ENSOLUM

January 3, 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 28-6 Unit 102N
Rio Arriba County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: nAPP2403034973

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Report and Closure Request* associated with a condensate release at the San Juan 28-6 Unit 102N natural gas production well (Site). The Site is located on federal land managed by the Bureau of Land Management (BLM) in Unit I, Section 26, Township 28 North, Range 6 West in Rio Arriba County, New Mexico (Figure 1).

SITE BACKGROUND

On January 29, 2024, Hilcorp discovered a release of 41.58 barrels (bbls) of condensate due to corrosion at the bottom of the on-Site above ground storage tank (AST). Fluids stayed within the secondary containment berm, but no fluids were recovered. Upon discovery, the leak was stopped, and the remaining contents of the tank were drained to the nearby pit. The release volume was determined based on the operator's tank gauging data. Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) via email and submitted a Notification of Release on January 30, 2024. Hilcorp submitted the initial Form C-141 on February 12, 2024, and the release was assigned NMOCD Incident Number nAPP2403034973. Details regarding all previous sampling/delineation efforts and presentation of the Site characterization information, including a sensitive receptor and geology/hydrogeology review, are summarized in the April 2024 *Remediation Work Plan*.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As presented in the April 26, 2024 *Remediation Work Plan*, the following Closure Criteria for constituents of concern (COCs) have been applied to the Site:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH) as a combination of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO): 2,500 mg/kg
- GRO+DRO: 1,000 mg/kg
- Chloride: 20,000 mg/kg

EXCAVATION AND CONFIRMATION SOIL SAMPLING ACTIVITIES

Because of the areal extent of impacts, volume of impacted soil, and remote location of the Site, soil shredding was chosen as the remediation technique to address impacted soil at the Site. Soil shredding is an ex-situ and on-Site treatment of impacted soil through which impacted material is chemically treated using a chemical oxidant (generally hydrogen peroxide) applied to the soil. Impacted material is excavated from the ground using standard construction techniques and placed onto a soil screening unit using a special shredding bucket. The impacted soil is conveyed by the screening unit and chemical treatment is applied simultaneously. The treated soil is then placed in 100 cubic yard stockpiles and allowed to process for 24 to 48 hours in order for the oxidant to degrade the petroleum hydrocarbon contaminants in the soil.

Based on delineation activities previously performed at the Site, impacted soil was excavated and treated as stated above and was stockpiled in the areas on the well pad. As soil was removed, the excavation sidewalls and floors were field screened using a photoionization detector (PID). Once field screening indicated impacted soil had been removed, 5-point composite samples were collected from the sidewalls and floor of the excavation at a frequency of 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 5-point composite samples were collected into laboratory-provided jars and immediately placed on ice. Samples were submitted to Envirotech Laboratory for analysis of BTEX and TPH following the same methods described above. Notifications were provided to the NMOCD prior to sampling activities and are attached as Appendix A.

Analytical results from the excavation indicated concentrations of TPH and BTEX were compliant with NMOCD Table I Closure Criteria in all confirmation soil samples with the exception of floor samples FS04, FS07, FS10, and FS12 and sidewall sample SW08. Because of this, additional soil was removed from these areas and the floors and sidewall were resampled on November 12, 2024. Analytical results from the November 2024 sampling event indicated impacted soil was successfully removed, and all floor and sidewalls were in compliance with the applicable Closure Criteria. Excavation sample locations are indicated on Figure 2. In total, approximately 1,100 cubic yards of impacted soil was removed from the excavation and treated. Soil sample results are summarized in Table 1, with complete laboratory analytical reports attached as Appendix B. Photographs taken by Ensolum during the excavation work are included in Appendix C.

SOIL SHREDDING STOCKPILE AND VADOSE ZONE SOIL SAMPLING ACTIVITIES

Once treated (as described above), 5-point composite samples were collected for analysis from each 100 cubic yard stockpile (SP01 through SP11). The 5-point composite samples were collected in the manner described above and submitted to Eurofins for TPH and BTEX analysis. Based on analytical results, all treated stockpile samples were in compliance with the applicable NMOCD Table I Closure Criteria. Soil sample results are summarized in Table 2, with complete laboratory analytical reports also included in Appendix B.

Once the treated stockpile soil was removed from the ground surface and placed back into the excavation as backfill, vadose zone soil from below the treatment areas were sampled to assess if petroleum hydrocarbon constituents had leached into the subsurface during the treatment process. A 5-point composite soil sample was collected from beneath the treatment stockpile areas at an approved frequency of one sample per 1,500 square feet, as specified by the NMOCD. The composite sample was collected from the ground surface to a depth of 1 foot below ground surface (bgs), with locations shown on Figure 2. Samples SS01 through SS03 were collected using the manner described above and also submitted for TPH and BTEX analysis. Analytical results from all vadose zone samples indicated concentrations of TPH and BTEX were compliant with the NMOCD reclamation requirement (100 mg/kg of TPH). Soil sample results are summarized in Table 3, with complete laboratory analytical reports attached in Appendix B.

CONCLUSIONS AND CLOSURE REQUEST

Corrective actions and soil sampling activities were conducted at the Site to address the release discovered on January 29, 2024. Laboratory analytical results from confirmation soil samples, collected from the final extents of the excavation, indicated all COC concentrations were compliant with the Site Closure Criteria and no further remediation is required. Additionally, all soil samples collected from the treated stockpiles and the vadose zone below the treatment stockpiles were also compliant with the applicable Site Closure Criteria and/or reclamation requirement. The corrective action initiated by Hilcorp has mitigated impacts at this Site and these remedial actions have been protective of human health, the environment, and groundwater. As such, Hilcorp respectfully request closure for Incident Number nAPP2403034973.

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

Sincerely,
Ensolum, LLC

Wes Weichert
Project Geologist
(816) 266-8732
wweichert@ensolum.com

Stuart Hyde
Senior Managing Geologist
(970) 903-1607
shyde@ensolum.com

Attachments:

Figure 1: Site Receptor Map
Figure 2: Confirmation Soil Sample Locations

Table 1: Excavation Soil Sample Analytical Results
Table 2: Treated Stockpile Soil Sample Analytical Results
Table 3: Treatment Area Vadose Zone Soil Sample Analytical Results

Appendix A: Agency Correspondence & Notifications
Appendix B: Laboratory Analytical Reports
Appendix C: Photographic Log

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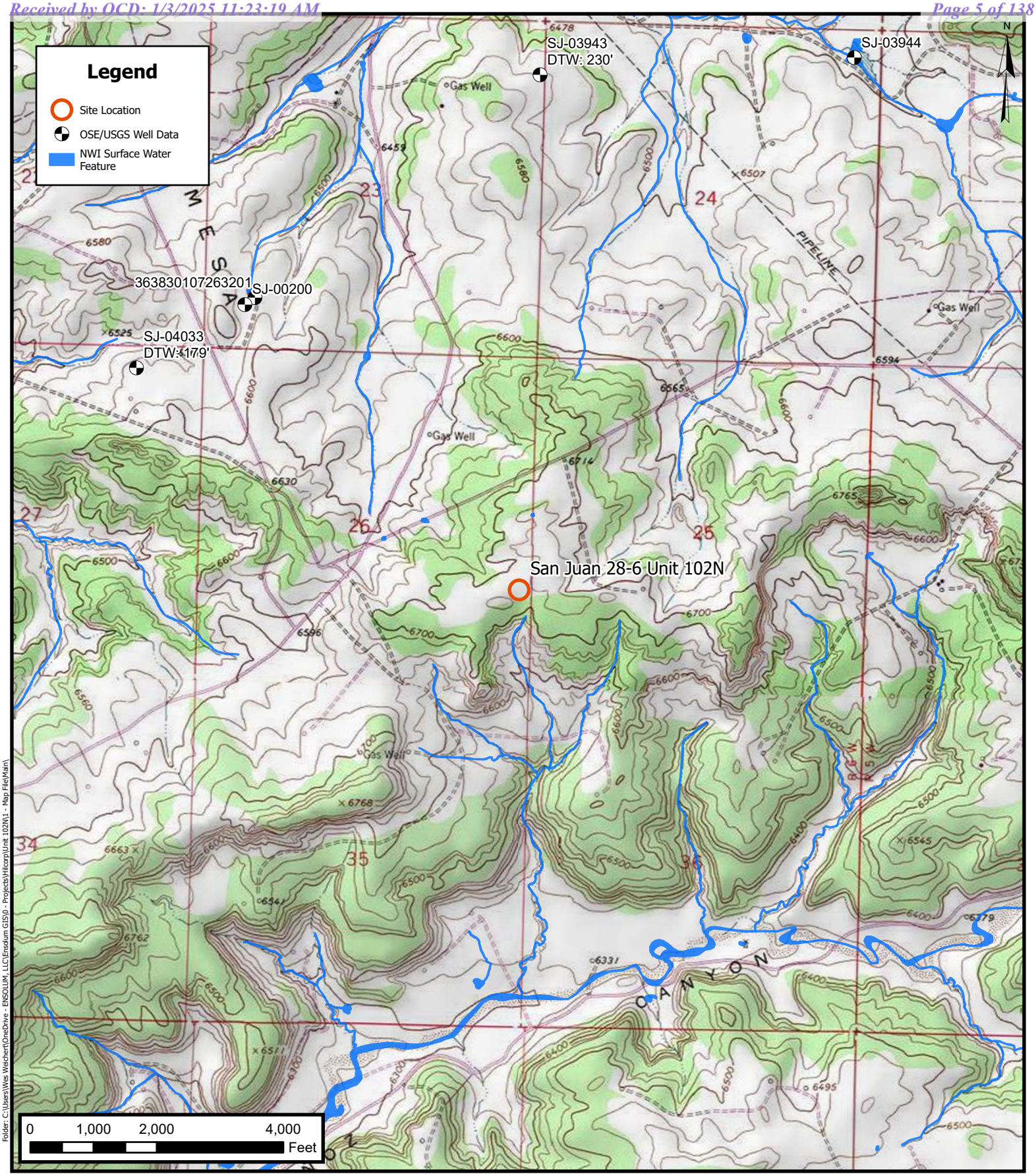
FIGURES



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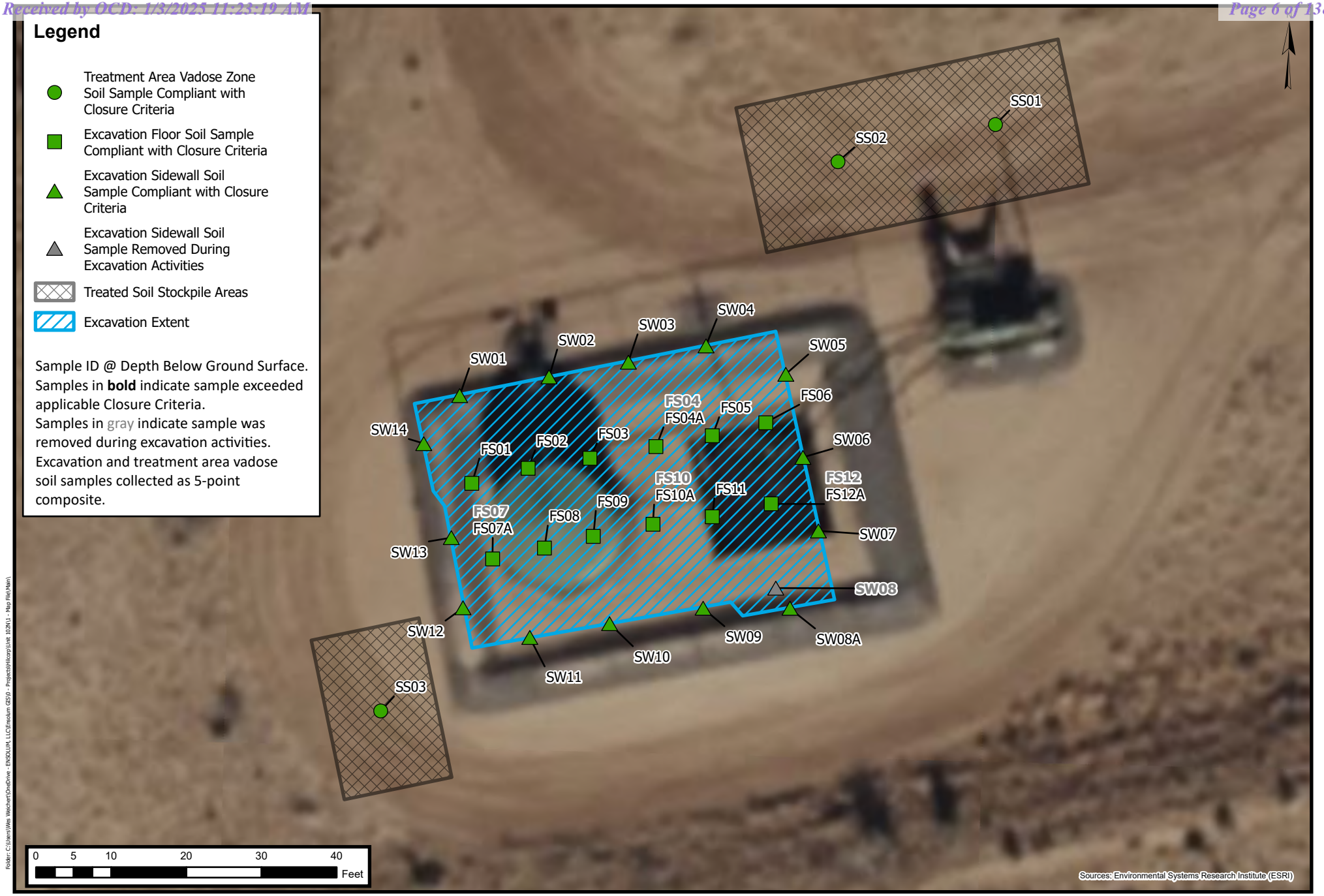
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Hilcorp Energy Company
San Juan 28-6 Unit 102N
Incident Number: nAPP2403034973
Unit I, Sec. 26, T028N, R006W
Rio Arriba County, New Mexico, United States

FIGURE 1



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Environmental, Engineering and Hydrogeologic Consultants

Confirmation Soil Sample Locations

Hilcorp Energy Company
San Juan 28-6 Unit 102N
Incident Number: nAPP2403034973
Unit I, Sec. 26, T028N, R006W
Rio Arriba County, New Mexico, United States

FIGURE 2

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TABLES

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TABLE 1
EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS
San Juan 28-6 Unit 102N
Hilcorp Energy Company
Rio Arriba County, New Mexico

Sample Identification	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	GRO+DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			**10**	NE	NE	NE	**50**	NE	NE	**1,000**	NE	**2,500**	**20,000**
Excavation Floor Samples													
FS01	11/6/2024	10 - 12	0.0296	1.32	1.28	16.5	19.1296	229	192	421	<50.0	421	<20.0
FS02	11/6/2024	10 - 12	<0.0250	0.745	0.876	10.8	12.421	159	317	476	<50.0	476	<20.0
FS03	11/6/2024	10 - 12	<0.0250	0.100	0.0529	0.728	0.8809	<20.0	<25.0	<25.0	<50.0	<50.0	<20.0
FS04*	11/6/2024	10 - 12	<1.25	19.9	11.3	159	**190.2**	1,010	2,030	**3,040**	<50.0	**3,040**	<20.0
FS04a	11/12/2024	10 - 12	0.0366	1.34	0.870	11.3	13.5466	130	123	253	<50.0	253	<20.0
FS05	11/6/2024	10 - 12	<0.0250	0.523	0.479	6.29	7.292	121	283	404	<50.0	404	<20.0
FS06	11/6/2024	10 - 12	<0.125	1.23	1.23	16.0	18.46	295	440	735	<50.0	735	<20.0
FS07*	11/6/2024	10 - 12	0.0440	2.95	3.22	42.3	48.514	481	845	**1,326**	<50.0	1,326	<20.0
FS07a	11/12/2024	13 - 14	<0.0250	0.454	0.384	5.66	6.498	73.7	257	330.7	<50.0	330.7	<20.0
FS08	11/6/2024	10 - 12	<0.0250	0.123	0.147	2.04	2.310	50.0	70.4	120.4	<50.0	120.4	<20.0
FS09	11/6/2024	10 - 12	<0.0250	<0.0250	<0.0250	0.107	0.107	<20.0	<25.0	<25.0	<50.0	<50.0	33.2
FS10*	11/6/2024	10 - 12	0.140	2.98	0.995	12.9	17.015	86.3	2,040	**2,126.3**	<50.0	2,126.3	<20.0
FS10a	11/12/2024	13 - 14	<0.0250	0.390	0.281	4.00	4.671	56.0	238	294.0	<50.0	294.0	<20.0
FS11	11/6/2024	10 - 12	<0.0250	0.313	0.464	6.52	7.297	111	277	388	<50.0	388	<20.0
FS12*	11/6/2024	10 - 12	<0.500	2.19	3.66	44.3	**50.15**	1,470	113	**1,583**	<50.0	1,583	<20.0
FS12a	11/12/2024	13 - 14	<0.0250	0.183	0.223	3.40	3.806	57.6	136	193.6	<50.0	193.6	<20.0
Excavation Sidewall Samples													
SW01	11/6/2024	0 - 12	<0.0250	0.0875	0.0695	0.811	0.9680	25.0	<25.0	25.0	<50.0	25.0	<20.0
SW02	11/6/2024	0 - 12	<0.0250	0.191	0.194	2.29	2.675	65.2	122	187.2	<50.0	187.2	52.6
SW03	11/6/2024	0 - 12	<0.0250	0.0488	0.0557	0.756	0.8605	24.6	32.9	57.5	<50.0	57.5	<20.0
SW04	11/6/2024	0 - 12	<0.0250	<0.0250	<0.0250	0.118	0.118	<20.0	<25.0	<25.0	<50.0	<50.0	<20.0
SW05	11/6/2024	0 - 12	<0.0250	0.0339	0.0272	0.418	0.4791	<20.0	<25.0	<25.0	<50.0	<50.0	<20.0
SW06	11/6/2024	0 - 12	0.0312	1.95	2.23	29.1	33.3112	333	622	955	<50.0	955	<20.0
SW07	11/6/2024	0 - 12	<0.0250	0.238	0.370	4.70	5.308	85.7	155	240.7	<50.0	240.7	<20.0
SW08*	11/6/2024	0 - 12	<0.500	7.12	5.86	87.1	**100.08**	890	1,010	**1,900**	<50.0	1,900	<20.0
SW08a	11/12/2024	0 - 14	<0.0250	<0.0250	<0.0250	0.192	0.192	<20.0	<25.0	<25.0	<50.0	<50.0	<20.0
SW09	11/6/2024	0 - 12	<0.0250	0.0937	0.0979	1.39	1.5816	33.4	64.1	97.5	<50.0	97.5	<20.0
SW10	11/6/2024	0 - 12	<0.0250	<0.0250	<0.0250	0.179	0.179	<20.0	<25.0	<25.0	<50.0	<50.0	23.6
SW11	11/6/2024	0 - 12	<0.0250	<0.0250	<0.0250	0.0848	0.0848	<20.0	<25.0	<25.0	<50.0	<50.0	<20.0
SW12	11/6/2024	0 - 12	<0.0250	<0.0250	<0.0250	0.119	0.119	<20.0	<25.0	<25.0	<50.0	<50.0	<20.0
SW13	11/6/2024	0 - 12	<0.0250	0.135	0.138	1.94	2.213	39.0	85.3	124.3	<50.0	124.3	<20.0
SW14	11/6/2024	0 - 12	<0.0250	0.0516	0.0291	0.469	0.5497	<20.0	<25.0	<25.0	<50.0	<50.0	<20.0

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
NMOCD: New Mexico Oil Conservation Division
TPH: Total Petroleum Hydrocarbon
< : 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*
** indicates soil sample area was removed during excavation activities and subsequently resampled*

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TABLE 2
TREATED STOCKPILE SOIL SAMPLE ANALYTICAL RESULTS
San Juan 28-6 Unit 102N
Hilcorp Energy Company
Rio Arriba County, New Mexico

Sample Identification	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	GRO+DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release		**10**	NE	NE	NE	**50**	NE	NE	**1,000**	NE	**2,500**
SP01	11/14/2024	<0.0250	0.0662	0.280	5.65	5.9962	101	94.4	195.4	<50.0	195.4
SP02	11/14/2024	<0.0250	<0.0250	0.159	4.13	4.289	88.7	91.3	180.0	<50.0	180.0
SP03	11/14/2024	<0.0250	0.0660	0.340	10.1	10.5060	133	60.3	193.3	<50.0	193.3
SP04	11/14/2024	<0.0250	<0.0250	0.196	5.08	5.276	96.7	72.4	169.1	<50.0	169.1
SP05	11/14/2024	<0.0250	0.0592	0.295	8.63	8.9842	130	110	240	<50.0	240
SP06	11/14/2024	<0.0250	0.401	0.545	12.7	13.646	169	60.1	229.1	<50.0	229.1
SP07	11/14/2024	<0.0250	0.167	0.441	10.5	11.108	165	38.2	203.2	<50.0	203.2
SP08	11/14/2024	<0.0250	0.296	0.543	12.6	13.439	171	38.4	209.4	<50.0	209.4
SP09	11/15/2024	<0.0250	<0.0250	<0.0250	2.26	2.26	112	159	271	<50.0	271
SP10	11/15/2024	<0.0250	<0.0250	<0.0250	0.651	0.651	87.8	53.1	140.9	<50.0	140.9
SP11	11/15/2024	<0.0250	<0.0250	<0.0250	4.76	4.76	176	108	284	<50.0	284

Notes:

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
mg/kg: Milligrams per kilogram
NE: Not Established
NMOCD: New Mexico Oil Conservation Division
< : Indicates result less than the stated laboratory reporting limit (RL)
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
MRO: Motor Oil/Lube Oil Range Organics
TPH: Total Petroleum Hydrocarbon

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TABLE 3
TREATMENT AREA VADOSE ZONE SOIL SAMPLE ANALYTICAL RESULTS
San Juan 28-6 Unit 102N
Hilcorp Energy Company
Rio Arriba County, New Mexico

Sample Identification	Date	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)
NMOCD Reclamation Criteria for Soils Impacted by a Release		**10**	NE	NE	NE	**50**	NE	NE	NE	**100**
SS01	12/3/2024	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0
SS02	12/3/2024	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0
SS03	12/3/2024	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0

Notes:

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
mg/kg: Milligrams per kilogram
NE: Not Established
NMOCD: New Mexico Oil Conservation Division
< : Indicates result less than the stated laboratory reporting limit (RL)
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
MRO: Motor Oil/Lube Oil Range Organics
TPH: Total Petroleum Hydrocarbon

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APPENDIX A

Agency Correspondence and Notifications

From: Samantha Grabert
To: Stuart Hyde
Subject: FW: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122
Date: Monday, November 18, 2024 4:02:17 PM
Attachments: image002.png
image003.png
image004.png
image006.png

[**EXTERNAL EMAIL**]

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Friday, May 10, 2024 10:40 AM
To: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

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Good morning Stuart,

Thanks for the inquiry. To answer your first question; no, but that should have been within the approved remediation plan. To include this, you must modify the remediation plan and re-submit.

The second question pertains to the reclamation of on-pad releases; answer is no, only the closure standard while the gas well is operational. If you did meet the reclamation standards, then you would alleviate the requirements at P&A for the gas well.

If you have any further questions or concerns, please reach me at your convenience.

Regards,

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

http://www.emnrd.state.nm.us/OCD/

From: Stuart Hyde <shyde@ensolum.com>
Sent: Thursday, May 9, 2024 9:46 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: RE: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

Nelson,

One last question on the conditions of approval stated below. Condition 1, if Hilcorp puts a liner down in the area where we plan to stockpile treated soil, would they still be subject to sampling the vadose zone once soil is removed?

Condition 2 pertaining to the reclamation requirement, it is our understanding that the reclamation standards are for areas not is use for production purposes. As such, would soil in areas on the active well pad need to meet the reclamation requirement of 100 mg/kg TPH and 600 mg/kg chloride in the top four feet of soil?

Thanks for clarifying. These questions also pertain to the soil shredding work that will be performed at the Hilcorp 27-5 #111 remediation site. Thanks.

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

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

---

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, May 1, 2024 2:54 PM
To: Samantha Grabert <Samantha.Grabert@hilcorp.com>; Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>

Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

[**EXTERNAL EMAIL**]

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

http://www.emnrd.state.nm.us/OCD/

From: Samantha Grabert <Samantha.Grabert@hilcorp.com>
Sent: Wednesday, May 1, 2024 2:52 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: RE: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

Got it, thank you again!

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, May 1, 2024 3:49 PM
To: Samantha Grabert <Samantha.Grabert@hilcorp.com>; Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

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Correct.

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

http://www.emnrd.state.nm.us/OCD/

From: Samantha Grabert <Samantha.Grabert@hilcorp.com>
Sent: Wednesday, May 1, 2024 2:48 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: RE: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

Thank you for clarifying, Nelson. Just for further clarification, this approval is intended for the San Juan 28-6 Unit 102N location, correct?

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, May 1, 2024 3:41 PM
To: Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

Stuart,

Thanks for the correspondence. Slight brain malfunction during that part of the write up. My apology, it is for Hilcorp.

Have a safe and productive day!

Regards,

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

http://www.emnrd.state.nm.us/OCD/

From: Stuart Hyde <shyde@ensolum.com>
Sent: Wednesday, May 1, 2024 2:26 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Wes Weichert <wweichert@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

Nelson,

I just received the notification below for approval of soil shredding. The incident number is for the Hilcorp San Juan 28-6 Unit 102N site, but the text below references Western Refining Pipeline. I just want to make sure we have the correct approval. Thanks so much and let us know if we need to discuss. Thanks!

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

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

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, May 1, 2024 1:07 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 338122

[**EXTERNAL EMAIL**]

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

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2403034973, with the following conditions:

- **Remediation plan is approved under the following conditions; 1. Once treated stockpiles have been sampled and properly disposed, vadose zone beneath treated stockpile must be sampled by collecting, at a minimum, five (5)-point composite samples (5pcs). Sampling depths should be from grade to a maximum of one (1) foot below grade, sampling area of treated soil locations should be no more than 1,500 square feet (ft.) per one(1) 5pcs, and meet the applicable closure standards. 2. Any soils used in the top four (4) ft. from grade must meet the reclamation standards of 100 mg/Kg for TPH per US EPA Method 8015M, 10 mg/Kg for benzene, and 50 mg/Kg for benzene, toluene, ethylbenzene, and total xylenes (BTEX) per US EPA Methods 8021 or 8260B. 3. Western Refining Pipeline has 90 days (July 30, 2024) to initiate the soil shredding process. 4. Western Refining Pipeline has 180 days (October 28, 2024) to submit to OCD its appropriate or final remediation closure report.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Nelson Velez
Environmental Specialist - Advanced
505-469-6146
Nelson.Velez@emnrd.nm.gov

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

this message.

While all reasonable care has been taken to avoid the transmission of viruses, it is the responsibility of the recipient to ensure that the onward transmission, opening, or use of this message and any attachments will not adversely affect its systems or data. No responsibility is accepted by the company in this regard and the recipient should carry out such virus and other checks as it considers appropriate.

The information contained in this email message is confidential and may be legally privileged and is intended only for the use of the individual or entity named above. If you are not an intended recipient or if you have received this message in error, you are hereby notified that any dissemination, distribution, or copy of this email is strictly prohibited. If you have received this email in error, please immediately notify us by return email or telephone if the sender's phone number is listed above, then promptly and permanently delete this message.

While all reasonable care has been taken to avoid the transmission of viruses, it is the responsibility of the recipient to ensure that the onward transmission, opening, or use of this message and any attachments will not adversely affect its systems or data. No responsibility is accepted by the company in this regard and the recipient should carry out such virus and other checks as it considers appropriate.

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While all reasonable care has been taken to avoid the transmission of viruses, it is the responsibility of the recipient to ensure that the onward transmission, opening, or use of this message and any attachments will not adversely affect its systems or data. No responsibility is accepted by the company in this regard and the recipient should carry out such virus and other checks as it considers appropriate.

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 396708
Date: Tuesday, October 29, 2024 11:08:27 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#) nAPP2403034973.

The sampling event is expected to take place:

When: 11/04/2024 @ 08:30
Where: I-26-28N-06W 1590 FSL 195 FEL (36.6293411,-107.428154)

Additional Information: Contact PM Stuart Hyde 970-903-1607 Sampling will be conducted during soil shredding operations between Monday 11/4/2024 and Friday 11/8/2024

Additional Instructions: SAN JUAN 28 6 UNIT #102N (API: 30-039-27600)
Rio Arriba County (36.6293411,-107.428154)

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

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

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

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

From: Velez, Nelson, EMNRD
To: Wes Weichert
Cc: Stuart Hyde
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 400398
Date: Thursday, November 7, 2024 2:00:29 PM
Attachments: image002.png
image003.png
image005.png
image006.png

[**EXTERNAL EMAIL**]

Good afternoon Wes,

Your variance request specifically taddressing 19.15.29.12D (1a) NMAC is approved.

Please include this within the next appropriate reporting submitted.

Regards,

Nelson Velez
Environmental Specialist-Adv
EMNRD / NMOCD

Get Outlook for iOS

From: Wes Weichert <wweichert@ensolum.com>
Sent: Thursday, November 7, 2024 11:57:57 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 400398

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

Nelson,

Due to inclement weather conditions, including snow and rain, sampling activities at SAN JUAN 28 6 UNIT #102N (API: 30-039-27600) cannot be completed this week as scheduled. Accordingly, we are requesting a variance from the 2-business day sampling notification requirement outlined in 9.15.29.12(D)(1)(a) to allow soil sampling at the SAN JUAN 28 6 UNIT #102N to occur from **Monday, November 11**, through **Friday, November 15, 2024**, beginning at 8:30 am each day.

Please let me know if you have any questions.

Best regards,

Wes Weichert, PG*
**Licensed in Wyoming*
Project Geologist
816-266-8732
Ensolum, LLC

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, November 7, 2024 11:49 AM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 400398

[**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#) nAPP2403034973.

The sampling event is expected to take place:

When: 11/11/2024 @ 08:30
Where: I-26-28N-06W 1590 FSL 195 FEL (36.6293411,-107.428154)

Additional Information: Contact PM Stuart Hyde 970-903-1607 - confirmation sampling for soil shredding operations.

Additional Instructions: SAN JUAN 28 6 UNIT #102N (API: 30-039-27600)
Rio Arriba County (36.6293411,-107.428154)

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

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 404692
Date: Tuesday, November 19, 2024 9:31:50 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#) nAPP2403034973.

The sampling event is expected to take place:

When: 12/03/2024 @ 09:00
Where: I-26-28N-06W 1590 FSL 195 FEL (36.6293411,-107.428154)

Additional Information: Contact PM Stuart Hyde 970-903-1607 Vadose zone sampling

Additional Instructions: SAN JUAN 28 6 UNIT #102N (API: 30-039-27600)
Rio Arriba County (36.6293411,-107.428154)

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

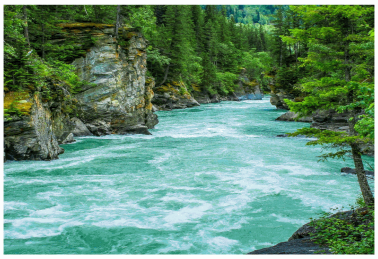
ENSOLUM

APPENDIX B

Laboratory Analytical Reports

Report to:

Stuart Hyde



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	San Juan 28-6 Unit 102N
Work Order:	E411071
Job Number:	17051-0002
Received:	11/7/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/8/24

Date Reported: 11/8/24

Stuart Hyde
PO Box 61529
Houston, TX 77208

Project Name: San Juan 28-6 Unit 102N
Workorder: E411071
Date Received: 11/7/2024 12:16:00PM

Stuart Hyde,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/7/2024 12:16:00PM, under the Project Name: San Juan 28-6 Unit 102N.

The analytical test results summarized in this report with the Project Name: San Juan 28-6 Unit 102N apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Table of Contents (continued)

Sample Summary

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/08/24 15:32

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01	E411071-01A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW02	E411071-02A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW03	E411071-03A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW04	E411071-04A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW05	E411071-05A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW06	E411071-06A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW07	E411071-07A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW08	E411071-08A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW09	E411071-09A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW10	E411071-10A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW11	E411071-11A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW12	E411071-12A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW13	E411071-13A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
SW14	E411071-14A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS01	E411071-15A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS02	E411071-16A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS03	E411071-17A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS04	E411071-18A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS05	E411071-19A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS06	E411071-20A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS07	E411071-21A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS08	E411071-22A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS09	E411071-23A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS10	E411071-24A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS11	E411071-25A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.
FS12	E411071-26A	Soil	11/06/24	11/07/24	Glass Jar, 4 oz.

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW01

E411071-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/07/24	
Ethylbenzene	**0.0695**	0.0250	1	11/07/24	11/07/24	
Toluene	**0.0875**	0.0250	1	11/07/24	11/07/24	
o-Xylene	**0.187**	0.0250	1	11/07/24	11/07/24	
p,m-Xylene	**0.624**	0.0500	1	11/07/24	11/07/24	
Total Xylenes	**0.811**	0.0250	1	11/07/24	11/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*	*70-130*	*11/07/24*	*11/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**25.0**	20.0	1	11/07/24	11/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*98.9 %*	*70-130*	*11/07/24*	*11/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*105 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW02

E411071-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.194**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.191**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.585**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**1.70**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**2.29**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**65.2**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*110 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**122**	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*112 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	**52.6**	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW03

E411071-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.0557**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.0488**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.196**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.561**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.756**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**24.6**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*99.5 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**32.9**	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*98.4 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW04

E411071-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	ND	0.0250	1	11/07/24	11/08/24	
Toluene	ND	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.0434**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.0743**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.118**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.9 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*96.6 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW05

E411071-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.0272**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.0339**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.121**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.297**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.418**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.6 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW06

E411071-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	**0.0312**	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**2.23**	0.0250	1	11/07/24	11/08/24	
Toluene	**1.95**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**6.33**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**22.7**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**29.1**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**333**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*141 %*	*70-130*	*11/07/24*	*11/08/24*	*S1*
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**622**	25.0	1	11/07/24	11/07/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*225 %*	*50-200*	*11/07/24*	*11/07/24*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW07

E411071-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.370**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.238**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**1.18**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**3.52**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**4.70**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**85.7**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*114 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**155**	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*118 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW08

E411071-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.500	20	11/07/24	11/08/24	
Ethylbenzene	**5.86**	0.500	20	11/07/24	11/08/24	
Toluene	**7.12**	0.500	20	11/07/24	11/08/24	
o-Xylene	**22.7**	0.500	20	11/07/24	11/08/24	
p,m-Xylene	**64.4**	1.00	20	11/07/24	11/08/24	
Total Xylenes	**87.1**	0.500	20	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**890**	400	20	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*98.7 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**1010**	25.0	1	11/07/24	11/07/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*397 %*	*50-200*	*11/07/24*	*11/07/24*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW09

E411071-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.0979**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.0937**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.401**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.992**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**1.39**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*109 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**33.4**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*98.3 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**64.1**	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW10

E411071-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	ND	0.0250	1	11/07/24	11/08/24	
Toluene	ND	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.0440**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.135**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.179**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.7 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*91.1 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	**23.6**	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW11

E411071-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	ND	0.0250	1	11/07/24	11/08/24	
Toluene	ND	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.0270**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.0579**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.0848**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.1 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*89.4 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW12

E411071-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	ND	0.0250	1	11/07/24	11/08/24	
Toluene	ND	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.0363**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.0829**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.119**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.3 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*98.2 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW13

E411071-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.138**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.135**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.517**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**1.43**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**1.94**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*108 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**39.0**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*101 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**85.3**	25.0	1	11/07/24	11/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

SW14

E411071-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.0291**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.0516**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.136**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.333**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.469**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*103 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.8 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*113 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS01

E411071-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	**0.0296**	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**1.28**	0.0250	1	11/07/24	11/08/24	
Toluene	**1.32**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**3.28**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**13.2**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**16.5**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*103 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**229**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*130 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**192**	25.0	1	11/07/24	11/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*128 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS02

E411071-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.876**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.745**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**2.47**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**8.35**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**10.8**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**159**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*124 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**317**	25.0	1	11/07/24	11/08/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*147 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/07/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS03

E411071-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.0529**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.100**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.185**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.544**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.728**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*99.2 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.8 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*106 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS04

E411071-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	1.25	50	11/07/24	11/08/24	
Ethylbenzene	**11.3**	1.25	50	11/07/24	11/08/24	
Toluene	**19.9**	1.25	50	11/07/24	11/08/24	
o-Xylene	**33.5**	1.25	50	11/07/24	11/08/24	
p,m-Xylene	**126**	2.50	50	11/07/24	11/08/24	
Total Xylenes	**159**	1.25	50	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**1010**	1000	50	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.8 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**2030**	25.0	1	11/07/24	11/08/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*609 %*	*50-200*	*11/07/24*	*11/08/24*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS05

E411071-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.479**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.523**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**1.30**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**4.99**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**6.29**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.7 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**121**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*129 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**283**	25.0	1	11/07/24	11/08/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*132 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS06

E411071-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Benzene	ND	0.125	5	11/07/24	11/08/24	
Ethylbenzene	**1.23**	0.125	5	11/07/24	11/08/24	
Toluene	**1.23**	0.125	5	11/07/24	11/08/24	
o-Xylene	**3.85**	0.125	5	11/07/24	11/08/24	
p,m-Xylene	**12.1**	0.250	5	11/07/24	11/08/24	
Total Xylenes	**16.0**	0.125	5	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.1 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445120
Gasoline Range Organics (C6-C10)	**295**	100	5	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*109 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445116
Diesel Range Organics (C10-C28)	**440**	25.0	1	11/07/24	11/08/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/08/24	
Surrogate: n-Nonane		*148 %*	*50-200*	*11/07/24*	*11/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445118
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS07

E411071-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Benzene	**0.0440**	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**3.22**	0.0250	1	11/07/24	11/08/24	
Toluene	**2.95**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**9.53**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**32.7**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**42.3**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*97.7 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Gasoline Range Organics (C6-C10)	**481**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*171 %*	*70-130*	*11/07/24*	*11/08/24*	*S1*
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445117
Diesel Range Organics (C10-C28)	**845**	25.0	1	11/07/24	11/07/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*274 %*	*50-200*	*11/07/24*	*11/07/24*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445119
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS08

E411071-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.147**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.123**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.527**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**1.51**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**2.04**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.3 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Gasoline Range Organics (C6-C10)	**50.0**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*107 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445117
Diesel Range Organics (C10-C28)	**70.4**	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*105 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445119
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS09

E411071-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	ND	0.0250	1	11/07/24	11/08/24	
Toluene	ND	0.0250	1	11/07/24	11/08/24	
o-Xylene	**0.0332**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**0.0734**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**0.107**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*88.6 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.2 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445117
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445119
Chloride	**33.2**	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS10

E411071-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Benzene	**0.140**	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.995**	0.0250	1	11/07/24	11/08/24	
Toluene	**2.98**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**2.64**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**10.3**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**12.9**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.4 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Gasoline Range Organics (C6-C10)	**86.3**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*103 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445117
Diesel Range Organics (C10-C28)	**2040**	25.0	1	11/07/24	11/07/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*616 %*	*50-200*	*11/07/24*	*11/07/24*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445119
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS11

E411071-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Benzene	ND	0.0250	1	11/07/24	11/08/24	
Ethylbenzene	**0.464**	0.0250	1	11/07/24	11/08/24	
Toluene	**0.313**	0.0250	1	11/07/24	11/08/24	
o-Xylene	**1.45**	0.0250	1	11/07/24	11/08/24	
p,m-Xylene	**5.07**	0.0500	1	11/07/24	11/08/24	
Total Xylenes	**6.52**	0.0250	1	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.2 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Gasoline Range Organics (C6-C10)	**111**	20.0	1	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*127 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445117
Diesel Range Organics (C10-C28)	**277**	25.0	1	11/07/24	11/07/24	T9
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*136 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445119
Chloride	ND	20.0	1	11/07/24	11/08/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

FS12

E411071-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Benzene	ND	0.500	20	11/07/24	11/08/24	
Ethylbenzene	**3.66**	0.500	20	11/07/24	11/08/24	
Toluene	**2.19**	0.500	20	11/07/24	11/08/24	
o-Xylene	**11.8**	0.500	20	11/07/24	11/08/24	
p,m-Xylene	**32.5**	1.00	20	11/07/24	11/08/24	
Total Xylenes	**44.3**	0.500	20	11/07/24	11/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.5 %*	*70-130*	*11/07/24*	*11/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2445110
Gasoline Range Organics (C6-C10)	**1470**	400	20	11/07/24	11/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*120 %*	*70-130*	*11/07/24*	*11/08/24*	*S1*
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2445117
Diesel Range Organics (C10-C28)	**113**	25.0	1	11/07/24	11/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/24	11/07/24	
Surrogate: n-Nonane		*117 %*	*50-200*	*11/07/24*	*11/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2445119
Chloride	ND	20.0	1	11/07/24	11/08/24	

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2445110-BLK1)									Prepared: 11/07/24 Analyzed: 11/08/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*6.69*		*8.00*		*83.6*	*70-130*			
LCS (2445110-BS1)									Prepared: 11/07/24 Analyzed: 11/08/24
Benzene	5.42	0.0250	5.00		108	70-130			
Ethylbenzene	5.21	0.0250	5.00		104	70-130			
Toluene	5.33	0.0250	5.00		107	70-130			
o-Xylene	5.19	0.0250	5.00		104	70-130			
p,m-Xylene	10.6	0.0500	10.0		106	70-130			
Total Xylenes	15.8	0.0250	15.0		105	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*6.95*		*8.00*		*86.9*	*70-130*			
LCS Dup (2445110-BSD1)									Prepared: 11/07/24 Analyzed: 11/08/24
Benzene	5.74	0.0250	5.00		115	70-130	5.73	20	
Ethylbenzene	5.53	0.0250	5.00		111	70-130	5.86	20	
Toluene	5.65	0.0250	5.00		113	70-130	5.83	20	
o-Xylene	5.51	0.0250	5.00		110	70-130	5.94	20	
p,m-Xylene	11.2	0.0500	10.0		112	70-130	5.88	20	
Total Xylenes	16.7	0.0250	15.0		112	70-130	5.90	20	
Surrogate: 4-Bromochlorobenzene-PID	*6.99*		*8.00*		*87.3*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2445120-BLK1)									Prepared: 11/07/24 Analyzed: 11/08/24
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	*7.95*		*8.00*		*99.3*	*70-130*			
LCS (2445120-BS1)									Prepared: 11/07/24 Analyzed: 11/08/24
Benzene	5.54	0.0250	5.00		111	70-130			
Ethylbenzene	5.35	0.0250	5.00		107	70-130			
Toluene	5.47	0.0250	5.00		109	70-130			
o-Xylene	5.37	0.0250	5.00		107	70-130			
p,m-Xylene	10.9	0.0500	10.0		109	70-130			
Total Xylenes	16.3	0.0250	15.0		109	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8.16*		*8.00*		*102*	*70-130*			
LCS Dup (2445120-BSD1)									Prepared: 11/07/24 Analyzed: 11/08/24
Benzene	5.51	0.0250	5.00		110	70-130	0.530	20	
Ethylbenzene	5.32	0.0250	5.00		106	70-130	0.603	20	
Toluene	5.44	0.0250	5.00		109	70-130	0.585	20	
o-Xylene	5.35	0.0250	5.00		107	70-130	0.385	20	
p,m-Xylene	10.9	0.0500	10.0		109	70-130	0.727	20	
Total Xylenes	16.2	0.0250	15.0		108	70-130	0.614	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.07*		*8.00*		*101*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2445110-BLK1)									Prepared: 11/07/24 Analyzed: 11/08/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.19*		*8.00*		*89.9*	*70-130*			
LCS (2445110-BS2)									Prepared: 11/07/24 Analyzed: 11/08/24
Gasoline Range Organics (C6-C10)	43.4	20.0	50.0		86.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.33*		*8.00*		*91.6*	*70-130*			
LCS Dup (2445110-BSD2)									Prepared: 11/07/24 Analyzed: 11/08/24
Gasoline Range Organics (C6-C10)	43.7	20.0	50.0		87.4	70-130	0.648	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.27*		*8.00*		*90.9*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2445120-BLK1)									Prepared: 11/07/24 Analyzed: 11/08/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.12*		*8.00*		*89.0*	*70-130*			
LCS (2445120-BS2)									Prepared: 11/07/24 Analyzed: 11/08/24
Gasoline Range Organics (C6-C10)	52.9	20.0	50.0		106	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.57*		*8.00*		*94.6*	*70-130*			
LCS Dup (2445120-BSD2)									Prepared: 11/07/24 Analyzed: 11/08/24
Gasoline Range Organics (C6-C10)	45.0	20.0	50.0		90.1	70-130	16.1	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.54*		*8.00*		*94.3*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2445116-BLK1)									Prepared: 11/07/24 Analyzed: 11/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.6*		*50.0*		*101*	*50-200*			
LCS (2445116-BS1)									Prepared: 11/07/24 Analyzed: 11/07/24
Diesel Range Organics (C10-C28)	260	25.0	250		104	38-132			
Surrogate: n-Nonane	*51.7*		*50.0*		*103*	*50-200*			
LCS Dup (2445116-BSD1)									Prepared: 11/07/24 Analyzed: 11/07/24
Diesel Range Organics (C10-C28)	267	25.0	250		107	38-132	2.59	20	
Surrogate: n-Nonane	*52.7*		*50.0*		*105*	*50-200*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2445117-BLK1)									Prepared: 11/07/24 Analyzed: 11/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.2*		*50.0*		*100*	*50-200*			
LCS (2445117-BS1)									Prepared: 11/07/24 Analyzed: 11/07/24
Diesel Range Organics (C10-C28)	267	25.0	250		107	38-132			
Surrogate: n-Nonane	*53.4*		*50.0*		*107*	*50-200*			
LCS Dup (2445117-BSD1)									Prepared: 11/07/24 Analyzed: 11/07/24
Diesel Range Organics (C10-C28)	281	25.0	250		112	38-132	5.10	20	
Surrogate: n-Nonane	*56.0*		*50.0*		*112*	*50-200*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

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 (2445118-BLK1)									Prepared: 11/07/24 Analyzed: 11/07/24
Chloride	ND	20.0							
LCS (2445118-BS1)									Prepared: 11/07/24 Analyzed: 11/07/24
Chloride	257	20.0	250		103	90-110			
Matrix Spike (2445118-MS1)				**Source: E411071-06**					Prepared: 11/07/24 Analyzed: 11/07/24
Chloride	261	20.0	250	ND	104	80-120			
Matrix Spike Dup (2445118-MSD1)				**Source: E411071-06**					Prepared: 11/07/24 Analyzed: 11/07/24
Chloride	259	20.0	250	ND	104	80-120	0.546	20	

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	11/8/2024 3:32:04PM

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 (2445119-BLK1)									Prepared: 11/07/24 Analyzed: 11/08/24
Chloride	ND	20.0							
LCS (2445119-BS1)									Prepared: 11/07/24 Analyzed: 11/08/24
Chloride	258	20.0	250		103	90-110			
Matrix Spike (2445119-MS1)				**Source: E411071-23**					Prepared: 11/07/24 Analyzed: 11/08/24
Chloride	298	20.0	250	33.2	106	80-120			
Matrix Spike Dup (2445119-MSD1)				**Source: E411071-23**					Prepared: 11/07/24 Analyzed: 11/08/24
Chloride	297	20.0	250	33.2	106	80-120	0.286	20	

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

Definitions and Notes

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Stuart Hyde	11/08/24 15:32

S1	Surrogate spike recovery was outside of the established acceptance limits.
S5	Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.
T9	DRO includes undifferentiated early eluting analytes characteristic of GRO.
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

Friday 11-8

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Hilcorp	Company: Hilcorp	Lab WO# E411071	Job Number 17051.0002	1D ✓ 2D 3D Std	NM ✓ CO UT TX
Project Name: ~~Stuart Hyde~~ San Juan 28-6 Unit 102N	Address:			
Project Manager: Stuart Hyde	City, State, Zip:			
Address:	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous:			
Email: samantha.grasert@hilcorp.com				

Analysis and Method

EPA Program

SDWA | CWA | RCRA

Compliance Y or N

PWSID #

Sample Information

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	Remarks
1402	11-6-24	soil	1-4oz	SW01		1	X	X	X		X				
1404				SW02		2									
1407				SW03		3									
1410				SW04		4									
1412				SW05		5									
1413				SW06		6									
1415				SW07		7									
1416				SW08		8									
1418				SW09		9									
1420				SW10		10									

Additional Instructions: cc shyde@ensolum.com, zmyers@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
	11-7-24	1055		10-7-24	11:01
	11-7-24	12:16	Rana Lem	11/7/24	12:16

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

Lab Use Only

Received on ice: Y / N

T1 T2 T3

AVG Temp °C 4

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

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

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

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Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Hilcorp	Company: Hilcorp	Lab WO# E411071	Job Number 17051.0002	1D ✓ 2D 3D Std	NM ✓ CO UT TX
Project Name: San Juan 28-6 Unit 102N	Address:			
Project Manager: Stuart Hyde	City, State, Zip:			
Address:	Phone:			
City, State, Zip:	Email:			
Phone: 970-703-1607	Miscellaneous:			
Email: samantha.graber@hilcorp.com				

Analysis and Method

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				Remarks
1422	11-6-24	soil	1x4oz	SW11		11	X	X	X		X							
1425				SW12		12												
1427				SW13		13												
1429				SW14		14												
1435				FS01		15												
1436				FS02		16												
1438				FS03		17												
1440				FS04		18												
1441				FS05		19												
1443				FS06		20												

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Additional Instructions: cc: shyde@envirotech-inc.com, zmyers@envirotech-inc.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
Zach Myers	11-7-24	1055		10-7-24	11:01
	11-7-24	12:16	Raina Schwanz	11/7/24	12:16

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

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

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

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

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Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Hilcorp	Company: Hilcorp	Lab WO# E411071	Job Number 17051-0002	1D ✓ 2D 3D Std
Project Name: San Juan 28-6 Unit 102N	Address:			NM ✓ CO UT TX
Project Manager: Stuart Hyde	City, State, Zip:			
Address:	Phone:			
City, State, Zip:	Email: samantha.grabert@hilcorp.com			
Phone: 970-903-1607	Miscellaneous:			
Email:				

Analysis and Method

EPA Program

SDWA | CWA | RCRA

Compliance Y or N

PWSID #

Sample Information

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	Remarks
1445	11-6-24	soil	1x4oz	FS07		21	X	X	X		X				
1447				FS08		22									
1449				FS09		23									
1451				FS10		24									
1453				FS11		25									
1455				FS12		26									

Additional Instructions: cc: zmyers@ensolum.com, shyde@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
	11-7-24	1055		10-7-24	11:01
	11-7-24	12:16	Raina Schwanz	11/7/24	12:16

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

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

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

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

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

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Envirotech Analytical Laboratory

Printed: 11/7/2024 12:36:22PM

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:	11/07/24 12:16	Work Order ID:	E411071
Phone:	-	Date Logged In:	11/07/24 12:21	Logged In By:	Caitlin Mars
Email:	shyde@ensolum.com	Due Date:	11/08/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

envirotech Inc.

Report to:

Samantha Grabert

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	San Juan 28-6 Unit 102N
Work Order:	E411120
Job Number:	17051-0002
Received:	11/12/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/14/24

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: 11/14/24

Samantha Grabert
PO Box 61529
Houston, TX 77208

Project Name: San Juan 28-6 Unit 102N
Workorder: E411120
Date Received: 11/12/2024 12:00:00PM

Samantha Grabert,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/12/2024 12:00:00PM, under the Project Name: San Juan 28-6 Unit 102N.

The analytical test results summarized in this report with the Project Name: San Juan 28-6 Unit 102N apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

Field Offices:

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/24 16:59

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS04a	E411120-01A	Soil	11/12/24	11/12/24	Glass Jar, 4 oz.
FS07a	E411120-02A	Soil	11/12/24	11/12/24	Glass Jar, 4 oz.
FS10a	E411120-03A	Soil	11/12/24	11/12/24	Glass Jar, 4 oz.
FS12a	E411120-04A	Soil	11/12/24	11/12/24	Glass Jar, 4 oz.
SW08a	E411120-05A	Soil	11/12/24	11/12/24	Glass Jar, 4 oz.

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

FS04a

E411120-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Benzene	**0.0366**	0.0250	1	11/12/24	11/12/24	
Ethylbenzene	**0.870**	0.0250	1	11/12/24	11/12/24	
Toluene	**1.34**	0.0250	1	11/12/24	11/12/24	
o-Xylene	**2.38**	0.0250	1	11/12/24	11/12/24	
p,m-Xylene	**8.89**	0.0500	1	11/12/24	11/12/24	
Total Xylenes	**11.3**	0.0250	1	11/12/24	11/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*107 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Gasoline Range Organics (C6-C10)	**130**	20.0	1	11/12/24	11/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*119 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446068
Diesel Range Organics (C10-C28)	**123**	25.0	1	11/12/24	11/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/12/24	11/13/24	
Surrogate: n-Nonane		*136 %*	*50-200*	*11/12/24*	*11/13/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2446067
Chloride	ND	20.0	1	11/12/24	11/13/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

FS07a

E411120-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Benzene	ND	0.0250	1	11/12/24	11/12/24	
Ethylbenzene	**0.384**	0.0250	1	11/12/24	11/12/24	
Toluene	**0.454**	0.0250	1	11/12/24	11/12/24	
o-Xylene	**1.31**	0.0250	1	11/12/24	11/12/24	
p,m-Xylene	**4.36**	0.0500	1	11/12/24	11/12/24	
Total Xylenes	**5.66**	0.0250	1	11/12/24	11/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*108 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Gasoline Range Organics (C6-C10)	**73.7**	20.0	1	11/12/24	11/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*108 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446068
Diesel Range Organics (C10-C28)	**257**	25.0	1	11/12/24	11/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/12/24	11/13/24	
Surrogate: n-Nonane		*152 %*	*50-200*	*11/12/24*	*11/13/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2446067
Chloride	ND	20.0	1	11/12/24	11/12/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

FS10a

E411120-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Benzene	ND	0.0250	1	11/12/24	11/12/24	
Ethylbenzene	**0.281**	0.0250	1	11/12/24	11/12/24	
Toluene	**0.390**	0.0250	1	11/12/24	11/12/24	
o-Xylene	**0.911**	0.0250	1	11/12/24	11/12/24	
p,m-Xylene	**3.09**	0.0500	1	11/12/24	11/12/24	
Total Xylenes	**4.00**	0.0250	1	11/12/24	11/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*109 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Gasoline Range Organics (C6-C10)	**56.0**	20.0	1	11/12/24	11/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446068
Diesel Range Organics (C10-C28)	**238**	25.0	1	11/12/24	11/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/12/24	11/13/24	
Surrogate: n-Nonane		*144 %*	*50-200*	*11/12/24*	*11/13/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2446067
Chloride	ND	20.0	1	11/12/24	11/13/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

FS12a

E411120-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Benzene	ND	0.0250	1	11/12/24	11/12/24	
Ethylbenzene	**0.223**	0.0250	1	11/12/24	11/12/24	
Toluene	**0.183**	0.0250	1	11/12/24	11/12/24	
o-Xylene	**0.828**	0.0250	1	11/12/24	11/12/24	
p,m-Xylene	**2.57**	0.0500	1	11/12/24	11/12/24	
Total Xylenes	**3.40**	0.0250	1	11/12/24	11/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*110 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Gasoline Range Organics (C6-C10)	**57.6**	20.0	1	11/12/24	11/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446068
Diesel Range Organics (C10-C28)	**136**	25.0	1	11/12/24	11/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/12/24	11/13/24	
Surrogate: n-Nonane		*124 %*	*50-200*	*11/12/24*	*11/13/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2446067
Chloride	ND	20.0	1	11/12/24	11/13/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

SW08a

E411120-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Benzene	ND	0.0250	1	11/12/24	11/12/24	
Ethylbenzene	ND	0.0250	1	11/12/24	11/12/24	
Toluene	ND	0.0250	1	11/12/24	11/12/24	
o-Xylene	**0.0464**	0.0250	1	11/12/24	11/12/24	
p,m-Xylene	**0.145**	0.0500	1	11/12/24	11/12/24	
Total Xylenes	**0.192**	0.0250	1	11/12/24	11/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*103 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446062
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/24	11/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.3 %*	*70-130*	*11/12/24*	*11/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446068
Diesel Range Organics (C10-C28)	ND	25.0	1	11/12/24	11/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/12/24	11/13/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*11/12/24*	*11/13/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2446067
Chloride	ND	20.0	1	11/12/24	11/13/24	

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2446062-BLK1)									Prepared: 11/12/24 Analyzed: 11/14/24
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	*7.83*		*8.00*		*97.9*	*70-130*			
LCS (2446062-BS1)									Prepared: 11/12/24 Analyzed: 11/14/24
Benzene	4.22	0.0250	5.00		84.4	70-130			
Ethylbenzene	4.22	0.0250	5.00		84.5	70-130			
Toluene	4.27	0.0250	5.00		85.4	70-130			
o-Xylene	4.22	0.0250	5.00		84.5	70-130			
p,m-Xylene	8.61	0.0500	10.0		86.1	70-130			
Total Xylenes	12.8	0.0250	15.0		85.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.82*		*8.00*		*97.8*	*70-130*			
LCS Dup (2446062-BSD1)									Prepared: 11/12/24 Analyzed: 11/14/24
Benzene	3.81	0.0250	5.00		76.2	70-130	10.1	20	
Ethylbenzene	3.82	0.0250	5.00		76.4	70-130	9.99	20	
Toluene	3.86	0.0250	5.00		77.2	70-130	10.1	20	
o-Xylene	3.83	0.0250	5.00		76.5	70-130	9.92	20	
p,m-Xylene	7.80	0.0500	10.0		78.0	70-130	9.87	20	
Total Xylenes	11.6	0.0250	15.0		77.5	70-130	9.89	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.80*		*8.00*		*97.5*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2446062-BLK1)									Prepared: 11/12/24 Analyzed: 11/14/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.35*		*8.00*		*91.8*	*70-130*			
LCS (2446062-BS2)									Prepared: 11/12/24 Analyzed: 11/14/24
Gasoline Range Organics (C6-C10)	45.0	20.0	50.0		90.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.47*		*8.00*		*93.4*	*70-130*			
LCS Dup (2446062-BSD2)									Prepared: 11/12/24 Analyzed: 11/14/24
Gasoline Range Organics (C6-C10)	44.4	20.0	50.0		88.9	70-130	1.38	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.52*		*8.00*		*94.0*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2446068-BLK1)									Prepared: 11/12/24 Analyzed: 11/13/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.0*		*50.0*		*108*	*50-200*			
LCS (2446068-BS1)									Prepared: 11/12/24 Analyzed: 11/13/24
Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	*52.8*		*50.0*		*106*	*50-200*			
Matrix Spike (2446068-MS1)				**Source: E411116-25**					Prepared: 11/12/24 Analyzed: 11/13/24
Diesel Range Organics (C10-C28)	294	25.0	250	ND	118	38-132			
Surrogate: n-Nonane	*59.0*		*50.0*		*118*	*50-200*			
Matrix Spike Dup (2446068-MSD1)				**Source: E411116-25**					Prepared: 11/12/24 Analyzed: 11/13/24
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132	5.95	20	
Surrogate: n-Nonane	*55.5*		*50.0*		*111*	*50-200*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/2024 4:59:27PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2446067-BLK1)									Prepared: 11/12/24 Analyzed: 11/12/24
Chloride	ND	20.0							
LCS (2446067-BS1)									Prepared: 11/12/24 Analyzed: 11/12/24
Chloride	230	20.0	250		91.9	90-110			
Matrix Spike (2446067-MS1)				**Source: E411120-02**					Prepared: 11/12/24 Analyzed: 11/12/24
Chloride	234	20.0	250	ND	93.4	80-120			
Matrix Spike Dup (2446067-MSD1)				**Source: E411120-02**					Prepared: 11/12/24 Analyzed: 11/12/24
Chloride	234	20.0	250	ND	93.5	80-120	0.0817	20	

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

Definitions and Notes

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	11/14/24 16:59

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

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

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

Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Hilcorp Energy Company	Company: Hilcorp Energy Company	Lab WO# E411120	Job Number 17051.0002	1D: X; 2D; 3D; Std	NM: x; CO; UT; TX
Project Name: San Juan 28-6 Unit 102N	Address: 1111 Travis Street			
Project Manager: Samantha Grabert	City, State, Zip: Houston, TX			
Address:	Phone:			
City, State, Zip:	Email: samantha.grabert@hilcorp.com			
Phone:	Miscellaneous:			
Email: samantha.grabert@hilcorp.com				

Sample Information

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	Remarks
947	11-12-24	Soil	1 - 4 oz jar	FS04a		1	x	x	x		X				
953				FS07a		2									
955				FS10a		3									
958				FS12a		4									
1001				SW08a		5									

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance: Y or N

PWSID #

Additional Instructions: email Wes Weichert wweichert@hilcorp.com and Stuart Hyde shyde@ensolum.com results

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
	11-12-24	1200	Caitlin Mor	11.12.24	12:00
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

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

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

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

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

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

envirotech

Envirotech Analytical Laboratory

Printed: 11/12/2024 12:07:28PM

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:	11/12/24 12:00	Work Order ID:	E411120
Phone:	(337) 781-9630	Date Logged In:	11/12/24 12:04	Logged In By:	Caitlin Mars
Email:	samantha.grabert@hilcorp.com	Due Date:	11/13/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	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 filteration required and/or requested for dissolved metals?	No

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

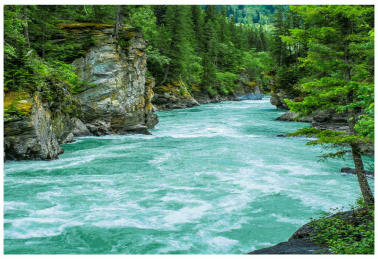
Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Report to:

Kate Kaufman



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	San Juan 28-6 Unit 102N
Work Order:	E411159
Job Number:	17051-0002
Received:	11/14/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/18/24

Date Reported: 11/18/24

Kate Kaufman
PO Box 61529
Houston, TX 77208

Project Name: San Juan 28-6 Unit 102N
Workorder: E411159
Date Received: 11/14/2024 4:10:00PM

Kate Kaufman,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/14/2024 4:10:00PM, under the Project Name: San Juan 28-6 Unit 102N.

The analytical test results summarized in this report with the Project Name: San Juan 28-6 Unit 102N apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
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Sample Summary

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/24 09:53

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP01	E411159-01A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.
SP02	E411159-02A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.
SP03	E411159-03A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.
SP04	E411159-04A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.
SP05	E411159-05A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.
SP06	E411159-06A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.
SP07	E411159-07A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.
SP08	E411159-08A	Soil	11/14/24	11/14/24	Glass Jar, 4 oz.

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP01

E411159-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.280**	0.0250	1	11/14/24	11/15/24	
Toluene	**0.0662**	0.0250	1	11/14/24	11/15/24	
o-Xylene	**1.39**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**4.26**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**5.65**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*108 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**101**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*118 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**94.4**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*11/15/24*	*11/15/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP02

E411159-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.159**	0.0250	1	11/14/24	11/15/24	
Toluene	ND	0.0250	1	11/14/24	11/15/24	
o-Xylene	**1.09**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**3.05**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**4.13**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*109 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**88.7**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*117 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**91.3**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*115 %*	*50-200*	*11/15/24*	*11/15/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP03

E411159-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.340**	0.0250	1	11/14/24	11/15/24	
Toluene	**0.0660**	0.0250	1	11/14/24	11/15/24	
o-Xylene	**2.43**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**7.69**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**10.1**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*108 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**133**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*120 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**60.3**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*92.7 %*	*50-200*	*11/15/24*	*11/15/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP04

E411159-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.196**	0.0250	1	11/14/24	11/15/24	
Toluene	ND	0.0250	1	11/14/24	11/15/24	
o-Xylene	**1.32**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**3.77**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**5.08**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*108 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**96.7**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.6 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**72.4**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*93.3 %*	*50-200*	*11/15/24*	*11/15/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP05

E411159-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.295**	0.0250	1	11/14/24	11/15/24	
Toluene	**0.0592**	0.0250	1	11/14/24	11/15/24	
o-Xylene	**1.97**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**6.65**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**8.63**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.2 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**130**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*129 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**110**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*11/15/24*	*11/15/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP06

E411159-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.545**	0.0250	1	11/14/24	11/15/24	
Toluene	**0.401**	0.0250	1	11/14/24	11/15/24	
o-Xylene	**2.73**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**9.97**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**12.7**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.7 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**169**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*142 %*	*70-130*	*11/14/24*	*11/15/24*	*S5*
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**60.1**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*11/15/24*	*11/15/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP07

E411159-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.441**	0.0250	1	11/14/24	11/15/24	
Toluene	**0.167**	0.0250	1	11/14/24	11/15/24	
o-Xylene	**2.34**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**8.21**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**10.5**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**165**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*141 %*	*70-130*	*11/14/24*	*11/15/24*	*S5*
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**38.2**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*108 %*	*50-200*	*11/15/24*	*11/15/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

SP08

E411159-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Benzene	ND	0.0250	1	11/14/24	11/15/24	
Ethylbenzene	**0.543**	0.0250	1	11/14/24	11/15/24	
Toluene	**0.296**	0.0250	1	11/14/24	11/15/24	
o-Xylene	**2.74**	0.0250	1	11/14/24	11/15/24	
p,m-Xylene	**9.84**	0.0500	1	11/14/24	11/15/24	
Total Xylenes	**12.6**	0.0250	1	11/14/24	11/15/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*11/14/24*	*11/15/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2446136
Gasoline Range Organics (C6-C10)	**171**	20.0	1	11/14/24	11/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*140 %*	*70-130*	*11/14/24*	*11/15/24*	*S5*
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2446129
Diesel Range Organics (C10-C28)	**38.4**	25.0	1	11/15/24	11/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/15/24	11/15/24	
Surrogate: n-Nonane		*93.3 %*	*50-200*	*11/15/24*	*11/15/24*	

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2446136-BLK1)									Prepared: 11/14/24 Analyzed: 11/14/24
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	*7.28*		*8.00*		*91.0*	*70-130*			
LCS (2446136-BS1)									Prepared: 11/14/24 Analyzed: 11/14/24
Benzene	4.85	0.0250	5.00		97.0	70-130			
Ethylbenzene	4.96	0.0250	5.00		99.2	70-130			
Toluene	4.99	0.0250	5.00		99.7	70-130			
o-Xylene	4.98	0.0250	5.00		99.5	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.22*		*8.00*		*90.2*	*70-130*			
LCS Dup (2446136-BSD1)									Prepared: 11/14/24 Analyzed: 11/14/24
Benzene	4.78	0.0250	5.00		95.7	70-130	1.43	20	
Ethylbenzene	4.91	0.0250	5.00		98.2	70-130	1.05	20	
Toluene	4.93	0.0250	5.00		98.6	70-130	1.08	20	
o-Xylene	4.94	0.0250	5.00		98.9	70-130	0.644	20	
p,m-Xylene	9.99	0.0500	10.0		99.9	70-130	0.928	20	
Total Xylenes	14.9	0.0250	15.0		99.5	70-130	0.834	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.17*		*8.00*		*89.6*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2446136-BLK1)									Prepared: 11/14/24 Analyzed: 11/14/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.26*		*8.00*		*90.7*	*70-130*			
LCS (2446136-BS2)									Prepared: 11/14/24 Analyzed: 11/14/24
Gasoline Range Organics (C6-C10)	39.0	20.0	50.0		78.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.27*		*8.00*		*90.9*	*70-130*			
LCS Dup (2446136-BSD2)									Prepared: 11/14/24 Analyzed: 11/15/24
Gasoline Range Organics (C6-C10)	35.9	20.0	50.0		71.8	70-130	8.43	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.31*		*8.00*		*91.3*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/2024 9:53:53AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2446129-BLK1)									Prepared: 11/14/24 Analyzed: 11/15/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.5*		*50.0*		*101*	*50-200*			
LCS (2446129-BS1)									Prepared: 11/14/24 Analyzed: 11/15/24
Diesel Range Organics (C10-C28)	271	25.0	250		108	38-132			
Surrogate: n-Nonane	*57.9*		*50.0*		*116*	*50-200*			
LCS Dup (2446129-BSD1)									Prepared: 11/14/24 Analyzed: 11/15/24
Diesel Range Organics (C10-C28)	265	25.0	250		106	38-132	2.11	20	
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*50-200*			

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

Definitions and Notes

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/18/24 09:53

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

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

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

Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Hilcorp	Company: Hilcorp	Lab WO# E411159	Job Number 17051-0002	1D: X (Same) 2D 3D Std
Project Name: S.J 28-6 102N	Address: Rd 3100			NM: X CO UT TX
Project Manager: Kate Kaufmann	City, State, Zip: Aztec NM			
Address:	Phone:			
City, State, Zip:	Email: KKaufman@hilcorp.com			
Phone:	Miscellaneous:			
Email:				

Sample Information

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			Remarks
1430	11-14	So.I	1	SP01		1	X	X	X									
1435				SP02		2	X	X	X									
1440				SP03		3	X	X	X									
1445				SP04		4	X	X	X									
1450				SP05		5	X	X	X									
1455				SP06		6	X	X	X									
1500				SP07		7	X	X	X									
1505				SP08		8	X	X	X									

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Additional Instructions: cc: shyde@ensolum.com ecarroll@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: Ecia Carroll

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ecia Carroll	11-14	16:10	Raimee Shuey	11/14/24	16:10
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

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

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

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

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

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

envirotech

Envirotech Analytical Laboratory

Printed: 11/14/2024 5:24:30PM

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:	11/14/24 16:10	Work Order ID:	E411159
Phone:	-	Date Logged In:	11/14/24 16:27	Logged In By:	Noe Soto
Email:	shyde@ensolum.com	Due Date:	11/15/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

envirotech Inc.

Report to:

Kate Kaufman

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	SO 28-6 102n
Work Order:	E411166
Job Number:	17051-0002
Received:	11/15/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/19/24

Date Reported: 11/19/24

Kate Kaufman
PO Box 61529
Houston, TX 77208

Project Name: SO 28-6 102n
Workorder: E411166
Date Received: 11/15/2024 3:00:00PM

Kate Kaufman,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/15/2024 3:00:00PM, under the Project Name: SO 28-6 102n.

The analytical test results summarized in this report with the Project Name: SO 28-6 102n apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Hilcorp Energy Co	Project Name:	SO 28-6 102n	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/24 16:25

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP09	E411166-01A	Soil	11/15/24	11/15/24	Glass Jar, 4 oz.
SP10	E411166-02A	Soil	11/15/24	11/15/24	Glass Jar, 4 oz.
SP11	E411166-03A	Soil	11/15/24	11/15/24	Glass Jar, 4 oz.

Sample Data

Hilcorp Energy Co	Project Name:	SO 28-6 102n	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/2024 4:25:10PM

SP09

E411166-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2447002
Benzene	ND	0.0250	1	11/18/24	11/18/24	
Ethylbenzene	ND	0.0250	1	11/18/24	11/18/24	
Toluene	ND	0.0250	1	11/18/24	11/18/24	
o-Xylene	**0.640**	0.0250	1	11/18/24	11/18/24	
p,m-Xylene	**1.62**	0.0500	1	11/18/24	11/18/24	
Total Xylenes	**2.26**	0.0250	1	11/18/24	11/18/24	
Surrogate: Bromofluorobenzene		*113 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.6 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: Toluene-d8		*110 %*	*70-130*	*11/18/24*	*11/18/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2447002
Gasoline Range Organics (C6-C10)	**112**	20.0	1	11/18/24	11/18/24	
Surrogate: Bromofluorobenzene		*113 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.6 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: Toluene-d8		*110 %*	*70-130*	*11/18/24*	*11/18/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447004
Diesel Range Organics (C10-C28)	**159**	25.0	1	11/18/24	11/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/18/24	11/18/24	
Surrogate: n-Nonane		*128 %*	*50-200*	*11/18/24*	*11/18/24*	

Sample Data

Hilcorp Energy Co	Project Name:	SO 28-6 102n	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/2024 4:25:10PM

SP10

E411166-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2447002
Benzene	ND	0.0250	1	11/18/24	11/18/24	
Ethylbenzene	ND	0.0250	1	11/18/24	11/18/24	
Toluene	ND	0.0250	1	11/18/24	11/18/24	
o-Xylene	**0.191**	0.0250	1	11/18/24	11/18/24	
p,m-Xylene	**0.461**	0.0500	1	11/18/24	11/18/24	
Total Xylenes	**0.651**	0.0250	1	11/18/24	11/18/24	
Surrogate: Bromofluorobenzene		*109 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.0 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/18/24*	*11/18/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2447002
Gasoline Range Organics (C6-C10)	**87.8**	20.0	1	11/18/24	11/18/24	
Surrogate: Bromofluorobenzene		*109 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.0 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/18/24*	*11/18/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447004
Diesel Range Organics (C10-C28)	**53.1**	25.0	1	11/18/24	11/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/18/24	11/18/24	
Surrogate: n-Nonane		*116 %*	*50-200*	*11/18/24*	*11/18/24*	

Sample Data

Hilcorp Energy Co	Project Name:	SO 28-6 102n	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/2024 4:25:10PM

SP11

E411166-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2447002
Benzene	ND	0.0250	1	11/18/24	11/18/24	
Ethylbenzene	ND	0.0250	1	11/18/24	11/18/24	
Toluene	ND	0.0250	1	11/18/24	11/18/24	
o-Xylene	**1.46**	0.0250	1	11/18/24	11/18/24	
p,m-Xylene	**3.30**	0.0500	1	11/18/24	11/18/24	
Total Xylenes	**4.76**	0.0250	1	11/18/24	11/18/24	
Surrogate: Bromofluorobenzene		*128 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.0 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*11/18/24*	*11/18/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2447002
Gasoline Range Organics (C6-C10)	**176**	20.0	1	11/18/24	11/18/24	
Surrogate: Bromofluorobenzene		*128 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.0 %*	*70-130*	*11/18/24*	*11/18/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*11/18/24*	*11/18/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447004
Diesel Range Organics (C10-C28)	**108**	25.0	1	11/18/24	11/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/18/24	11/18/24	
Surrogate: n-Nonane		*123 %*	*50-200*	*11/18/24*	*11/18/24*	

QC Summary Data

Hilcorp Energy Co	Project Name:	SO 28-6 102n	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/2024 4:25:10PM

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 (2447002-BLK1)									Prepared: 11/18/24 Analyzed: 11/18/24
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	*0.482*		*0.500*		*96.4*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.3*	*70-130*			
Surrogate: Toluene-d8	*0.521*		*0.500*		*104*	*70-130*			
LCS (2447002-BS1)									Prepared: 11/18/24 Analyzed: 11/18/24
Benzene	2.33	0.0250	2.50		93.1	70-130			
Ethylbenzene	2.57	0.0250	2.50		103	70-130			
Toluene	2.48	0.0250	2.50		99.0	70-130			
o-Xylene	2.63	0.0250	2.50		105	70-130			
p,m-Xylene	5.33	0.0500	5.00		107	70-130			
Total Xylenes	7.97	0.0250	7.50		106	70-130			
Surrogate: Bromofluorobenzene	*0.497*		*0.500*		*99.4*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.479*		*0.500*		*95.7*	*70-130*			
Surrogate: Toluene-d8	*0.521*		*0.500*		*104*	*70-130*			
LCS Dup (2447002-BSD1)									Prepared: 11/18/24 Analyzed: 11/18/24
Benzene	2.40	0.0250	2.50		95.8	70-130	2.88	23	
Ethylbenzene	2.61	0.0250	2.50		105	70-130	1.66	27	
Toluene	2.53	0.0250	2.50		101	70-130	2.18	24	
o-Xylene	2.70	0.0250	2.50		108	70-130	2.44	27	
p,m-Xylene	5.40	0.0500	5.00		108	70-130	1.29	27	
Total Xylenes	8.10	0.0250	7.50		108	70-130	1.67	27	
Surrogate: Bromofluorobenzene	*0.496*		*0.500*		*99.1*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.512*		*0.500*		*102*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	SO 28-6 102n	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/2024 4:25:10PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2447002-BLK1)									Prepared: 11/18/24 Analyzed: 11/18/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.482*		*0.500*		*96.4*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.3*	*70-130*			
Surrogate: Toluene-d8	*0.521*		*0.500*		*104*	*70-130*			
LCS (2447002-BS2)									Prepared: 11/18/24 Analyzed: 11/18/24
Gasoline Range Organics (C6-C10)	54.3	20.0	50.0		109	70-130			
Surrogate: Bromofluorobenzene	*0.500*		*0.500*		*99.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.489*		*0.500*		*97.8*	*70-130*			
Surrogate: Toluene-d8	*0.523*		*0.500*		*105*	*70-130*			
LCS Dup (2447002-BSD2)									Prepared: 11/18/24 Analyzed: 11/18/24
Gasoline Range Organics (C6-C10)	56.5	20.0	50.0		113	70-130	3.95	20	
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.490*		*0.500*		*97.9*	*70-130*			
Surrogate: Toluene-d8	*0.525*		*0.500*		*105*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	SO 28-6 102n	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/2024 4:25:10PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447004-BLK1)									Prepared: 11/18/24 Analyzed: 11/18/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*55.5*		*50.0*		*111*	*50-200*			
LCS (2447004-BS1)									Prepared: 11/18/24 Analyzed: 11/18/24
Diesel Range Organics (C10-C28)	237	25.0	250		94.8	38-132			
Surrogate: n-Nonane	*52.6*		*50.0*		*105*	*50-200*			
LCS Dup (2447004-BSD1)									Prepared: 11/18/24 Analyzed: 11/18/24
Diesel Range Organics (C10-C28)	248	25.0	250		99.0	38-132	4.35	20	
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*50-200*			

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:	SO 28-6 102n	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Kate Kaufman	11/19/24 16:25

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

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

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

Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Hilcorp	Company: Hilcorp	Lab WO# E4111606	Job Number 1705|.0002	1D: X; 2D; 3D; Std	NM: X; CO; UT; TX
Project Name: ~~Kate Kaufman~~ SJ 28-6 #2N	Address: PO Box 3100			
Project Manager: Kate Kaufman	City, State, Zip: Aztec, NM			
Address:	Phone:			
City, State, Zip:	Email: KKaufman@hilcorp.com			
Phone:	Miscellaneous:			
Email: KKaufman@hilcorp.com				

Sample Information

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				Remarks
1330	11-15	Soil	1	SP09		1	X	X	X									
1335	11-15	Soil	1	SP10		2	X	X	X									
1340	11-15	Soil	1	SP11		3	X	X	X									

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance: Y or N

PWSID #

Additional Instructions: cc: shyde@ensolum.com ecarroll@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: Eddie Carroll

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Eddie Carroll	11-15	1500	Kaine Schmidt	11/15/24	15:00
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

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

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

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

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

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

envirotech

Envirotech Analytical Laboratory

Printed: 11/15/2024 3:04:16PM

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:	11/15/24 15:00	Work Order ID:	E411166
Phone:	-	Date Logged In:	11/15/24 15:01	Logged In By:	Caitlin Mars
Email:		Due Date:	11/18/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

envirotech Inc.

Report to:

Samantha Grabert

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name:	San Juan 28-6 Unit 102N
Work Order:	E412023
Job Number:	17051-0002
Received:	12/3/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/9/24

Date Reported: 12/9/24

Samantha Grabert
PO Box 61529
Houston, TX 77208

Project Name: San Juan 28-6 Unit 102N
Workorder: E412023
Date Received: 12/3/2024 2:16:00PM

Samantha Grabert,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/3/2024 2:16:00PM, under the Project Name: San Juan 28-6 Unit 102N.

The analytical test results summarized in this report with the Project Name: San Juan 28-6 Unit 102N apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

Field Offices:

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Office: 505-421-LABS(5227)
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ljarboe@envirotech-inc.com

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Client Representative
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Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	12/09/24 10:19

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01	E412023-01A	Soil	12/03/24	12/03/24	Glass Jar, 4 oz.
SS02	E412023-02A	Soil	12/03/24	12/03/24	Glass Jar, 4 oz.
SS03	E412023-03A	Soil	12/03/24	12/03/24	Glass Jar, 4 oz.

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	12/9/2024 10:19:09AM

SS01

E412023-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL			Batch: 2449073
Benzene	ND	0.0250	1	12/05/24	12/05/24	
Ethylbenzene	ND	0.0250	1	12/05/24	12/05/24	
Toluene	ND	0.0250	1	12/05/24	12/05/24	
o-Xylene	ND	0.0250	1	12/05/24	12/05/24	
p,m-Xylene	ND	0.0500	1	12/05/24	12/05/24	
Total Xylenes	ND	0.0250	1	12/05/24	12/05/24	
Surrogate: 4-Bromochlorobenzene-PID		*86.3 %*	*70-130*	*12/05/24*	*12/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2449073
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/24	12/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*12/05/24*	*12/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2449075
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/24	12/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/24	12/05/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*12/05/24*	*12/05/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	12/9/2024 10:19:09AM

SS02

E412023-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL			Batch: 2449073
Benzene	ND	0.0250	1	12/05/24	12/05/24	
Ethylbenzene	ND	0.0250	1	12/05/24	12/05/24	
Toluene	ND	0.0250	1	12/05/24	12/05/24	
o-Xylene	ND	0.0250	1	12/05/24	12/05/24	
p,m-Xylene	ND	0.0500	1	12/05/24	12/05/24	
Total Xylenes	ND	0.0250	1	12/05/24	12/05/24	
Surrogate: 4-Bromochlorobenzene-PID		*85.4 %*	*70-130*	*12/05/24*	*12/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2449073
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/24	12/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.2 %*	*70-130*	*12/05/24*	*12/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2449075
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/24	12/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/24	12/05/24	
Surrogate: n-Nonane		*113 %*	*50-200*	*12/05/24*	*12/05/24*	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	12/9/2024 10:19:09AM

SS03

E412023-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL			Batch: 2449073
Benzene	ND	0.0250	1	12/05/24	12/05/24	
Ethylbenzene	ND	0.0250	1	12/05/24	12/05/24	
Toluene	ND	0.0250	1	12/05/24	12/05/24	
o-Xylene	ND	0.0250	1	12/05/24	12/05/24	
p,m-Xylene	ND	0.0500	1	12/05/24	12/05/24	
Total Xylenes	ND	0.0250	1	12/05/24	12/05/24	
Surrogate: 4-Bromochlorobenzene-PID		*86.4 %*	*70-130*	*12/05/24*	*12/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2449073
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/24	12/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.2 %*	*70-130*	*12/05/24*	*12/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2449075
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/24	12/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/24	12/05/24	
Surrogate: n-Nonane		*107 %*	*50-200*	*12/05/24*	*12/05/24*	

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	12/9/2024 10:19:09AM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2449073-BLK1)									Prepared: 12/05/24 Analyzed: 12/05/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*6.91*		*8.00*		*86.3*	*70-130*			
LCS (2449073-BS1)									Prepared: 12/05/24 Analyzed: 12/05/24
Benzene	4.92	0.0250	5.00		98.4	70-130			
Ethylbenzene	4.71	0.0250	5.00		94.2	70-130			
Toluene	4.82	0.0250	5.00		96.5	70-130			
o-Xylene	4.68	0.0250	5.00		93.6	70-130			
p,m-Xylene	9.58	0.0500	10.0		95.8	70-130			
Total Xylenes	14.3	0.0250	15.0		95.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*6.86*		*8.00*		*85.8*	*70-130*			
LCS Dup (2449073-BSD1)									Prepared: 12/05/24 Analyzed: 12/05/24
Benzene	5.58	0.0250	5.00		112	70-130	12.5	20	
Ethylbenzene	5.36	0.0250	5.00		107	70-130	13.0	20	
Toluene	5.49	0.0250	5.00		110	70-130	12.9	20	
o-Xylene	5.33	0.0250	5.00		107	70-130	13.0	20	
p,m-Xylene	10.9	0.0500	10.0		109	70-130	12.7	20	
Total Xylenes	16.2	0.0250	15.0		108	70-130	12.8	20	
Surrogate: 4-Bromochlorobenzene-PID	*6.84*		*8.00*		*85.6*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	12/9/2024 10:19:09AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2449073-BLK1)									Prepared: 12/05/24 Analyzed: 12/05/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.65*		*8.00*		*95.7*	*70-130*			
LCS (2449073-BS2)									Prepared: 12/05/24 Analyzed: 12/05/24
Gasoline Range Organics (C6-C10)	42.3	20.0	50.0		84.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.82*		*8.00*		*97.7*	*70-130*			
LCS Dup (2449073-BSD2)									Prepared: 12/05/24 Analyzed: 12/05/24
Gasoline Range Organics (C6-C10)	41.9	20.0	50.0		83.7	70-130	1.03	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.77*		*8.00*		*97.1*	*70-130*			

QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	**Reported:**
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Samantha Grabert	12/9/2024 10:19:09AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2449075-BLK1)									Prepared: 12/05/24 Analyzed: 12/05/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*53.9*		*50.0*		*108*	*50-200*			
LCS (2449075-BS1)									Prepared: 12/05/24 Analyzed: 12/05/24
Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	*52.7*		*50.0*		*105*	*50-200*			
Matrix Spike (2449075-MS1)				**Source: E412025-09**					Prepared: 12/05/24 Analyzed: 12/05/24
Diesel Range Organics (C10-C28)	259	25.0	250	ND	104	38-132			
Surrogate: n-Nonane	*55.4*		*50.0*		*111*	*50-200*			
Matrix Spike Dup (2449075-MSD1)				**Source: E412025-09**					Prepared: 12/05/24 Analyzed: 12/05/24
Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	3.68	20	
Surrogate: n-Nonane	*57.0*		*50.0*		*114*	*50-200*			

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

Definitions and Notes

Hilcorp Energy Co	Project Name:	San Juan 28-6 Unit 102N	
PO Box 61529	Project Number:	17051-0002	**Reported:**
Houston TX, 77208	Project Manager:	Samantha Grabert	12/09/24 10:19

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

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

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

Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Hilcorp Energy Company	Company: Hilcorp Energy Company	Lab WO# E412023	1D 2D 3D Std X	NM CO UT TX
Project Name: San Juan 28-6 Unit 102N	Address: 1111 Travis Street	Job Number 17051.0002		x
Project Manager: Samantha Grabert	City, State, Zip: Houston, TX			
Address:	Phone:			
City, State, Zip:	Email: samantha.grabert@hilcorp.com			
Phone:	Miscellaneous:			
Email: samantha.grabert@hilcorp.com				

Sample Information

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				Remarks
1140	12-3-24	Soil	1 - 4 oz jar	SS01		1	x	x	x									
1150	↓	↓	↓	SS02		2	↓	↓	↓									
1200	↓	↓	↓	SS03		3	↓	↓	↓									

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Additional Instructions: email Wes Weichert wweichert@hilcorp.com and Stuart Hyde shyde@ensolum.com results

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
	12-3-24	1415		12.3.24	14:16
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

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

Lab Use Only

Received on ice: (Y) N

T1 T2 T3

AVG Temp °C 4

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

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

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

envirotech

Envirotech Analytical Laboratory

Printed: 12/4/2024 12:14:19PM

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:	12/03/24 14:16	Work Order ID:	E412023
Phone:	(337) 781-9630	Date Logged In:	12/04/24 12:07	Logged In By:	Caitlin Mars
Email:	samantha.grabert@hilcorp.com	Due Date:	12/10/24 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	Carrier: Zach Myers
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	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 filteration required and/or requested for dissolved metals?	No

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

envirotech Inc.

ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
Hilcorp Energy Company
San Juan 28-6 Unit 102N
Rio Arriba County, New Mexico

Photograph: 1 Date: 11/6/2024
Description: Start of excavation from separator
View: Southwest

Photograph: 2 Date: 11/6/2024
Description: East side of excavation and old BGT pit
View: North

Photograph: 3 Date: 11/6/2024
Description: Excavation activities, 6-7' deep
View: Southwest

Photograph: 4 Date: 11/6/2024
Description: Excavation at 10-12' depth
View: Southwest

ENSOLUM

Photographic Log
Hilcorp Energy Company
San Juan 28-6 Unit 102N
Rio Arriba County, New Mexico

Photograph: 5 Date: 11/12/2024
Description: Additional excavation at FS07a
View: Southwest

Photograph: 6 Date: 11/12/2024
Description: Additional excavation SW08a, FS10a, and FS12a
View: South

Photograph: 7 Date: 12/3/2024
Description: Vadose Zone sampling
View: West

Photograph: 8 Date: 12/3/2024
Description: Site backfilled and facilities reset
View: East

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 416900

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 416900
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2403034973**
Incident Name	**NAPP2403034973 SAN JUAN 28-6 UNIT 102N @ 30-039-27600**
Incident Type	**Release Other**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-039-27600] SAN JUAN 28 6 UNIT #102N**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SAN JUAN 28-6 UNIT 102N
Date Release Discovered	01/29/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Corrosion | Production Tank | Condensate | Released: 42 BBL | Recovered: 0 BBL | Lost: 42 BBL.
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 416900
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	N/A

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

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 01/03/2025

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QUESTIONS (continued)

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	Action Number: 416900
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 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	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 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 ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	0
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	9100
GRO+DRO (EPA SW-846 Method 8015M)	9100
BTEX (EPA SW-846 Method 8021B or 8260B)	787.8
Benzene (EPA SW-846 Method 8021B or 8260B)	4.6
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	01/30/2024
On what date will (or did) the final sampling or liner inspection occur	02/06/2024
On what date will (or was) the remediation complete(d)	02/06/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	2000
What is the estimated volume (in cubic yards) that will be remediated	600
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	No
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	Yes
Which OCD approved facility will be used for **on-site** disposal	*Not answered.*
OR which OCD approved well (API) will be used for **on-site** disposal	30-039-27600 SAN JUAN 28 6 UNIT #102N
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 01/03/2025

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS (continued)

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QUESTIONS

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

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QUESTIONS (continued)

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QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**404692**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**12/03/2024**
What was the (estimated) number of samples that were to be gathered	**20**
What was the sampling surface area in square feet	**4000**

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	1700
What was the total volume (cubic yards) remediated	1100
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	Laboratory analytical results from confirmation soil samples, collected from the final extents of the excavation, indicated all COC concentrations were compliant with the Site Closure Criteria and no further remediation is required. Additionally, all soil samples collected from the treated stockpiles and the vadose zone below the treatment stockpiles were also compliant with the applicable Site Closure Criteria and/or reclamation requirement. The corrective action initiated by Hilcorp has mitigated impacts at this Site and these remedial actions have been protective of human health, the environment, and groundwater.

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.

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QUESTIONS (continued)

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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

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CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/31/2025