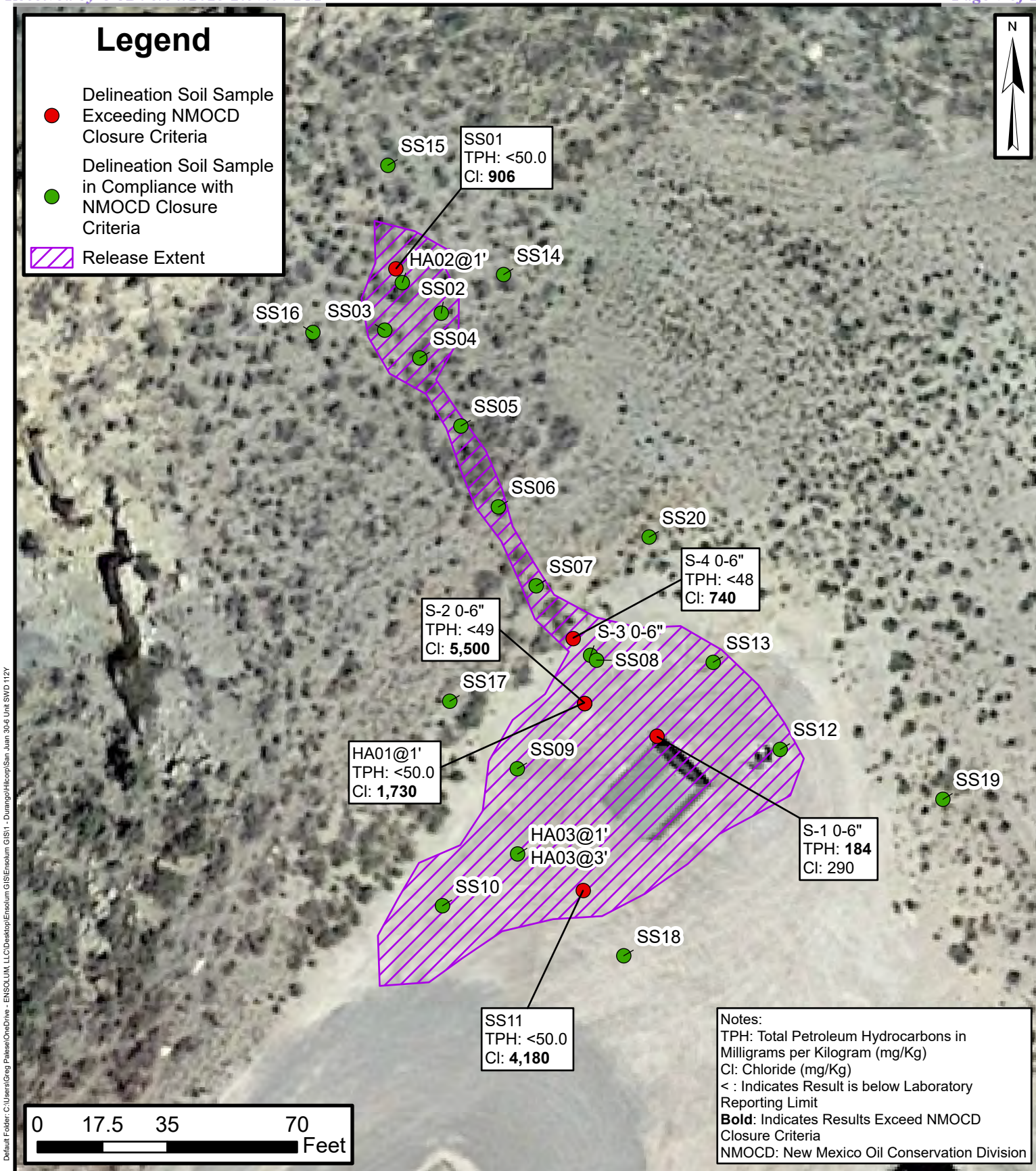
Site Receptor Map

San Juan 30-6 Unit 112Y SWD
 Hilcorp Energy Company

36.78781, -107.42621
 Rio Arriba County, New Mexico

FIGURE

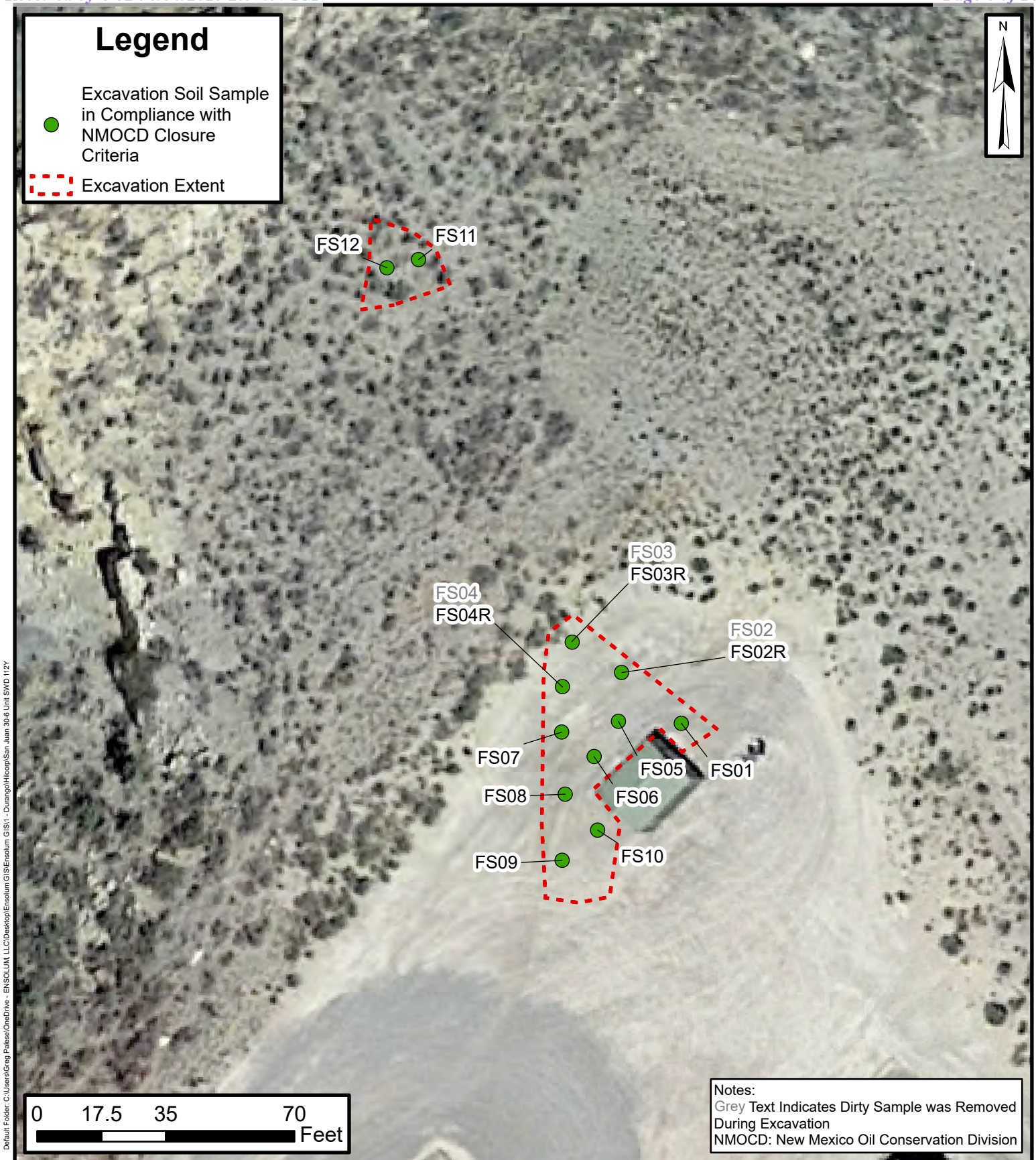
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Delineation Soil Sample Map

San Juan 30-6 Unit 112Y SWD
 Hilcorp Energy Company
 36.78781, -107.42621
 Rio Arriba County, New Mexico

FIGURE
2



Excavation Soil Sample Map

San Juan 30-6 Unit 112Y SWD
 Hilcorp Energy Company
 36.78781, -107.42621
 Rio Arriba County, New Mexico

FIGURE
3



TABLES

TABLE 1
DELINEATION SOIL SAMPLE ANALYTICAL RESULTS
 San Juan 30-6 Unit 112Y SWD
 Hilcorp Energy Company
 Rio Arriba County, New Mexico

Sample Identification	Date	Depth (feet bgs)	Chloride Field Screening (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCDC Closure Criteria for Soils Impacted by a Release			NE	10	NE	NE	NE	50	NE	NE	NE	100	600
S-1 0-6"	1/31/2025	0 - 0.5	--	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	44	140	184	290
S-2 0-6"	1/31/2025	0 - 0.5	--	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.8	<49	<49	5,500
S-3 0-6"	1/31/2025	0 - 0.5	--	0.029	0.11	<0.049	<0.098	0.139	<4.9	<9.5	<48	<48	550
S-4 0-6"	1/31/2025	0 - 0.5	--	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.5	<48	<48	740
SS01	3/3/2025	0 - 0.5	576	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	906
SS02	3/3/2025	0 - 0.5	164	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	333
SS03	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	22.8
SS04	3/3/2025	0 - 0.5	<112	<0.0250	0.0477	<0.0250	<0.0250	0.0477	<20.0	<25.0	<50.0	<50.0	207
SS05	3/3/2025	0 - 0.5	<112	<0.0250	0.0507	<0.0250	<0.0250	0.0507	<20.0	<25.0	<50.0	<50.0	52.7
SS06	3/3/2025	0 - 0.5	<112	<0.0250	0.0591	<0.0250	<0.0250	0.0591	<20.0	<25.0	<50.0	<50.0	186
SS07	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	42.9
SS08	3/3/2025	0 - 0.5	284	<0.0250	0.0289	<0.0250	<0.0250	0.0289	<20.0	<25.0	<50.0	<50.0	468
SS09	3/3/2025	0 - 0.5	284	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	221
SS10	3/3/2025	0 - 0.5	192	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	309
SS11	3/3/2025	0 - 0.5	>2,512	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	4,180
SS12	3/3/2025	0 - 0.5	136	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	131
SS13	3/3/2025	0 - 0.5	<112	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<40.0	<25.0	<50.0	<50.0	137
SS14	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
SS15	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
SS16	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
SS17	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
SS18	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	103
SS19	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
SS20	3/3/2025	0 - 0.5	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
HA01@1'	3/3/2025	1.0	996	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	1,730
HA02@1'	3/3/2025	1.0	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	95.1
HA03@1'	3/3/2025	1.0	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	44.6
HA03@2'	3/3/2025	2.0	<112	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	94.0

Notes:

bgs: Below ground surface
 BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
 DRO: Diesel Range Organics
 GRO: Gasoline Range Organics
 mg/kg: Milligrams per kilogram
 MRO: Motor Oil/Lube Oil Range Organics
 NE: Not Established

NMOCDC: New Mexico Oil Conservation Division

ppm: Parts per million

TPH: Total Petroleum Hydrocarbon

': Feet

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

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

TABLE 2
EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS
 San Juan 30-6 Unit 112Y SWD
 Hilcorp Energy Company
 Rio Arriba County, New Mexico

Sample Identification	Date	Depth (feet bgs)	Chloride Field Screening (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCDClosure Criteria for Soils Impacted by a Release			NE	10	NE	NE	NE	50	NE	NE	NE	100	600
FS01	4/25/2025	0.8	<112	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.3	<46	<46	100
FS02	4/25/2025	1.0	329	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.6	<48	<48	1,200
FS02R	5/19/2025	1.5	<112	<0.018	<0.037	<0.037	<0.074	<0.074	<3.7	11.0	<48	11.0	450
FS03	4/25/2025	1.0	192	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.6	<48	<48	710
FS03R	5/19/2025	1.5	<112	<0.019	<0.037	<0.037	<0.075	<0.075	<3.7	<9.4	<47	<47	350
FS04	4/25/2025	1.0	284	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.7	<49	<49	940
FS04R	5/19/2025	1.5	<112	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.9	<50	<50	380
FS05	4/25/2025	1.0	<112	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.4	<47	<47	530
FS06	4/25/2025	1.0	164	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.9	<50	<50	220
FS07	4/25/2025	1.0	<112	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.1	<46	<46	200
FS08	4/25/2025	0.8	<112	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.7	<49	<49	110
FS09	4/25/2025	0.8	<112	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.7	<49	<49	110
FS10	4/25/2025	0.8	<112	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.2	<46	<46	180
FS11	4/28/2025	0.8	<112	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<48	<60
FS12	4/28/2025	0.8	<112	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.5	<48	<48	62

Notes:

bgs: Below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

DRO: Diesel Range Organics

GRO: Gasoline Range Organics

mg/kg: Milligrams per kilogram

MRO: Motor Oil/Lube Oil Range Organics

NE: Not Established

NMOCDClosure Criteria for Soils Impacted by a Release

ppm: Parts per million

TPH: Total Petroleum Hydrocarbon

': Feet

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

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

Grey and strikethrough text represents samples that have been excavated



APPENDIX A

Depth-to-Water Determination

#16 30-039-07764
#410 30-039-24602
#112-4 30-039-23501

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit A Sec. 26 Twp 30 Rng 6

Name of Well/Wells or Pipeline Serviced SAN JUAN 30-6 UNIT #16, #410, #112Y
cps 192w

Elevation 6733' Completion Date 7/23/87 Total Depth 460' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

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

Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 40', 190', 280' NOT ENOUGH FOR SAMPLE

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 420', 380', 365', 355', 345', 335', 325', 315', 290', 280'

Depths vent pipes placed: 440' OF 1" PVC VENT PIPE

Vent pipe perforations: BOTTOM 300'

Remarks: gb #3

RECEIVED
MAY 31 1987

OIL CON. DIST. 3

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

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

#16 30-039-07764

#410 30-039-24602

#112-4 30-039-23501

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

(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NE Sec. 26 Twp 30 Rng 6Name of Well/Wells or Pipeline Serviced SAN JUAN 30-6 UNIT #16, #4120, #112Vcps 192wElevation 6733' Completion Date 8/28/84 Total Depth 450' Land Type* N/ACasing, Sizes, Types & Depths N/AIf Casing is cemented, show amounts & types used N/A

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

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 280', 350' (foam)**RECEIVED**
MAY 31 1991Depths gas encountered: N/A**OIL CON. DIV**
DIST. 3Type & amount of coke breeze used: N/ADepths anodes placed: 410', 400', 390', 380', 370', 360', 335', 320', 310', 300'Depths vent pipes placed: N/AVent pipe perforations: 300'Remarks: gb #2 #1, #2 ANODES DID NOT RESPOND AS MUCH AS ANTICIPATED-PROBABLEPARTIAL BRIDGE.

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

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

#16 30-039-07764

#410 30-039-24602

#112-4 30-039-23501

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

(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NE Sec. 26 Twp 30 Rng 6Name of Well/Wells or Pipeline Serviced SAN JUAN 30-6 UNIT #16, #410, #112Ycps 192wElevation 6733' Completion Date 5/2/63 Total Depth 140' Land Type* N/ACasing, Sizes, Types & Depths N/AIf Casing is cemented, show amounts & types used N/AIf Cement or Bentonite Plugs have been placed, show depths & amounts used
N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. N/ADepths gas encountered: N/AType & amount of coke breeze used: 1105 lbs.Depths anodes placed: 110', 104', 55', 49', 43'Depths vent pipes placed: N/AVent pipe perforations: N/ARemarks: gb #1**RECEIVED**

MAY 31 1991

OIL CON. DIV
DIST. 3

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

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



APPENDIX B

Laboratory Analytical Reports



Environment Testing

- 1
- 2
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- 8
- 9
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- 11

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/12/2025 1:08:57 PM

JOB DESCRIPTION

SJ 30 6 Unit 112Y

JOB NUMBER

885-19171-1

Eurofins Albuquerque
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Eurofins Albuquerque

Job Notes

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

Authorization



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Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Laboratory Job ID: 885-19171-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Job ID: 885-19171-1**Eurofins Albuquerque****Job Narrative
885-19171-1**

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

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

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

Receipt

The samples were received on 2/1/2025 7:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

Method 8015D_DRO: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-20298 and analytical batch 885-20239 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC

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

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Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Client Sample ID: S-1 0-6'

Lab Sample ID: 885-19171-1

Date Collected: 01/31/25 10:10

Matrix: Solid

Date Received: 02/01/25 07:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		02/04/25 09:52	02/06/25 18:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		35 - 166			02/04/25 09:52	02/06/25 18:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/04/25 09:52	02/05/25 22:37	1
Ethylbenzene	ND		0.049	mg/Kg		02/04/25 09:52	02/05/25 22:37	1
Toluene	ND		0.049	mg/Kg		02/04/25 09:52	02/05/25 22:37	1
Xylenes, Total	ND		0.098	mg/Kg		02/04/25 09:52	02/05/25 22:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		48 - 145			02/04/25 09:52	02/05/25 22:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	44		9.9	mg/Kg		02/04/25 14:09	02/04/25 21:45	1
Motor Oil Range Organics [C28-C40]	140		50	mg/Kg		02/04/25 14:09	02/04/25 21:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			02/04/25 14:09	02/04/25 21:45	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		60	mg/Kg		02/04/25 11:56	02/04/25 18:38	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Client Sample ID: S-2 0-6'

Lab Sample ID: 885-19171-2

Date Collected: 01/31/25 10:20

Matrix: Solid

Date Received: 02/01/25 07:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		02/04/25 09:52	02/06/25 19:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			02/04/25 09:52	02/06/25 19:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		02/04/25 09:52	02/05/25 23:48	1
Ethylbenzene	ND		0.050	mg/Kg		02/04/25 09:52	02/05/25 23:48	1
Toluene	ND		0.050	mg/Kg		02/04/25 09:52	02/05/25 23:48	1
Xylenes, Total	ND		0.099	mg/Kg		02/04/25 09:52	02/05/25 23:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		48 - 145			02/04/25 09:52	02/05/25 23:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		02/04/25 14:09	02/04/25 21:55	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/04/25 14:09	02/04/25 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			02/04/25 14:09	02/04/25 21:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5500		300	mg/Kg		02/04/25 11:56	02/05/25 11:30	100

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Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Client Sample ID: S-3 0-6'

Lab Sample ID: 885-19171-3

Date Collected: 01/31/25 10:30

Matrix: Solid

Date Received: 02/01/25 07:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		02/04/25 09:52	02/06/25 19:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		35 - 166			02/04/25 09:52	02/06/25 19:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.029		0.024	mg/Kg		02/04/25 09:52	02/06/25 00:58	1
Ethylbenzene	ND		0.049	mg/Kg		02/04/25 09:52	02/06/25 00:58	1
Toluene	0.11		0.049	mg/Kg		02/04/25 09:52	02/06/25 00:58	1
Xylenes, Total	ND		0.098	mg/Kg		02/04/25 09:52	02/06/25 00:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			02/04/25 09:52	02/06/25 00:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		02/04/25 14:09	02/04/25 22:06	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		02/04/25 14:09	02/04/25 22:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			02/04/25 14:09	02/04/25 22:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	550		60	mg/Kg		02/04/25 11:56	02/04/25 19:20	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Client Sample ID: S-4 0-6'

Lab Sample ID: 885-19171-4

Date Collected: 01/31/25 10:40

Matrix: Solid

Date Received: 02/01/25 07:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/04/25 09:52	02/06/25 19:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		35 - 166			02/04/25 09:52	02/06/25 19:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/04/25 09:52	02/06/25 01:22	1
Ethylbenzene	ND		0.048	mg/Kg		02/04/25 09:52	02/06/25 01:22	1
Toluene	ND		0.048	mg/Kg		02/04/25 09:52	02/06/25 01:22	1
Xylenes, Total	ND		0.095	mg/Kg		02/04/25 09:52	02/06/25 01:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			02/04/25 09:52	02/06/25 01:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		02/04/25 14:09	02/04/25 22:17	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		02/04/25 14:09	02/04/25 22:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			02/04/25 14:09	02/04/25 22:17	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	740		60	mg/Kg		02/04/25 11:56	02/04/25 19:30	20

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QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

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

Lab Sample ID: MB 885-20264/1-A

Matrix: Solid

Analysis Batch: 20452

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20264

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		02/04/25 09:52	02/06/25 16:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			02/04/25 09:52	02/06/25 16:13	1

Lab Sample ID: LCS 885-20264/2-A

Matrix: Solid

Analysis Batch: 20452

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	25.5		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	194		35 - 166				

Lab Sample ID: 885-19171-1 MS

Matrix: Solid

Analysis Batch: 20452

Client Sample ID: S-1 0-6'

Prep Type: Total/NA

Prep Batch: 20264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.3	20.8		mg/Kg		86	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	197		35 - 166						

Lab Sample ID: 885-19171-1 MSD

Matrix: Solid

Analysis Batch: 20452

Client Sample ID: S-1 0-6'

Prep Type: Total/NA

Prep Batch: 20264

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.5	23.5		mg/Kg		96	70 - 130	12	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	201		35 - 166								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-20264/1-A

Matrix: Solid

Analysis Batch: 20394

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20264

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		02/04/25 09:52	02/05/25 22:14	1
Ethylbenzene	ND		0.050	mg/Kg		02/04/25 09:52	02/05/25 22:14	1
Toluene	ND		0.050	mg/Kg		02/04/25 09:52	02/05/25 22:14	1

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QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

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

Lab Sample ID: MB 885-20264/1-A

Matrix: Solid

Analysis Batch: 20394

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20264

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		02/04/25 09:52	02/05/25 22:14	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			02/04/25 09:52	02/05/25 22:14	1

Lab Sample ID: LCS 885-20264/3-A

Matrix: Solid

Analysis Batch: 20394

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.01		mg/Kg		101	70 - 130
Ethylbenzene	1.00	0.994		mg/Kg		99	70 - 130
m&p-Xylene	2.00	2.00		mg/Kg		100	70 - 130
o-Xylene	1.00	0.982		mg/Kg		98	70 - 130
Toluene	1.00	1.00		mg/Kg		100	70 - 130
Xylenes, Total	3.00	2.99		mg/Kg		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	90		48 - 145				

Lab Sample ID: 885-19171-2 MS

Matrix: Solid

Analysis Batch: 20394

Client Sample ID: S-2 0-6'

Prep Type: Total/NA

Prep Batch: 20264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.986	1.01		mg/Kg		103	70 - 130
Ethylbenzene	ND		0.986	1.01		mg/Kg		103	70 - 130
m&p-Xylene	ND		1.97	2.05		mg/Kg		104	70 - 130
o-Xylene	ND		0.986	1.00		mg/Kg		102	70 - 130
Toluene	ND		0.986	1.03		mg/Kg		104	70 - 130
Xylenes, Total	ND		2.96	3.05		mg/Kg		103	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	91		48 - 145						

Lab Sample ID: 885-19171-2 MSD

Matrix: Solid

Analysis Batch: 20394

Client Sample ID: S-2 0-6'

Prep Type: Total/NA

Prep Batch: 20264

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.990	1.02		mg/Kg		103	70 - 130	1	20
Ethylbenzene	ND		0.990	1.05		mg/Kg		106	70 - 130	3	20
m&p-Xylene	ND		1.98	2.07		mg/Kg		105	70 - 130	1	20
o-Xylene	ND		0.990	0.996		mg/Kg		101	70 - 130	1	20
Toluene	ND		0.990	1.05		mg/Kg		106	70 - 130	2	20
Xylenes, Total	ND		2.97	3.07		mg/Kg		103	70 - 130	1	20

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QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

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

Lab Sample ID: 885-19171-2 MSD

Matrix: Solid

Analysis Batch: 20394

Client Sample ID: S-2 0-6'

Prep Type: Total/NA

Prep Batch: 20264

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		48 - 145

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

Lab Sample ID: MB 885-20298/1-A

Matrix: Solid

Analysis Batch: 20239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20298

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		02/04/25 14:09	02/04/25 18:41	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		02/04/25 14:09	02/04/25 18:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			02/04/25 14:09	02/04/25 18:41	1

Lab Sample ID: LCS 885-20298/2-A

Matrix: Solid

Analysis Batch: 20239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20298

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	50.3		mg/Kg		101	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	96		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-20285/1-A

Matrix: Solid

Analysis Batch: 20268

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20285

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

Lab Sample ID: LCS 885-20285/2-A

Matrix: Solid

Analysis Batch: 20268

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20285

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

Lab Sample ID: MRL 885-20317/3

Matrix: Solid

Analysis Batch: 20317

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.534		mg/L		107	50 - 150

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QC Association Summary

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

GC VOA

Prep Batch: 20264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-1	S-1 0-6'	Total/NA	Solid	5030C	
885-19171-2	S-2 0-6'	Total/NA	Solid	5030C	
885-19171-3	S-3 0-6'	Total/NA	Solid	5030C	
885-19171-4	S-4 0-6'	Total/NA	Solid	5030C	
MB 885-20264/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-20264/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-20264/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-19171-1 MS	S-1 0-6'	Total/NA	Solid	5030C	
885-19171-1 MSD	S-1 0-6'	Total/NA	Solid	5030C	
885-19171-2 MS	S-2 0-6'	Total/NA	Solid	5030C	
885-19171-2 MSD	S-2 0-6'	Total/NA	Solid	5030C	

Analysis Batch: 20394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-1	S-1 0-6'	Total/NA	Solid	8021B	20264
885-19171-2	S-2 0-6'	Total/NA	Solid	8021B	20264
885-19171-3	S-3 0-6'	Total/NA	Solid	8021B	20264
885-19171-4	S-4 0-6'	Total/NA	Solid	8021B	20264
MB 885-20264/1-A	Method Blank	Total/NA	Solid	8021B	20264
LCS 885-20264/3-A	Lab Control Sample	Total/NA	Solid	8021B	20264
885-19171-2 MS	S-2 0-6'	Total/NA	Solid	8021B	20264
885-19171-2 MSD	S-2 0-6'	Total/NA	Solid	8021B	20264

Analysis Batch: 20452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-1	S-1 0-6'	Total/NA	Solid	8015M/D	20264
885-19171-2	S-2 0-6'	Total/NA	Solid	8015M/D	20264
885-19171-3	S-3 0-6'	Total/NA	Solid	8015M/D	20264
885-19171-4	S-4 0-6'	Total/NA	Solid	8015M/D	20264
MB 885-20264/1-A	Method Blank	Total/NA	Solid	8015M/D	20264
LCS 885-20264/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	20264
885-19171-1 MS	S-1 0-6'	Total/NA	Solid	8015M/D	20264
885-19171-1 MSD	S-1 0-6'	Total/NA	Solid	8015M/D	20264

GC Semi VOA

Analysis Batch: 20239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-1	S-1 0-6'	Total/NA	Solid	8015M/D	20298
885-19171-2	S-2 0-6'	Total/NA	Solid	8015M/D	20298
885-19171-3	S-3 0-6'	Total/NA	Solid	8015M/D	20298
885-19171-4	S-4 0-6'	Total/NA	Solid	8015M/D	20298
MB 885-20298/1-A	Method Blank	Total/NA	Solid	8015M/D	20298
LCS 885-20298/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	20298

Prep Batch: 20298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-1	S-1 0-6'	Total/NA	Solid	SHAKE	
885-19171-2	S-2 0-6'	Total/NA	Solid	SHAKE	
885-19171-3	S-3 0-6'	Total/NA	Solid	SHAKE	
885-19171-4	S-4 0-6'	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

GC Semi VOA (Continued)

Prep Batch: 20298 (Continued)

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

HPLC/IC

Analysis Batch: 20268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-1	S-1 0-6'	Total/NA	Solid	300.0	20285
885-19171-3	S-3 0-6'	Total/NA	Solid	300.0	20285
885-19171-4	S-4 0-6'	Total/NA	Solid	300.0	20285
MB 885-20285/1-A	Method Blank	Total/NA	Solid	300.0	20285
LCS 885-20285/2-A	Lab Control Sample	Total/NA	Solid	300.0	20285

Prep Batch: 20285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-1	S-1 0-6'	Total/NA	Solid	300_Prep	
885-19171-2	S-2 0-6'	Total/NA	Solid	300_Prep	
885-19171-3	S-3 0-6'	Total/NA	Solid	300_Prep	
885-19171-4	S-4 0-6'	Total/NA	Solid	300_Prep	
MB 885-20285/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-20285/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 20317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19171-2	S-2 0-6'	Total/NA	Solid	300.0	20285
MRL 885-20317/3	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Client Sample ID: S-1 0-6'

Lab Sample ID: 885-19171-1

Date Collected: 01/31/25 10:10

Matrix: Solid

Date Received: 02/01/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8015M/D		1	20452	AT	EET ALB	02/06/25 18:01
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		1	20394	JP	EET ALB	02/05/25 22:37
Total/NA	Prep	SHAKE			20298	MI	EET ALB	02/04/25 14:09
Total/NA	Analysis	8015M/D		1	20239	MI	EET ALB	02/04/25 21:45
Total/NA	Prep	300_Prep			20285	ES	EET ALB	02/04/25 11:56
Total/NA	Analysis	300.0		20	20268	ES	EET ALB	02/04/25 18:38

Client Sample ID: S-2 0-6'

Lab Sample ID: 885-19171-2

Date Collected: 01/31/25 10:20

Matrix: Solid

Date Received: 02/01/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8015M/D		1	20452	AT	EET ALB	02/06/25 19:07
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		1	20394	JP	EET ALB	02/05/25 23:48
Total/NA	Prep	SHAKE			20298	MI	EET ALB	02/04/25 14:09
Total/NA	Analysis	8015M/D		1	20239	MI	EET ALB	02/04/25 21:55
Total/NA	Prep	300_Prep			20285	ES	EET ALB	02/04/25 11:56
Total/NA	Analysis	300.0		100	20317	ES	EET ALB	02/05/25 11:30

Client Sample ID: S-3 0-6'

Lab Sample ID: 885-19171-3

Date Collected: 01/31/25 10:30

Matrix: Solid

Date Received: 02/01/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8015M/D		1	20452	AT	EET ALB	02/06/25 19:28
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		1	20394	JP	EET ALB	02/06/25 00:58
Total/NA	Prep	SHAKE			20298	MI	EET ALB	02/04/25 14:09
Total/NA	Analysis	8015M/D		1	20239	MI	EET ALB	02/04/25 22:06
Total/NA	Prep	300_Prep			20285	ES	EET ALB	02/04/25 11:56
Total/NA	Analysis	300.0		20	20268	ES	EET ALB	02/04/25 19:20

Client Sample ID: S-4 0-6'

Lab Sample ID: 885-19171-4

Date Collected: 01/31/25 10:40

Matrix: Solid

Date Received: 02/01/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8015M/D		1	20452	AT	EET ALB	02/06/25 19:50

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Client Sample ID: S-4 0-6'

Date Collected: 01/31/25 10:40

Date Received: 02/01/25 07:40

Lab Sample ID: 885-19171-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			20264	JP	EET ALB	02/04/25 09:52
Total/NA	Analysis	8021B		1	20394	JP	EET ALB	02/06/25 01:22
Total/NA	Prep	SHAKE			20298	MI	EET ALB	02/04/25 14:09
Total/NA	Analysis	8015M/D		1	20239	MI	EET ALB	02/04/25 22:17
Total/NA	Prep	300_Prep			20285	ES	EET ALB	02/04/25 11:56
Total/NA	Analysis	300.0		20	20268	ES	EET ALB	02/04/25 19:30

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: SJ 30 6 Unit 112Y

Job ID: 885-19171-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-25

Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-19171-1

Login Number: 19171

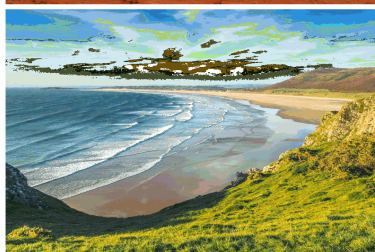
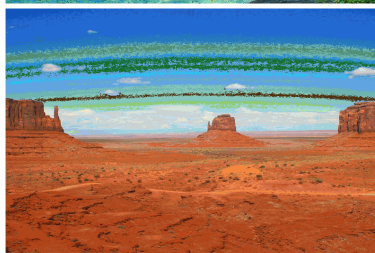
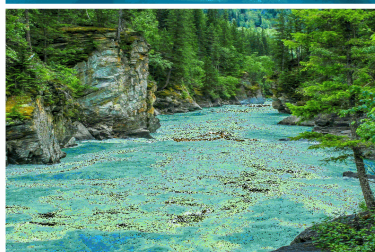
List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

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

Report to:
Kate Kaufman



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name: San Juan 30-6 Unit #112Y SWD

Work Order: E503020

Job Number: 17051-0002

Received: 3/3/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/10/25

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 3/10/25

Kate Kaufman
PO Box 61529
Houston, TX 77208



Project Name: San Juan 30-6 Unit #112Y SWD
Workorder: E503020
Date Received: 3/3/2025 3:55:00PM

Kate Kaufman,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/3/2025 3:55:00PM, under the Project Name: San Juan 30-6 Unit #112Y SWD.

The analytical test results summarized in this report with the Project Name: San Juan 30-6 Unit #112Y SWD apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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Sample Summary

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	03/10/25 12:04

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01	E503020-01A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS02	E503020-02A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS03	E503020-03A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS04	E503020-04A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS05	E503020-05A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS06	E503020-06A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS07	E503020-07A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS08	E503020-08A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS09	E503020-09A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS10	E503020-10A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS11	E503020-11A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS12	E503020-12A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS13	E503020-13A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS14	E503020-14A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS15	E503020-15A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS16	E503020-16A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS17	E503020-17A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS18	E503020-18A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS19	E503020-19A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
SS20	E503020-20A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
HA01@1'	E503020-21A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
HA02@1'	E503020-22A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
HA03@1'	E503020-23A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.
HA03@2'	E503020-24A	Soil	03/03/25	03/03/25	Glass Jar, 4 oz.



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS01

E503020-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2510059	
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2510059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.8 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: HM		Batch: 2510069	
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>		98.5 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM		Batch: 2510072	
Chloride	906	20.0	1	03/04/25	03/04/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS02

E503020-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		103 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.6 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		106 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	333	20.0	1	03/04/25	03/04/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS03

E503020-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.1 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		112 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	22.8	20.0	1	03/04/25	03/04/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS04

E503020-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	0.0477	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		110 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.2 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		107 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	207	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS05

E503020-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	0.0507	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		112 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.9 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		105 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	52.7	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
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Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS06

E503020-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	0.0591	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		111 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.2 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		108 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	186	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
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Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS07

E503020-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		110 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.1 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		105 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	42.9	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
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Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS08

E503020-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	0.0289	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		110 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.9 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		108 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	468	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
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Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS09

E503020-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		111 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.6 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		104 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	221	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
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Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS10

E503020-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		112 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.7 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		107 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	309	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS11

E503020-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2510059	
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		110 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2510059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.4 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: HM		Batch: 2510069	
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		106 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2510072	
Chloride	4180	40.0	2	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS12

E503020-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		109 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.0 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		108 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	131	40.0	2	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS13

E503020-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0500	2	03/04/25	03/06/25	
Ethylbenzene	ND	0.0500	2	03/04/25	03/06/25	
Toluene	ND	0.0500	2	03/04/25	03/06/25	
o-Xylene	ND	0.0500	2	03/04/25	03/06/25	
p,m-Xylene	ND	0.100	2	03/04/25	03/06/25	
Total Xylenes	ND	0.0500	2	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		108 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	40.0	2	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.0 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		106 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	137	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS14

E503020-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		107 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.6 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		116 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	ND	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS15

E503020-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		107 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.8 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		115 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	ND	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS16

E503020-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		108 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.1 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		116 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	ND	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS17

E503020-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		108 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.8 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		109 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	ND	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS18

E503020-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		109 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.0 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		113 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	103	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

SS19

E503020-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		109 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2510059
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.4 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2510069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		110 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2510072
Chloride	ND	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported: 3/10/2025 12:04:01PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	

SS20

E503020-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2510059	
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		109 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2510059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.7 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: HM		Batch: 2510069	
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
<i>Surrogate: n-Nonane</i>						
		111 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2510072	
Chloride	ND	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

HA01@1'

E503020-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Benzene	ND	0.0250	1	03/04/25	03/05/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/05/25	
Toluene	ND	0.0250	1	03/04/25	03/05/25	
o-Xylene	ND	0.0250	1	03/04/25	03/05/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/05/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/05/25	
Surrogate: Bromofluorobenzene		107 %	70-130	03/04/25	03/05/25	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/04/25	03/05/25	
Surrogate: Toluene-d8		107 %	70-130	03/04/25	03/05/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/05/25	
Surrogate: Bromofluorobenzene		107 %	70-130	03/04/25	03/05/25	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/04/25	03/05/25	
Surrogate: Toluene-d8		107 %	70-130	03/04/25	03/05/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2510070
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
Surrogate: n-Nonane		112 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2510068
Chloride	1730	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

HA02@1'

E503020-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
Surrogate: Bromofluorobenzene		106 %	70-130	03/04/25	03/06/25	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	03/04/25	03/06/25	
Surrogate: Toluene-d8		108 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
Surrogate: Bromofluorobenzene		106 %	70-130	03/04/25	03/06/25	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	03/04/25	03/06/25	
Surrogate: Toluene-d8		108 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2510070
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
Surrogate: n-Nonane		112 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2510068
Chloride	95.1	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

HA03@1'

E503020-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
Surrogate: Bromofluorobenzene		104 %	70-130	03/04/25	03/06/25	
Surrogate: 1,2-Dichloroethane-d4		105 %	70-130	03/04/25	03/06/25	
Surrogate: Toluene-d8		107 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
Surrogate: Bromofluorobenzene		104 %	70-130	03/04/25	03/06/25	
Surrogate: 1,2-Dichloroethane-d4		105 %	70-130	03/04/25	03/06/25	
Surrogate: Toluene-d8		107 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2510070
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
Surrogate: n-Nonane		109 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2510068
Chloride	44.6	20.0	1	03/04/25	03/05/25	



Sample Data

Hilcorp Energy Co
PO Box 61529
Houston TX, 77208

Project Name: San Juan 30-6 Unit #112Y SWD
Project Number: 17051-0002
Project Manager: Kate Kaufman

Reported:
3/10/2025 12:04:01PM

HA03@2'

E503020-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Benzene	ND	0.0250	1	03/04/25	03/06/25	
Ethylbenzene	ND	0.0250	1	03/04/25	03/06/25	
Toluene	ND	0.0250	1	03/04/25	03/06/25	
o-Xylene	ND	0.0250	1	03/04/25	03/06/25	
p,m-Xylene	ND	0.0500	1	03/04/25	03/06/25	
Total Xylenes	ND	0.0250	1	03/04/25	03/06/25	
Surrogate: Bromofluorobenzene		104 %	70-130	03/04/25	03/06/25	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	03/04/25	03/06/25	
Surrogate: Toluene-d8		107 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2510058
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/25	03/06/25	
Surrogate: Bromofluorobenzene		104 %	70-130	03/04/25	03/06/25	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	03/04/25	03/06/25	
Surrogate: Toluene-d8		107 %	70-130	03/04/25	03/06/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2510070
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/25	03/06/25	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/25	03/06/25	
Surrogate: n-Nonane		113 %	61-141	03/04/25	03/06/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2510068
Chloride	94.0	20.0	1	03/04/25	03/05/25	



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2510058-BLK1)					Prepared: 03/04/25 Analyzed: 03/05/25				
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.517		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.521		0.500		104	70-130			
Surrogate: Toluene-d8	0.543		0.500		109	70-130			

LCS (2510058-BS1)					Prepared: 03/04/25 Analyzed: 03/05/25				
Benzene	2.33	0.0250	2.50		93.2	70-130			
Ethylbenzene	2.45	0.0250	2.50		97.8	70-130			
Toluene	2.56	0.0250	2.50		103	70-130			
o-Xylene	2.53	0.0250	2.50		101	70-130			
p,m-Xylene	5.23	0.0500	5.00		105	70-130			
Total Xylenes	7.75	0.0250	7.50		103	70-130			
Surrogate: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.516		0.500		103	70-130			
Surrogate: Toluene-d8	0.538		0.500		108	70-130			

Matrix Spike (2510058-MS1)					Source: E503020-21		Prepared: 03/04/25 Analyzed: 03/06/25		
Benzene	2.38	0.0250	2.50	ND	95.1	48-131			
Ethylbenzene	2.47	0.0250	2.50	ND	98.7	45-135			
Toluene	2.61	0.0250	2.50	ND	105	48-130			
o-Xylene	2.62	0.0250	2.50	ND	105	43-135			
p,m-Xylene	5.45	0.0500	5.00	ND	109	43-135			
Total Xylenes	8.06	0.0250	7.50	ND	107	43-135			
Surrogate: Bromofluorobenzene	0.531		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			

Matrix Spike Dup (2510058-MSD1)					Source: E503020-21		Prepared: 03/04/25 Analyzed: 03/06/25		
Benzene	2.33	0.0250	2.50	ND	93.2	48-131	2.00	23	
Ethylbenzene	2.43	0.0250	2.50	ND	97.3	45-135	1.37	27	
Toluene	2.58	0.0250	2.50	ND	103	48-130	1.33	24	
o-Xylene	2.60	0.0250	2.50	ND	104	43-135	0.537	27	
p,m-Xylene	5.39	0.0500	5.00	ND	108	43-135	1.03	27	
Total Xylenes	7.99	0.0250	7.50	ND	107	43-135	0.872	27	
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2510059-BLK1)

Prepared: 03/04/25 Analyzed: 03/06/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.35		8.00		104	70-130			

LCS (2510059-BS1)

Prepared: 03/04/25 Analyzed: 03/06/25

Benzene	5.09	0.0250	5.00		102	70-130			
Ethylbenzene	4.95	0.0250	5.00		99.1	70-130			
Toluene	5.04	0.0250	5.00		101	70-130			
o-Xylene	4.95	0.0250	5.00		99.1	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.0	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.58		8.00		107	70-130			

Matrix Spike (2510059-MS1)

Source: E503020-12

Prepared: 03/04/25 Analyzed: 03/06/25

Benzene	5.61	0.0250	5.00	ND	112	54-133			
Ethylbenzene	5.45	0.0250	5.00	ND	109	61-133			
Toluene	5.56	0.0250	5.00	ND	111	61-130			
o-Xylene	5.46	0.0250	5.00	ND	109	63-131			
p,m-Xylene	11.1	0.0500	10.0	ND	111	63-131			
Total Xylenes	16.6	0.0250	15.0	ND	110	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.45		8.00		106	70-130			

Matrix Spike Dup (2510059-MSD1)

Source: E503020-12

Prepared: 03/04/25 Analyzed: 03/06/25

Benzene	5.07	0.0250	5.00	ND	101	54-133	10.1	20	
Ethylbenzene	4.93	0.0250	5.00	ND	98.5	61-133	10.2	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	10.3	20	
o-Xylene	4.92	0.0250	5.00	ND	98.5	63-131	10.3	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	10.1	20	
Total Xylenes	15.0	0.0250	15.0	ND	99.7	63-131	10.2	20	
Surrogate: 4-Bromochlorobenzene-PID	8.61		8.00		108	70-130			



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2510058-BLK1)

Prepared: 03/04/25 Analyzed: 03/05/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.517		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.521		0.500		104	70-130			
Surrogate: Toluene-d8	0.543		0.500		109	70-130			

LCS (2510058-BS2)

Prepared: 03/04/25 Analyzed: 03/05/25

Gasoline Range Organics (C6-C10)	53.4	20.0	50.0		107	70-130			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.551		0.500		110	70-130			

Matrix Spike (2510058-MS2)

Source: E503020-21

Prepared: 03/04/25 Analyzed: 03/06/25

Gasoline Range Organics (C6-C10)	54.8	20.0	50.0	ND	110	70-130			
Surrogate: Bromofluorobenzene	0.540		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			

Matrix Spike Dup (2510058-MSD2)

Source: E503020-21

Prepared: 03/04/25 Analyzed: 03/06/25

Gasoline Range Organics (C6-C10)	53.3	20.0	50.0	ND	107	70-130	2.86	20	
Surrogate: Bromofluorobenzene	0.543		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.3	70-130			
Surrogate: Toluene-d8	0.552		0.500		110	70-130			



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2510059-BLK1) Prepared: 03/04/25 Analyzed: 03/06/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.57		8.00		94.7	70-130			

LCS (2510059-BS2) Prepared: 03/04/25 Analyzed: 03/06/25

Gasoline Range Organics (C6-C10)	46.9	20.0	50.0		93.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61		8.00		95.1	70-130			

Matrix Spike (2510059-MS2) Source: E503020-12 Prepared: 03/04/25 Analyzed: 03/06/25

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0	ND	96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.63		8.00		95.4	70-130			

Matrix Spike Dup (2510059-MSD2) Source: E503020-12 Prepared: 03/04/25 Analyzed: 03/06/25

Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	99.9	70-130	3.84	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.75		8.00		96.8	70-130			



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: HM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2510069-BLK1)					Prepared: 03/04/25 Analyzed: 03/06/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.4		50.0		105	61-141			

LCS (2510069-BS1)					Prepared: 03/04/25 Analyzed: 03/06/25				
Diesel Range Organics (C10-C28)	267	25.0	250		107	66-144			
Surrogate: n-Nonane	54.0		50.0		108	61-141			

Matrix Spike (2510069-MS1)					Source: E503020-03		Prepared: 03/04/25 Analyzed: 03/06/25		
Diesel Range Organics (C10-C28)	288	25.0	250	ND	115	56-156			
Surrogate: n-Nonane	58.0		50.0		116	61-141			

Matrix Spike Dup (2510069-MSD1)					Source: E503020-03		Prepared: 03/04/25 Analyzed: 03/06/25		
Diesel Range Organics (C10-C28)	275	25.0	250	ND	110	56-156	4.74	20	
Surrogate: n-Nonane	57.5		50.0		115	61-141			



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2510070-BLK1)					Prepared: 03/04/25 Analyzed: 03/06/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.3		50.0		111	61-141			

LCS (2510070-BS1)					Prepared: 03/04/25 Analyzed: 03/06/25				
Diesel Range Organics (C10-C28)	244	25.0	250		97.5	66-144			
Surrogate: n-Nonane	56.6		50.0		113	61-141			

Matrix Spike (2510070-MS1)					Source: E503017-24		Prepared: 03/04/25 Analyzed: 03/06/25		
Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	56-156			
Surrogate: n-Nonane	56.8		50.0		114	61-141			

Matrix Spike Dup (2510070-MSD1)					Source: E503017-24		Prepared: 03/04/25 Analyzed: 03/06/25		
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	56-156	6.45	20	
Surrogate: n-Nonane	56.1		50.0		112	61-141			



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2510068-BLK1)					Prepared: 03/04/25 Analyzed: 03/04/25				
Chloride	ND	20.0							
LCS (2510068-BS1)					Prepared: 03/04/25 Analyzed: 03/04/25				
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2510068-MS1)					Source: E503019-03		Prepared: 03/04/25 Analyzed: 03/04/25		
Chloride	272	20.0	250	ND	109	80-120			
Matrix Spike Dup (2510068-MSD1)					Source: E503019-03		Prepared: 03/04/25 Analyzed: 03/04/25		
Chloride	272	20.0	250	ND	109	80-120	0.104	20	



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	3/10/2025 12:04:01PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2510072-BLK1)					Prepared: 03/04/25 Analyzed: 03/04/25				
Chloride	ND	20.0							
LCS (2510072-BS1)					Prepared: 03/04/25 Analyzed: 03/04/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2510072-MS1)					Source: E503020-02		Prepared: 03/04/25 Analyzed: 03/04/25		
Chloride	574	20.0	250	333	96.5	80-120			
Matrix Spike Dup (2510072-MSD1)					Source: E503020-02		Prepared: 03/04/25 Analyzed: 03/04/25		
Chloride	586	20.0	250	333	102	80-120	2.19	20	

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

Definitions and Notes

Hilcorp Energy Co	Project Name:	San Juan 30-6 Unit #112Y SWD	
PO Box 61529	Project Number:	17051-0002	Reported:
Houston TX, 77208	Project Manager:	Kate Kaufman	03/10/25 12:04

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

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

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



Chain of Custody

San Juan 30-6 Unit #112Y SWD

Client Information				Invoice Information				Lab Use Only				TAT				State							
Client: <u>Hilcorp</u>				Company: <u>Hilcorp</u>				Lab WO# <u>E503020</u>				Job Number <u>17051-0002</u>				<input checked="" type="checkbox"/> 1D <input type="checkbox"/> 2D <input type="checkbox"/> 3D <input checked="" type="checkbox"/> Std							
Project Name: <u>San Juan 30-6 #112Y SWD</u>				Address:												<input checked="" type="checkbox"/> NM <input type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> TX							
Project Manager: <u>Kate Kaufman</u>				City, State, Zip:																			
Address:				Phone:																			
City, State, Zip:				Email:																			
Phone:				Miscellaneous:																			
Email: <u>kkaufman@hilcorp.com</u>																							
Sample Information												Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field	Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEq 1005 - TX	RCRA 8 Metals	Cation/Anion Pkg	SDWA	CWA	RCRA				
1048	3-3	soil	1x4oz	SS01			1	X	X	X		X											
1051				SS02			2																
1054				SS03			3																
1056				SS04			4																
1059				SS05			5																
1101				SS06			6																
1104				SS07			7																
1111				SS08			8																
1116				SS09			9																
1121				SS10			10																
Additional Instructions: <u>cc: shyde@ensolum.com, zimyers@ensolum.com, ofroelich@ensolum.com</u>																							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																							
Sampled by: <u>Zach Wye</u>																							
Relinquished by: (Signature)				Date		Time		Received by: (Signature)				Date		Time		Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>							
Relinquished by: (Signature)				Date		Time		Received by: (Signature)				Date		Time									
Relinquished by: (Signature)				Date		Time		Received by: (Signature)				Date		Time									
Relinquished by: (Signature)				Date		Time		Received by: (Signature)				Date		Time									
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																							
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																							
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																							



envirotech

Chain of Custody

San Juan 30-6 Unit 112Y SWD

Client Information				Invoice Information				Lab Use Only				TAT				State			
Client: <i>Hilcorp</i>				Company: <i>Hilcorp</i>				Lab WO#		Job Number		1D	2D	3D	Std	NM	CO	UT	TX
Project Name: <i>San Juan 30-6 Unit 112Y SWD</i>				Address:				<i>E 503020</i>		<i>17051-0002</i>					<input checked="" type="checkbox"/>				
Project Manager: <i>Kate Kaufman</i>				City, State, Zip:															
Address:				Phone:															
City, State, Zip:				Email:															
Phone:				Miscellaneous:															
Email: <i>kkaufman@hilcorp.com</i>																			

Sample Information										Analysis and Method										EPA Program			Remarks
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Cation/Anion Pkg	SDWA	CWA	RCRA					
																Compliance	Y	or	N				
<i>1124</i>	<i>3-3</i>	<i>soil</i>	<i>1x4oz</i>	<i>5511</i>		<i>11</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>X</i>												
<i>1132</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5512</i>		<i>12</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1135</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5513</i>		<i>13</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1238</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5514</i>		<i>14</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1240</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5515</i>		<i>15</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1242</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5516</i>		<i>16</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1310</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5517</i>		<i>17</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1314</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5518</i>		<i>18</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1319</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5519</i>		<i>19</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												
<i>1324</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>5520</i>		<i>20</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>1</i>												

Additional Instructions: *cc2 shyde@ensolum.com, Zmyers@ensolum.com, ofroelich@ensolum.com*

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

Sampled by: *Zach Myers*

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <i>4</i>
<i>Zach Myers</i>	<i>3-3-25</i>	<i>1552</i>	<i>Carlie Mann</i>	<i>3-3-25</i>	<i>1555</i>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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

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

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



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Chain of Custody

San Juan 30-6 Unit #112V SWD

[illegible]

Envirotech Analytical Laboratory

Printed: 3/4/2025 9:24:13AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Hilcorp Energy Co	Date Received:	03/03/25 15:55	Work Order ID:	E503020
Phone:	-	Date Logged In:	03/04/25 09:15	Logged In By:	Noe Soto
Email:		Due Date:	03/10/25 17:00 (5 day TAT)		

Chain of Custody (COC)

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

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

Carrier: Zach MyersComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

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

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/2/2025 4:54:38 PM

JOB DESCRIPTION

San Juan 30-6 Unit #112Y SWD

JOB NUMBER

885-23903-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization



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

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Laboratory Job ID: 885-23903-1

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Definitions/Glossary

Client: Hilcorp Energy

Job ID: 885-23903-1

Project/Site: San Juan 30-6 Unit #112Y SWD

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 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Job ID: 885-23903-1

Eurofins Albuquerque

Job Narrative 885-23903-1

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

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

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

Receipt

The samples were received on 4/29/2025 7:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.3°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

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Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS01

Lab Sample ID: 885-23903-1

Date Collected: 04/25/25 12:05

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/30/25 07:00	05/01/25 18:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			04/30/25 07:00	05/01/25 18:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/30/25 07:00	05/01/25 18:21	1
Ethylbenzene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 18:21	1
Toluene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 18:21	1
Xylenes, Total	ND		0.10	mg/Kg		04/30/25 07:00	05/01/25 18:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			04/30/25 07:00	05/01/25 18:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		04/30/25 11:46	04/30/25 15:25	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/30/25 11:46	04/30/25 15:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	118		62 - 134			04/30/25 11:46	04/30/25 15:25	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		60	mg/Kg		05/01/25 06:22	05/01/25 13:18	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS02

Lab Sample ID: 885-23903-2

Date Collected: 04/25/25 12:40

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/30/25 07:00	05/01/25 19:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		35 - 166			04/30/25 07:00	05/01/25 19:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/30/25 07:00	05/01/25 19:26	1
Ethylbenzene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 19:26	1
Toluene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 19:26	1
Xylenes, Total	ND		0.10	mg/Kg		04/30/25 07:00	05/01/25 19:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			04/30/25 07:00	05/01/25 19:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/30/25 11:46	04/30/25 15:38	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/30/25 11:46	04/30/25 15:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	121		62 - 134			04/30/25 11:46	04/30/25 15:38	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		60	mg/Kg		05/01/25 06:22	05/01/25 14:23	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS03

Lab Sample ID: 885-23903-3

Date Collected: 04/25/25 12:50

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/30/25 07:00	05/01/25 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166	04/30/25 07:00	05/01/25 20:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/30/25 07:00	05/01/25 20:31	1
Ethylbenzene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 20:31	1
Toluene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 20:31	1
Xylenes, Total	ND		0.099	mg/Kg		04/30/25 07:00	05/01/25 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		48 - 145	04/30/25 07:00	05/01/25 20:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/30/25 11:46	04/30/25 15:50	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/30/25 11:46	04/30/25 15:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	125		62 - 134	04/30/25 11:46	04/30/25 15:50	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	710		60	mg/Kg		05/01/25 06:22	05/01/25 14:37	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS04

Lab Sample ID: 885-23903-4

Date Collected: 04/25/25 12:54

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/30/25 07:00	05/01/25 20:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			04/30/25 07:00	05/01/25 20:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/30/25 07:00	05/01/25 20:53	1
Ethylbenzene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 20:53	1
Toluene	ND		0.050	mg/Kg		04/30/25 07:00	05/01/25 20:53	1
Xylenes, Total	ND		0.099	mg/Kg		04/30/25 07:00	05/01/25 20:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		48 - 145			04/30/25 07:00	05/01/25 20:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/30/25 11:46	04/30/25 16:02	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/30/25 11:46	04/30/25 16:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	114		62 - 134			04/30/25 11:46	04/30/25 16:02	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	940		60	mg/Kg		05/01/25 06:22	05/01/25 14:50	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS05

Lab Sample ID: 885-23903-5

Date Collected: 04/25/25 12:58

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/30/25 07:00	05/01/25 21:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166	04/30/25 07:00	05/01/25 21:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/30/25 07:00	05/01/25 21:15	1
Ethylbenzene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 21:15	1
Toluene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 21:15	1
Xylenes, Total	ND		0.097	mg/Kg		04/30/25 07:00	05/01/25 21:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145	04/30/25 07:00	05/01/25 21:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/30/25 11:46	04/30/25 16:14	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/30/25 11:46	04/30/25 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134	04/30/25 11:46	04/30/25 16:14	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	530		60	mg/Kg		05/01/25 06:22	05/01/25 15:03	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS06

Lab Sample ID: 885-23903-6

Date Collected: 04/25/25 13:05

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/30/25 07:00	05/01/25 21:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			04/30/25 07:00	05/01/25 21:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/30/25 07:00	05/01/25 21:36	1
Ethylbenzene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 21:36	1
Toluene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 21:36	1
Xylenes, Total	ND		0.098	mg/Kg		04/30/25 07:00	05/01/25 21:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			04/30/25 07:00	05/01/25 21:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/30/25 11:46	04/30/25 16:26	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/30/25 11:46	04/30/25 16:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	119		62 - 134			04/30/25 11:46	04/30/25 16:26	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		61	mg/Kg		05/01/25 06:22	05/01/25 15:16	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS07

Lab Sample ID: 885-23903-7

Date Collected: 04/25/25 13:15

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/30/25 07:00	05/01/25 21:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			04/30/25 07:00	05/01/25 21:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/30/25 07:00	05/01/25 21:58	1
Ethylbenzene	ND		0.048	mg/Kg		04/30/25 07:00	05/01/25 21:58	1
Toluene	ND		0.048	mg/Kg		04/30/25 07:00	05/01/25 21:58	1
Xylenes, Total	ND		0.097	mg/Kg		04/30/25 07:00	05/01/25 21:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		48 - 145			04/30/25 07:00	05/01/25 21:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/30/25 11:46	04/30/25 16:39	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/30/25 11:46	04/30/25 16:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	117		62 - 134			04/30/25 11:46	04/30/25 16:39	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		60	mg/Kg		05/01/25 06:22	05/01/25 15:29	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS08

Lab Sample ID: 885-23903-8

Date Collected: 04/25/25 14:05

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/30/25 07:00	05/01/25 22:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			04/30/25 07:00	05/01/25 22:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/30/25 07:00	05/01/25 22:19	1
Ethylbenzene	ND		0.047	mg/Kg		04/30/25 07:00	05/01/25 22:19	1
Toluene	ND		0.047	mg/Kg		04/30/25 07:00	05/01/25 22:19	1
Xylenes, Total	ND		0.094	mg/Kg		04/30/25 07:00	05/01/25 22:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			04/30/25 07:00	05/01/25 22:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/30/25 11:46	04/30/25 13:34	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/30/25 11:46	04/30/25 13:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	113		62 - 134			04/30/25 11:46	04/30/25 13:34	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		05/01/25 06:22	05/01/25 15:42	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS09

Lab Sample ID: 885-23903-9

Date Collected: 04/25/25 14:20

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/30/25 07:00	05/01/25 22:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			04/30/25 07:00	05/01/25 22:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/30/25 07:00	05/01/25 22:41	1
Ethylbenzene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 22:41	1
Toluene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 22:41	1
Xylenes, Total	ND		0.098	mg/Kg		04/30/25 07:00	05/01/25 22:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			04/30/25 07:00	05/01/25 22:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/30/25 11:46	04/30/25 13:57	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/30/25 11:46	04/30/25 13:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	114		62 - 134			04/30/25 11:46	04/30/25 13:57	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		05/01/25 06:22	05/01/25 15:55	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS10

Lab Sample ID: 885-23903-10

Date Collected: 04/25/25 14:25

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/30/25 07:00	05/01/25 23:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			04/30/25 07:00	05/01/25 23:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/30/25 07:00	05/01/25 23:03	1
Ethylbenzene	ND		0.047	mg/Kg		04/30/25 07:00	05/01/25 23:03	1
Toluene	ND		0.047	mg/Kg		04/30/25 07:00	05/01/25 23:03	1
Xylenes, Total	ND		0.094	mg/Kg		04/30/25 07:00	05/01/25 23:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		48 - 145			04/30/25 07:00	05/01/25 23:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/30/25 11:46	04/30/25 14:21	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/30/25 11:46	04/30/25 14:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	115		62 - 134			04/30/25 11:46	04/30/25 14:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		60	mg/Kg		05/01/25 06:22	05/01/25 16:35	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS11

Lab Sample ID: 885-23903-11

Date Collected: 04/28/25 10:05

Matrix: Solid

Date Received: 04/29/25 07:10

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/30/25 07:00	05/01/25 23:46		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		35 - 166			04/30/25 07:00	05/01/25 23:46		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/25 07:00	05/01/25 23:46		1
Ethylbenzene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 23:46		1
Toluene	ND		0.049	mg/Kg		04/30/25 07:00	05/01/25 23:46		1
Xylenes, Total	ND		0.097	mg/Kg		04/30/25 07:00	05/01/25 23:46		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		48 - 145			04/30/25 07:00	05/01/25 23:46		1
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/30/25 11:46	04/30/25 14:44		1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/30/25 11:46	04/30/25 14:44		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	114		62 - 134			04/30/25 11:46	04/30/25 14:44		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		05/01/25 06:22	05/01/25 16:48		20

Client Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS12

Lab Sample ID: 885-23903-12

Date Collected: 04/28/25 10:10

Matrix: Solid

Date Received: 04/29/25 07:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/30/25 07:00	05/02/25 00:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			04/30/25 07:00	05/02/25 00:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/30/25 07:00	05/02/25 00:08	1
Ethylbenzene	ND		0.049	mg/Kg		04/30/25 07:00	05/02/25 00:08	1
Toluene	ND		0.049	mg/Kg		04/30/25 07:00	05/02/25 00:08	1
Xylenes, Total	ND		0.097	mg/Kg		04/30/25 07:00	05/02/25 00:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		48 - 145			04/30/25 07:00	05/02/25 00:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/30/25 11:46	04/30/25 15:55	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/30/25 11:46	04/30/25 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			04/30/25 11:46	04/30/25 15:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62		60	mg/Kg		05/01/25 06:22	05/01/25 17:01	20

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QC Sample Results

Client: Hilcorp Energy

Job ID: 885-23903-1

Project/Site: San Juan 30-6 Unit #112Y SWD

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

Lab Sample ID: MB 885-25212/1-A

Matrix: Solid

Analysis Batch: 25409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25212

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/30/25 06:59	05/01/25 17:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			04/30/25 06:59	05/01/25 17:59	1

Lab Sample ID: LCS 885-25212/2-A

Matrix: Solid

Analysis Batch: 25409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	26.7		mg/Kg		107	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	211		35 - 166				

Lab Sample ID: 885-23903-1 MS

Matrix: Solid

Analysis Batch: 25409

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 25212

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		25.0	28.0		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	217		35 - 166						

Lab Sample ID: 885-23903-1 MSD

Matrix: Solid

Analysis Batch: 25409

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 25212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		25.0	28.1		mg/Kg		113	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	219		35 - 166								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-25212/1-A

Matrix: Solid

Analysis Batch: 25410

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25212

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/30/25 06:59	05/01/25 17:59	1
Ethylbenzene	ND		0.050	mg/Kg		04/30/25 06:59	05/01/25 17:59	1
Toluene	ND		0.050	mg/Kg		04/30/25 06:59	05/01/25 17:59	1

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QC Sample Results

Client: Hilcorp Energy

Job ID: 885-23903-1

Project/Site: San Juan 30-6 Unit #112Y SWD

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

Lab Sample ID: MB 885-25212/1-A

Matrix: Solid

Analysis Batch: 25410

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25212

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/30/25 06:59	05/01/25 17:59	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		48 - 145			04/30/25 06:59	05/01/25 17:59	1

Lab Sample ID: LCS 885-25212/3-A

Matrix: Solid

Analysis Batch: 25410

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.03		mg/Kg		103	70 - 130
Ethylbenzene	1.00	1.03		mg/Kg		103	70 - 130
m&p-Xylene	2.00	2.06		mg/Kg		103	70 - 130
o-Xylene	1.00	1.04		mg/Kg		104	70 - 130
Toluene	1.00	1.01		mg/Kg		101	70 - 130
Xylenes, Total	3.00	3.10		mg/Kg		103	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	98		48 - 145				

Lab Sample ID: 885-23903-2 MS

Matrix: Solid

Analysis Batch: 25410

Client Sample ID: FS02

Prep Type: Total/NA

Prep Batch: 25212

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.992	1.07		mg/Kg		108	70 - 130
Ethylbenzene	ND		0.992	1.09		mg/Kg		110	70 - 130
m&p-Xylene	ND		1.98	2.22		mg/Kg		112	70 - 130
o-Xylene	ND		0.992	1.11		mg/Kg		112	70 - 130
Toluene	ND		0.992	1.07		mg/Kg		108	70 - 130
Xylenes, Total	ND		2.98	3.33		mg/Kg		112	70 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	102		48 - 145						

Lab Sample ID: 885-23903-2 MSD

Matrix: Solid

Analysis Batch: 25410

Client Sample ID: FS02

Prep Type: Total/NA

Prep Batch: 25212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.992	1.05		mg/Kg		106	70 - 130	3	20
Ethylbenzene	ND		0.992	1.07		mg/Kg		108	70 - 130	2	20
m&p-Xylene	ND		1.98	2.11		mg/Kg		106	70 - 130	5	20
o-Xylene	ND		0.992	1.08		mg/Kg		109	70 - 130	3	20
Toluene	ND		0.992	1.02		mg/Kg		103	70 - 130	4	20
Xylenes, Total	ND		2.98	3.19		mg/Kg		107	70 - 130	4	20

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QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

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

Lab Sample ID: 885-23903-2 MSD

Matrix: Solid

Analysis Batch: 25410

Client Sample ID: FS02

Prep Type: Total/NA

Prep Batch: 25212

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		48 - 145

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

Lab Sample ID: MB 885-25249/1-A

Matrix: Solid

Analysis Batch: 25219

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25249

Analyte	MB	MB							
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/30/25 11:46	04/30/25 14:07	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/30/25 11:46	04/30/25 14:07	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			04/30/25 11:46	04/30/25 14:07	1	

Lab Sample ID: LCS 885-25249/2-A

Matrix: Solid

Analysis Batch: 25219

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25249

Analyte		Spike	LCS	LCS				%Rec	
		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics [C10-C28]		50.0	40.1		mg/Kg		80	51 - 148	
Surrogate	%Recovery	Qualifier	Limits						
Di-n-octyl phthalate (Surr)	106		62 - 134						

Lab Sample ID: 885-23903-11 MS

Matrix: Solid

Analysis Batch: 25220

Client Sample ID: FS11

Prep Type: Total/NA

Prep Batch: 25249

Analyte	Sample	Sample	Spike	MS	MS			%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10-C28]	ND		48.3	41.1		mg/Kg		85	44 - 136
Surrogate	%Recovery	Qualifier	Limits						
Di-n-octyl phthalate (Surr)	114		62 - 134						

Lab Sample ID: 885-23903-11 MSD

Matrix: Solid

Analysis Batch: 25220

Client Sample ID: FS11

Prep Type: Total/NA

Prep Batch: 25249

Analyte	Sample	Sample	Spike	MSD	MSD			%Rec	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	ND		45.8	40.0		mg/Kg		87	44 - 136	3	32
Surrogate	%Recovery	Qualifier	Limits								
Di-n-octyl phthalate (Surr)	114		62 - 134								

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QC Sample Results

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-25297/1-A
Matrix: Solid
Analysis Batch: 25322

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 25297

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		05/01/25 06:22	05/01/25 11:14	1

Lab Sample ID: LCS 885-25297/2-A
Matrix: Solid
Analysis Batch: 25322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	30.5		mg/Kg		102	90 - 110

Lab Sample ID: 885-23903-1 MS
Matrix: Solid
Analysis Batch: 25322

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 25297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100		29.7	120		mg/Kg		65	50 - 150

Lab Sample ID: 885-23903-1 MSD
Matrix: Solid
Analysis Batch: 25322

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 25297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100		30.1	121		mg/Kg		69	50 - 150	1	20

QC Association Summary

Client: Hilcorp Energy

Job ID: 885-23903-1

Project/Site: San Juan 30-6 Unit #112Y SWD

GC VOA

Prep Batch: 25212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-1	FS01	Total/NA	Solid	5030C	
885-23903-2	FS02	Total/NA	Solid	5030C	
885-23903-3	FS03	Total/NA	Solid	5030C	
885-23903-4	FS04	Total/NA	Solid	5030C	
885-23903-5	FS05	Total/NA	Solid	5030C	
885-23903-6	FS06	Total/NA	Solid	5030C	
885-23903-7	FS07	Total/NA	Solid	5030C	
885-23903-8	FS08	Total/NA	Solid	5030C	
885-23903-9	FS09	Total/NA	Solid	5030C	
885-23903-10	FS10	Total/NA	Solid	5030C	
885-23903-11	FS11	Total/NA	Solid	5030C	
885-23903-12	FS12	Total/NA	Solid	5030C	
MB 885-25212/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-25212/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-25212/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-23903-1 MS	FS01	Total/NA	Solid	5030C	
885-23903-1 MSD	FS01	Total/NA	Solid	5030C	
885-23903-2 MS	FS02	Total/NA	Solid	5030C	
885-23903-2 MSD	FS02	Total/NA	Solid	5030C	

Analysis Batch: 25409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-1	FS01	Total/NA	Solid	8015M/D	25212
885-23903-2	FS02	Total/NA	Solid	8015M/D	25212
885-23903-3	FS03	Total/NA	Solid	8015M/D	25212
885-23903-4	FS04	Total/NA	Solid	8015M/D	25212
885-23903-5	FS05	Total/NA	Solid	8015M/D	25212
885-23903-6	FS06	Total/NA	Solid	8015M/D	25212
885-23903-7	FS07	Total/NA	Solid	8015M/D	25212
885-23903-8	FS08	Total/NA	Solid	8015M/D	25212
885-23903-9	FS09	Total/NA	Solid	8015M/D	25212
885-23903-10	FS10	Total/NA	Solid	8015M/D	25212
885-23903-11	FS11	Total/NA	Solid	8015M/D	25212
885-23903-12	FS12	Total/NA	Solid	8015M/D	25212
MB 885-25212/1-A	Method Blank	Total/NA	Solid	8015M/D	25212
LCS 885-25212/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	25212
885-23903-1 MS	FS01	Total/NA	Solid	8015M/D	25212
885-23903-1 MSD	FS01	Total/NA	Solid	8015M/D	25212

Analysis Batch: 25410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-1	FS01	Total/NA	Solid	8021B	25212
885-23903-2	FS02	Total/NA	Solid	8021B	25212
885-23903-3	FS03	Total/NA	Solid	8021B	25212
885-23903-4	FS04	Total/NA	Solid	8021B	25212
885-23903-5	FS05	Total/NA	Solid	8021B	25212
885-23903-6	FS06	Total/NA	Solid	8021B	25212
885-23903-7	FS07	Total/NA	Solid	8021B	25212
885-23903-8	FS08	Total/NA	Solid	8021B	25212
885-23903-9	FS09	Total/NA	Solid	8021B	25212
885-23903-10	FS10	Total/NA	Solid	8021B	25212

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

GC VOA (Continued)

Analysis Batch: 25410 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-11	FS11	Total/NA	Solid	8021B	25212
885-23903-12	FS12	Total/NA	Solid	8021B	25212
MB 885-25212/1-A	Method Blank	Total/NA	Solid	8021B	25212
LCS 885-25212/3-A	Lab Control Sample	Total/NA	Solid	8021B	25212
885-23903-2 MS	FS02	Total/NA	Solid	8021B	25212
885-23903-2 MSD	FS02	Total/NA	Solid	8021B	25212

GC Semi VOA

Analysis Batch: 25219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-1	FS01	Total/NA	Solid	8015M/D	25249
885-23903-2	FS02	Total/NA	Solid	8015M/D	25249
885-23903-3	FS03	Total/NA	Solid	8015M/D	25249
885-23903-4	FS04	Total/NA	Solid	8015M/D	25249
885-23903-5	FS05	Total/NA	Solid	8015M/D	25249
885-23903-6	FS06	Total/NA	Solid	8015M/D	25249
885-23903-7	FS07	Total/NA	Solid	8015M/D	25249
MB 885-25249/1-A	Method Blank	Total/NA	Solid	8015M/D	25249
LCS 885-25249/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	25249

Analysis Batch: 25220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-8	FS08	Total/NA	Solid	8015M/D	25249
885-23903-9	FS09	Total/NA	Solid	8015M/D	25249
885-23903-10	FS10	Total/NA	Solid	8015M/D	25249
885-23903-11	FS11	Total/NA	Solid	8015M/D	25249
885-23903-12	FS12	Total/NA	Solid	8015M/D	25249
885-23903-11 MS	FS11	Total/NA	Solid	8015M/D	25249
885-23903-11 MSD	FS11	Total/NA	Solid	8015M/D	25249

Prep Batch: 25249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-1	FS01	Total/NA	Solid	SHAKE	
885-23903-2	FS02	Total/NA	Solid	SHAKE	
885-23903-3	FS03	Total/NA	Solid	SHAKE	
885-23903-4	FS04	Total/NA	Solid	SHAKE	
885-23903-5	FS05	Total/NA	Solid	SHAKE	
885-23903-6	FS06	Total/NA	Solid	SHAKE	
885-23903-7	FS07	Total/NA	Solid	SHAKE	
885-23903-8	FS08	Total/NA	Solid	SHAKE	
885-23903-9	FS09	Total/NA	Solid	SHAKE	
885-23903-10	FS10	Total/NA	Solid	SHAKE	
885-23903-11	FS11	Total/NA	Solid	SHAKE	
885-23903-12	FS12	Total/NA	Solid	SHAKE	
MB 885-25249/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-25249/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-23903-11 MS	FS11	Total/NA	Solid	SHAKE	
885-23903-11 MSD	FS11	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy

Job ID: 885-23903-1

Project/Site: San Juan 30-6 Unit #112Y SWD

HPLC/IC

Prep Batch: 25297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-1	FS01	Total/NA	Solid	300_Prep	
885-23903-2	FS02	Total/NA	Solid	300_Prep	
885-23903-3	FS03	Total/NA	Solid	300_Prep	
885-23903-4	FS04	Total/NA	Solid	300_Prep	
885-23903-5	FS05	Total/NA	Solid	300_Prep	
885-23903-6	FS06	Total/NA	Solid	300_Prep	
885-23903-7	FS07	Total/NA	Solid	300_Prep	
885-23903-8	FS08	Total/NA	Solid	300_Prep	
885-23903-9	FS09	Total/NA	Solid	300_Prep	
885-23903-10	FS10	Total/NA	Solid	300_Prep	
885-23903-11	FS11	Total/NA	Solid	300_Prep	
885-23903-12	FS12	Total/NA	Solid	300_Prep	
MB 885-25297/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-25297/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-23903-1 MS	FS01	Total/NA	Solid	300_Prep	
885-23903-1 MSD	FS01	Total/NA	Solid	300_Prep	

Analysis Batch: 25322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-23903-1	FS01	Total/NA	Solid	300.0	25297
885-23903-2	FS02	Total/NA	Solid	300.0	25297
885-23903-3	FS03	Total/NA	Solid	300.0	25297
885-23903-4	FS04	Total/NA	Solid	300.0	25297
885-23903-5	FS05	Total/NA	Solid	300.0	25297
885-23903-6	FS06	Total/NA	Solid	300.0	25297
885-23903-7	FS07	Total/NA	Solid	300.0	25297
885-23903-8	FS08	Total/NA	Solid	300.0	25297
885-23903-9	FS09	Total/NA	Solid	300.0	25297
885-23903-10	FS10	Total/NA	Solid	300.0	25297
885-23903-11	FS11	Total/NA	Solid	300.0	25297
885-23903-12	FS12	Total/NA	Solid	300.0	25297
MB 885-25297/1-A	Method Blank	Total/NA	Solid	300.0	25297
LCS 885-25297/2-A	Lab Control Sample	Total/NA	Solid	300.0	25297
885-23903-1 MS	FS01	Total/NA	Solid	300.0	25297
885-23903-1 MSD	FS01	Total/NA	Solid	300.0	25297

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS01
Date Collected: 04/25/25 12:05
Date Received: 04/29/25 07:10

Lab Sample ID: 885-23903-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 18:21
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 18:21
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25219	MI	EET ALB	04/30/25 15:25
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 13:18

Client Sample ID: FS02
Date Collected: 04/25/25 12:40
Date Received: 04/29/25 07:10

Lab Sample ID: 885-23903-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 19:26
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 19:26
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25219	MI	EET ALB	04/30/25 15:38
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 14:23

Client Sample ID: FS03
Date Collected: 04/25/25 12:50
Date Received: 04/29/25 07:10

Lab Sample ID: 885-23903-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 20:31
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 20:31
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25219	MI	EET ALB	04/30/25 15:50
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 14:37

Client Sample ID: FS04
Date Collected: 04/25/25 12:54
Date Received: 04/29/25 07:10

Lab Sample ID: 885-23903-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 20:53

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS04

Lab Sample ID: 885-23903-4

Date Collected: 04/25/25 12:54

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 20:53
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25219	MI	EET ALB	04/30/25 16:02
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 14:50

Client Sample ID: FS05

Lab Sample ID: 885-23903-5

Date Collected: 04/25/25 12:58

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 21:15
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 21:15
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25219	MI	EET ALB	04/30/25 16:14
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 15:03

Client Sample ID: FS06

Lab Sample ID: 885-23903-6

Date Collected: 04/25/25 13:05

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 21:36
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 21:36
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25219	MI	EET ALB	04/30/25 16:26
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 15:16

Client Sample ID: FS07

Lab Sample ID: 885-23903-7

Date Collected: 04/25/25 13:15

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 21:58
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 21:58

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS07

Lab Sample ID: 885-23903-7

Date Collected: 04/25/25 13:15

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25219	MI	EET ALB	04/30/25 16:39
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 15:29

Client Sample ID: FS08

Lab Sample ID: 885-23903-8

Date Collected: 04/25/25 14:05

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 22:19
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 22:19
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25220	MI	EET ALB	04/30/25 13:34
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 15:42

Client Sample ID: FS09

Lab Sample ID: 885-23903-9

Date Collected: 04/25/25 14:20

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 22:41
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 22:41
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25220	MI	EET ALB	04/30/25 13:57
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 15:55

Client Sample ID: FS10

Lab Sample ID: 885-23903-10

Date Collected: 04/25/25 14:25

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 23:03
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 23:03
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25220	MI	EET ALB	04/30/25 14:21

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

Client Sample ID: FS10

Lab Sample ID: 885-23903-10

Date Collected: 04/25/25 14:25

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 16:35

Client Sample ID: FS11

Lab Sample ID: 885-23903-11

Date Collected: 04/28/25 10:05

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/01/25 23:46
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/01/25 23:46
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25220	MI	EET ALB	04/30/25 14:44
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 16:48

Client Sample ID: FS12

Lab Sample ID: 885-23903-12

Date Collected: 04/28/25 10:10

Matrix: Solid

Date Received: 04/29/25 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8015M/D		1	25409	AT	EET ALB	05/02/25 00:08
Total/NA	Prep	5030C			25212	JE	EET ALB	04/30/25 07:00
Total/NA	Analysis	8021B		1	25410	AT	EET ALB	05/02/25 00:08
Total/NA	Prep	SHAKE			25249	MI	EET ALB	04/30/25 11:46
Total/NA	Analysis	8015M/D		1	25220	MI	EET ALB	04/30/25 15:55
Total/NA	Prep	300_Prep			25297	JT	EET ALB	05/01/25 06:22
Total/NA	Analysis	300.0		20	25322	ES	EET ALB	05/01/25 17:01

Laboratory References:

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

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: San Juan 30-6 Unit #112Y SWD

Job ID: 885-23903-1

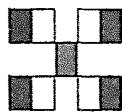
Laboratory: Eurofins Albuquerque

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

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

Chain-of-Custody Record

Client: <u>Hilcorp</u>		Turn-Around Time: <u>5 day</u> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
attn: <u>Kate Kaufman</u>		Project Name: <u>San Juan 30-6 Unit #112K SWD</u>	
Mailing Address:		Project #:	
Phone #:		Project Manager: <u>Stuart Hyde</u>	
email or Fax#: <u>kk Kaufman@hilcorp.com</u>		shyde@enslum.com	
QA/QC Package:		Sampler: <u>Zach Hyde</u>	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other		# of Coolers: <u>1</u>	
<input type="checkbox"/> EDD (Type)		Cooler Temp (including CP): <u>6-14.2-20.3 (°C)</u>	
Date	Time	Matrix	Sample Name
4-25	1205	soil	FS01
	1240		FS02
	1250		FS03
	1254		FS04
	1258		FS05
	1305		FS06
	1315		FS07
	1405		FS08
	1420		FS09
	1425		FS10
4-28	1005		FS11
	1010		FS12
Date:	Time:	Relinquished by:	Received by:
4/28/25	1400	<u>Zach</u>	<u>Woo</u>
Date:	Time:	Relinquished by:	Received by:
4/28/25	1830	<u>Stuart Wade</u>	<u>Via courier</u>


**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109 885-23903 COC

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

Analysis Request

TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	C, F, Br, NO ₂ , NO ₃ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
<input checked="" type="checkbox"/> BTEX / MTBE / TMBs (8023)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks:

cc:

zmyers@enslum.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: 885-23903-1

Login Number: 23903

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/22/2025 9:08:47 AM

JOB DESCRIPTION

SJ 30-6 112Y

JOB NUMBER

885-25160-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization



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5/22/2025 9:08:47 AM

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

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Laboratory Job ID: 885-25160-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: SJ 30-6 112Y

Job ID: 885-25160-1

Job ID: 885-25160-1

Eurofins Albuquerque

Job Narrative 885-25160-1

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

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

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

Receipt

The samples were received on 5/20/2025 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 3.7°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

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Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

Client Sample ID: FS02R

Lab Sample ID: 885-25160-1

Date Collected: 05/19/25 12:00

Matrix: Solid

Date Received: 05/20/25 06:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.7	mg/Kg		05/20/25 09:37	05/20/25 21:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			05/20/25 09:37	05/20/25 21:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.018	mg/Kg		05/20/25 09:37	05/20/25 21:46	1
Ethylbenzene	ND		0.037	mg/Kg		05/20/25 09:37	05/20/25 21:46	1
Toluene	ND		0.037	mg/Kg		05/20/25 09:37	05/20/25 21:46	1
Xylenes, Total	ND		0.074	mg/Kg		05/20/25 09:37	05/20/25 21:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			05/20/25 09:37	05/20/25 21:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		9.6	mg/Kg		05/20/25 10:36	05/20/25 16:30	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/20/25 10:36	05/20/25 16:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			05/20/25 10:36	05/20/25 16:30	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	450		60	mg/Kg		05/20/25 10:34	05/21/25 03:11	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

Client Sample ID: FS03R

Lab Sample ID: 885-25160-2

Date Collected: 05/19/25 11:40

Matrix: Solid

Date Received: 05/20/25 06:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.7	mg/Kg		05/20/25 09:37	05/20/25 22:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			05/20/25 09:37	05/20/25 22:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019	mg/Kg		05/20/25 09:37	05/20/25 22:08	1
Ethylbenzene	ND		0.037	mg/Kg		05/20/25 09:37	05/20/25 22:08	1
Toluene	ND		0.037	mg/Kg		05/20/25 09:37	05/20/25 22:08	1
Xylenes, Total	ND		0.075	mg/Kg		05/20/25 09:37	05/20/25 22:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			05/20/25 09:37	05/20/25 22:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/20/25 10:36	05/20/25 16:41	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/20/25 10:36	05/20/25 16:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			05/20/25 10:36	05/20/25 16:41	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	350		60	mg/Kg		05/20/25 10:34	05/21/25 03:25	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

Client Sample ID: FS04R

Lab Sample ID: 885-25160-3

Date Collected: 05/19/25 11:15

Matrix: Solid

Date Received: 05/20/25 06:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		05/20/25 09:37	05/20/25 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 150			05/20/25 09:37	05/20/25 22:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/20/25 09:37	05/20/25 22:29	1
Ethylbenzene	ND		0.048	mg/Kg		05/20/25 09:37	05/20/25 22:29	1
Toluene	ND		0.048	mg/Kg		05/20/25 09:37	05/20/25 22:29	1
Xylenes, Total	ND		0.096	mg/Kg		05/20/25 09:37	05/20/25 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			05/20/25 09:37	05/20/25 22:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		05/20/25 10:36	05/21/25 15:41	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/20/25 10:36	05/21/25 15:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			05/20/25 10:36	05/21/25 15:41	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	380		60	mg/Kg		05/20/25 10:34	05/20/25 17:24	20

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QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

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

Lab Sample ID: MB 885-26527/1-A

Matrix: Solid

Analysis Batch: 26587

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26527

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/20/25 09:37	05/20/25 21:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 150			05/20/25 09:37	05/20/25 21:24	1

Lab Sample ID: LCS 885-26527/2-A

Matrix: Solid

Analysis Batch: 26587

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26527

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	24.7		mg/Kg		99	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	216		15 - 150				

Lab Sample ID: 885-25160-1 MS

Matrix: Solid

Analysis Batch: 26587

Client Sample ID: FS02R

Prep Type: Total/NA

Prep Batch: 26527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		18.4	16.8		mg/Kg		91	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	200		15 - 150						

Lab Sample ID: 885-25160-1 MSD

Matrix: Solid

Analysis Batch: 26587

Client Sample ID: FS02R

Prep Type: Total/NA

Prep Batch: 26527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		18.4	15.6		mg/Kg		85	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	188		15 - 150								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-26527/1-A

Matrix: Solid

Analysis Batch: 26586

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26527

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/20/25 09:37	05/20/25 21:24	1
Ethylbenzene	ND		0.050	mg/Kg		05/20/25 09:37	05/20/25 21:24	1
Toluene	ND		0.050	mg/Kg		05/20/25 09:37	05/20/25 21:24	1

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QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

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

Lab Sample ID: MB 885-26527/1-A

Matrix: Solid

Analysis Batch: 26586

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26527

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		05/20/25 09:37	05/20/25 21:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			05/20/25 09:37	05/20/25 21:24	1

Lab Sample ID: LCS 885-26527/3-A

Matrix: Solid

Analysis Batch: 26586

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26527

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.937		mg/Kg		94	70 - 130
Ethylbenzene	1.00	0.957		mg/Kg		96	70 - 130
m&p-Xylene	2.00	1.94		mg/Kg		97	70 - 130
o-Xylene	1.00	0.960		mg/Kg		96	70 - 130
Toluene	1.00	0.936		mg/Kg		94	70 - 130
Xylenes, Total	3.00	2.90		mg/Kg		97	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	97		15 - 150				

Lab Sample ID: 885-25160-2 MS

Matrix: Solid

Analysis Batch: 26586

Client Sample ID: FS03R

Prep Type: Total/NA

Prep Batch: 26527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.748	0.680		mg/Kg		91	70 - 130
Ethylbenzene	ND		0.748	0.700		mg/Kg		94	70 - 130
m&p-Xylene	ND		1.50	1.39		mg/Kg		93	70 - 130
o-Xylene	ND		0.748	0.703		mg/Kg		93	70 - 130
Toluene	ND		0.748	0.679		mg/Kg		91	70 - 130
Xylenes, Total	ND		2.24	2.09		mg/Kg		93	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	93		15 - 150						

Lab Sample ID: 885-25160-2 MSD

Matrix: Solid

Analysis Batch: 26586

Client Sample ID: FS03R

Prep Type: Total/NA

Prep Batch: 26527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.748	0.635		mg/Kg		85	70 - 130	7	20
Ethylbenzene	ND		0.748	0.654		mg/Kg		87	70 - 130	7	20
m&p-Xylene	ND		1.50	1.32		mg/Kg		88	70 - 130	5	20
o-Xylene	ND		0.748	0.676		mg/Kg		89	70 - 130	4	20
Toluene	ND		0.748	0.630		mg/Kg		84	70 - 130	7	20
Xylenes, Total	ND		2.24	2.00		mg/Kg		89	70 - 130	4	20

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QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

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

Lab Sample ID: 885-25160-2 MSD

Matrix: Solid

Analysis Batch: 26586

Client Sample ID: FS03R

Prep Type: Total/NA

Prep Batch: 26527

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		15 - 150

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

Lab Sample ID: MB 885-26537/1-A

Matrix: Solid

Analysis Batch: 26524

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26537

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/20/25 10:36	05/20/25 12:20	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/20/25 10:36	05/20/25 12:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			05/20/25 10:36	05/20/25 12:20	1

Lab Sample ID: LCS 885-26537/2-A

Matrix: Solid

Analysis Batch: 26524

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26537

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	52.5		mg/Kg		105	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	104		62 - 134				

Lab Sample ID: 885-25160-3 MS

Matrix: Solid

Analysis Batch: 26524

Client Sample ID: FS04R

Prep Type: Total/NA

Prep Batch: 26537

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	13		49.1	66.8		mg/Kg		110	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	119		62 - 134						

Lab Sample ID: 885-25160-3 MSD

Matrix: Solid

Analysis Batch: 26524

Client Sample ID: FS04R

Prep Type: Total/NA

Prep Batch: 26537

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	13		47.9	57.1		mg/Kg		93	44 - 136	16	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	119		62 - 134								

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QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 885-26536/3-A				Client Sample ID: Lab Control Sample			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 26552				Prep Batch: 26536			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.8		mg/Kg		99	90 - 110

Lab Sample ID: LLCS 885-26536/2-A				Client Sample ID: Lab Control Sample			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 26552				Prep Batch: 26536			
Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1.50	1.58		mg/Kg		105	50 - 150

QC Association Summary

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

GC VOA

Prep Batch: 26527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-1	FS02R	Total/NA	Solid	5035	
885-25160-2	FS03R	Total/NA	Solid	5035	
885-25160-3	FS04R	Total/NA	Solid	5035	
MB 885-26527/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-26527/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-26527/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-25160-1 MS	FS02R	Total/NA	Solid	5035	
885-25160-1 MSD	FS02R	Total/NA	Solid	5035	
885-25160-2 MS	FS03R	Total/NA	Solid	5035	
885-25160-2 MSD	FS03R	Total/NA	Solid	5035	

Analysis Batch: 26586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-1	FS02R	Total/NA	Solid	8021B	26527
885-25160-2	FS03R	Total/NA	Solid	8021B	26527
885-25160-3	FS04R	Total/NA	Solid	8021B	26527
MB 885-26527/1-A	Method Blank	Total/NA	Solid	8021B	26527
LCS 885-26527/3-A	Lab Control Sample	Total/NA	Solid	8021B	26527
885-25160-2 MS	FS03R	Total/NA	Solid	8021B	26527
885-25160-2 MSD	FS03R	Total/NA	Solid	8021B	26527

Analysis Batch: 26587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-1	FS02R	Total/NA	Solid	8015M/D	26527
885-25160-2	FS03R	Total/NA	Solid	8015M/D	26527
885-25160-3	FS04R	Total/NA	Solid	8015M/D	26527
MB 885-26527/1-A	Method Blank	Total/NA	Solid	8015M/D	26527
LCS 885-26527/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	26527
885-25160-1 MS	FS02R	Total/NA	Solid	8015M/D	26527
885-25160-1 MSD	FS02R	Total/NA	Solid	8015M/D	26527

GC Semi VOA

Analysis Batch: 26524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-1	FS02R	Total/NA	Solid	8015M/D	26537
885-25160-2	FS03R	Total/NA	Solid	8015M/D	26537
MB 885-26537/1-A	Method Blank	Total/NA	Solid	8015M/D	26537
LCS 885-26537/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	26537
885-25160-3 MS	FS04R	Total/NA	Solid	8015M/D	26537
885-25160-3 MSD	FS04R	Total/NA	Solid	8015M/D	26537

Prep Batch: 26537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-1	FS02R	Total/NA	Solid	SHAKE	
885-25160-2	FS03R	Total/NA	Solid	SHAKE	
885-25160-3	FS04R	Total/NA	Solid	SHAKE	
MB 885-26537/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-26537/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-25160-3 MS	FS04R	Total/NA	Solid	SHAKE	
885-25160-3 MSD	FS04R	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

GC Semi VOA

Analysis Batch: 26619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-3	FS04R	Total/NA	Solid	8015M/D	26537

HPLC/IC

Prep Batch: 26536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-1	FS02R	Total/NA	Solid	300_Prep	
885-25160-2	FS03R	Total/NA	Solid	300_Prep	
885-25160-3	FS04R	Total/NA	Solid	300_Prep	
LCS 885-26536/3-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LLCS 885-26536/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 26552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25160-1	FS02R	Total/NA	Solid	300.0	26536
885-25160-2	FS03R	Total/NA	Solid	300.0	26536
885-25160-3	FS04R	Total/NA	Solid	300.0	26536
LCS 885-26536/3-A	Lab Control Sample	Total/NA	Solid	300.0	26536
LLCS 885-26536/2-A	Lab Control Sample	Total/NA	Solid	300.0	26536

Lab Chronicle

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

Client Sample ID: FS02R
Date Collected: 05/19/25 12:00
Date Received: 05/20/25 06:50

Lab Sample ID: 885-25160-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			26527	JE	EET ALB	05/20/25 09:37
Total/NA	Analysis	8015M/D		1	26587	AT	EET ALB	05/20/25 21:46
Total/NA	Prep	5035			26527	JE	EET ALB	05/20/25 09:37
Total/NA	Analysis	8021B		1	26586	AT	EET ALB	05/20/25 21:46
Total/NA	Prep	SHAKE			26537	EM	EET ALB	05/20/25 10:36
Total/NA	Analysis	8015M/D		1	26524	EM	EET ALB	05/20/25 16:30
Total/NA	Prep	300_Prep			26536	DL	EET ALB	05/20/25 10:34
Total/NA	Analysis	300.0		20	26552	DL	EET ALB	05/21/25 03:11

Client Sample ID: FS03R
Date Collected: 05/19/25 11:40
Date Received: 05/20/25 06:50

Lab Sample ID: 885-25160-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			26527	JE	EET ALB	05/20/25 09:37
Total/NA	Analysis	8015M/D		1	26587	AT	EET ALB	05/20/25 22:08
Total/NA	Prep	5035			26527	JE	EET ALB	05/20/25 09:37
Total/NA	Analysis	8021B		1	26586	AT	EET ALB	05/20/25 22:08
Total/NA	Prep	SHAKE			26537	EM	EET ALB	05/20/25 10:36
Total/NA	Analysis	8015M/D		1	26524	EM	EET ALB	05/20/25 16:41
Total/NA	Prep	300_Prep			26536	DL	EET ALB	05/20/25 10:34
Total/NA	Analysis	300.0		20	26552	DL	EET ALB	05/21/25 03:25

Client Sample ID: FS04R
Date Collected: 05/19/25 11:15
Date Received: 05/20/25 06:50

Lab Sample ID: 885-25160-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			26527	JE	EET ALB	05/20/25 09:37
Total/NA	Analysis	8015M/D		1	26587	AT	EET ALB	05/20/25 22:29
Total/NA	Prep	5035			26527	JE	EET ALB	05/20/25 09:37
Total/NA	Analysis	8021B		1	26586	AT	EET ALB	05/20/25 22:29
Total/NA	Prep	SHAKE			26537	EM	EET ALB	05/20/25 10:36
Total/NA	Analysis	8015M/D		1	26619	EM	EET ALB	05/21/25 15:41
Total/NA	Prep	300_Prep			26536	DL	EET ALB	05/20/25 10:34
Total/NA	Analysis	300.0		20	26552	DL	EET ALB	05/20/25 17:24

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: SJ 30-6 112Y

Job ID: 885-25160-1

Laboratory: Eurofins Albuquerque

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

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

Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-25160-1

Login Number: 25160

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

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



APPENDIX C

Agency Correspondence

From: [Hamlet, Robert, EMNRD](#)
To: [Stuart Hyde](#)
Cc: [Kate Kaufman](#); [Wes Weichert](#); [Zach Myers](#); [Bratcher, Michael, EMNRD](#); [Wells, Shelly, EMNRD](#)
Subject: (Extension Approval) - NAPP2502031055 - Hilcorp San Juan 306 #112Y SWD Reporting
Date: Friday, April 11, 2025 1:41:33 PM
Attachments: [image006.png](#)
[image007.png](#)
[image008.png](#)

[**EXTERNAL EMAIL**]

RE: Incident #NAPP2502031055 SAN JUAN 30-6 #112Y SWD

Stuart,

A 90-day extension is approved. Please have a remediation plan and/or remediation closure report uploaded to the OCD Permitting Portal no later than **July 10th, 2025**. Please include this e-mail correspondence in the remediation plan and/or remediation closure report.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave. | Artesia, NM 88210
575.909.0302 | robert.hamlet@emnrd.nm.gov
<http://www.emnrd.state.nm.us/OCD/>



From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Friday, April 11, 2025 1:12 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] NAPP2502031055 - Hilcorp San Juan 306 #112Y SWD Reporting Extension Request

From: Stuart Hyde <shyde@ensolum.com>
Sent: Friday, April 11, 2025 11:25 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Adeloye, Abiodun A <aadeloye@blm.gov>

Cc: Kate Kaufman <kkaufman@hilcorp.com>; Wes Weichert <wweichert@ensolum.com>; Zach Myers <zmyers@ensolum.com>

Subject: [EXTERNAL] NAPP2502031055 - Hilcorp San Juan 306 #112Y SWD Reporting Extension Request

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

To whom it may concern,

On behalf of Hilcorp Energy Company, we are requesting a 90 day extension to the April 16, 2025 reporting deadline for the release at the San Juan 306 #112Y SWD site located in Rio Arriba County (coordinates 36.78781, -107.42621). At this time, we have successfully delineated the extent of soil impacts at the site. However, due to nearby cultural resources, we are awaiting an updated cultural resources survey prior to conducting excavation work at the site to removed impacted soil.

If approved, the new deadline would be July 15, 2025. Please reach out with any questions or comments. Thanks and have a great weekend.



Stuart Hyde, PG

(Licensed in TX, WA, & WY)

Senior Managing Geologist

970-903-1607

[Ensolum, LLC](#)

in f X

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

From: OCDOnline@state.nm.us
To: [Stuart Hyde](#)
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 454215
Date: Tuesday, April 22, 2025 9:31:12 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#) nAPP2502031055.

The sampling event is expected to take place:

When: 04/25/2025 @ 09:00

Where: A-26-30N-06W 1120 FNL 870 FEL (36.78757,-107.42567)

Additional Information: Stuart Hyde, 970-903-1607

Additional Instructions: San Juan 306 #112Y SWD, 36.78781, -107.42621

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: 454221
Date: Tuesday, April 22, 2025 9:32:41 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#) nAPP2502031055.

The sampling event is expected to take place:

When: 04/28/2025 @ 09:00

Where: A-26-30N-06W 1120 FNL 870 FEL (36.78757,-107.42567)

Additional Information: Stuart Hyde, 970-903-1607

Additional Instructions: San Juan 306 #112Y SWD, 36.78781, -107.42621

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: 462391
Date: Wednesday, May 14, 2025 1:54:19 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#) nAPP2502031055.

The sampling event is expected to take place:

When: 05/19/2025 @ 09:00

Where: A-26-30N-06W 1120 FNL 870 FEL (36.78757,-107.42567)

Additional Information: Stuart Hyde, 970-903-1607

Additional Instructions: San Juan 306 #112Y SWD, 36.78781, -107.42621

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



APPENDIX D

Photographic Log



Photographic Log

Hilcorp Energy Company
San Juan 30-6 Unit 112Y SWD
Rio Arriba County, New Mexico



Photograph: 1 Date: 4/25/2025
Description: Beginning excavation activities
View: West-Northwest



Photograph: 2 Date: 4/25/2025
Description: Pad excavation extent on 4/25/2025
View: Northeast



Photograph: 3 Date: 4/25/2025
Description: Off-Pad excavation activities
View: North



Photograph: 4 Date: 5/19/2025
Description: Additional excavation on 5/19/2025
View: Northeast

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 469448

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2502031055
Incident Name	NAPP2502031055 SAN JUAN 30-6 #112Y SWD @ 30-039-23501
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-039-23501] SAN JUAN 30 6 UNIT #112Y

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

Site Name	San Juan 30-6 #112Y SWD
Date Release Discovered	01/16/2025
Surface Owner	Federal

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

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

Nature and Volume of Release*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 Other (Specify) Produced Water Released: 8 BBL Recovered: 5 BBL Lost: 3 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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

QUESTIONS, Page 2

Action 469448

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Initial Response

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

The source of the release has been stopped	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	<i>Not answered.</i>

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: 05/30/2025
--	--

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

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Phone: (505) 629-6116

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

QUESTIONS, Page 3

Action 469448

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	5500
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	184
GRO+DRO (EPA SW-846 Method 8015M)	44
BTEX (EPA SW-846 Method 8021B or 8260B)	0.1
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	04/25/2025
On what date will (or did) the final sampling or liner inspection occur	05/19/2025
On what date will (or was) the remediation complete(d)	05/19/2025
What is the estimated surface area (in square feet) that will be reclaimed	350
What is the estimated volume (in cubic yards) that will be reclaimed	10
What is the estimated surface area (in square feet) that will be remediated	1760
What is the estimated volume (in cubic yards) that will be remediated	140
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

QUESTIONS, Page 4

Action 469448

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(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	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 05/30/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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>

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QUESTIONS, Page 5

Action 469448

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS, Page 6

Action 469448

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	462391
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/19/2025
What was the (estimated) number of samples that were to be gathered	3
What was the sampling surface area in square feet	600

Remediation Closure Request

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

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1760
What was the total volume (cubic yards) remediated	140
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	350
What was the total volume (in cubic yards) reclaimed	10
Summarize any additional remediation activities not included by answers (above)	N/A

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

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 05/30/2025
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QUESTIONS, Page 7

Action 469448

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 469448

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 469448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Step-out samples are only allowed if the entire release stayed on pad. If any part of the release exits the pad, all sidewall samples must come from the sidewall of the excavation. The release area will need confirmation samples representing no more than 200 ft2. All off-pad areas must meet reclamation standards in the OCD Spill Rule. The work will need to be completed in 90 days after the report has been reviewed.	6/16/2025