ENSOLUM

July 25, 2024

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**
Newsom B 9
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: nAPP2401660821

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 release of condensate and produced water discovered at the Newsom B 9 natural gas production well (Site). The Site is located on land managed by the United States Bureau of Land Management (BLM) in Unit G, Section 7, Township 26 North, Range 8 West in San Juan County, New Mexico (Figure 1).

SITE BACKGROUND

On January 16, 2024, during Auditory, Visual, and Olfactory (AVO) inspections and routine tank gauging, Hilcorp operations discovered a release at the Site. The operator gauged the tank and found 46.76 barrels (bbls) of condensate and 8.35 bbls of produced water missing from the tank. The operator immediately walked around the base of the 300-bbl tank and found a small leak in the tank shell near the manway door that was the result of corrosion. Upon discovery, the operator was able to open a drain to divert the remaining fluids to the adjacent pit tank. Based on tank gauging data, the total release volume was estimated to be 55.11 bbls. No fluids were recovered; however, the release remained within containment. Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) via email and submitted a Notification of Release on January 16, 2024. The initial C-141 Form was submitted on January 29, 2024. The NMOCD assigned the release incident number nAPP2401660821.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

The Site is located within the Nacimiento Geologic Formation. In the report titled "*Hydrogeology and Water Resources of San Juan Basin, New Mexico*" (Stone, et. al., 1983), the Nacimiento Formation is characterized by interbedded black carbonaceous mudstones and white, coarse-grained sandstones, which ranges in thickness from 418 feet to 2,232 feet. The hydrogeologic properties of the Nacimiento Formation display variable hydrogeologic properties dependent on location. Where sufficient yield is

present, the primary use of water from this formation is for domestic and/or livestock supply. The Nacimiento Formation is underlain by the Ojo Alamo sandstone (Stone et. al., 1983).

The closest significant watercourse is a dry wash located approximately 650 feet northeast of the Site. There are no known springs or fresh-water wells located within 500 feet of the Site. The nearest groundwater well with depth to groundwater information (SJ-03811) is located approximately 8,985 feet southwest of the Site. Depth to water information from this well indicates groundwater is approximately 175 feet below ground surface (bgs) at the location of the water well. Well SJ-03811 (well summary is attached as Appendix A) is situated at an elevation of approximately 6,300 feet above mean sea level (AMSL) and approximately 68 feet higher in elevation than the Site, therefore depth to water at the Site is assumed to be greater than 100 feet bgs. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland. Surface land use surrounding the Site consists primarily of oil and gas development and livestock grazing. The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as low potential karst by the BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. Sensitive receptors near the Site are depicted on Figure 1.

SITE CLOSURE CRITERIA

Based on the information presented above and in accordance with the *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 NMAC), the following Closure Criteria for constituents of concern (COCs) should be applied to the Site:

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

EXCAVATION SOIL SAMPLING ACTIVITIES

On January 19, 2024, Hilcorp commenced excavation activities at the Site and completed initial soil sampling on January 29, 2024 (S-1, S-2, & N SW). However, soil analytical results indicated that impacts remained, so Hilcorp returned to the Site on March 13, 2024, to continue excavation efforts and re-sample. Soil analytical results gathered during the March 2024 sampling indicated that additional impacted soil was present between depths of 9 feet and 14 feet bgs. As such, Ensolum personnel returned to the site on April 5, 2024, to collect two discrete samples (S-1 2' & S-1 13') from the discolored interval between 10 feet and 12 feet bgs in accordance with 19.15.29.12.D(1) NMAC. Soil sample locations from the March & April 2024 sampling are shown in Figure 2. Based on the results of the discrete samples, additional excavation and sampling was necessary at the site. Between June 11 and June 17, 2024, Ensolum personnel conducted excavation oversight and confirmation sampling. Notification to NMOCD was provided prior to conducting remediation and sampling work, with correspondence attached in Appendix B.

To direct activities during excavation, Ensolum personnel field screened soil for volatile organic compounds (VOCs) using a calibrated photoionization detector (PID). Once field screening indicated impacted soil had been removed, five-point composite soil samples were collected from the floor (FS01 through FS12) and sidewalls (SW01 through SW17) of the excavation at a frequency of one sample per 200 square feet. The five-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. Additionally, in accordance with 19.15.29.12.D(1) NMAC, an individual grab sample was collected from discolored/stained soil located on sidewall area SW16 (sample SW16-Discrete).

All soil samples were collected into laboratory provided jars and transported under proper chain of custody procedures to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico for laboratory analysis of TPH following Environmental Protection Agency (EPA) Method 8015M/D, BTEX following EPA Method 8021B, and chloride following EPA Method 300.0. Soil sample results are summarized in Table 1, with complete laboratory analytical reports attached as Appendix C. Photographs taken by Ensolum during the excavation work are included in Appendix D.

Analytical results from the excavation completed in June 2024 indicated concentrations of all COCs were compliant with NMOCD Table I Closure Criteria. The excavation was advanced to a depth of 8 feet bgs to the north and 15 feet bgs to the south. The excavation measured approximately 38 feet wide by 66 feet long with an aerial extent of approximately 2,300 square feet. In total, approximately 1,000 cubic yards of impacted soil were removed and transported to the Envirotech, Inc. landfarm located in San Juan County, New Mexico. Confirmation sample location and excavation extent are presented in Figure 3.

CLOSURE REQUEST

Site excavation and sampling activities were conducted at the Site to address the release discovered on January 16, 2024. Laboratory analytical results for the excavation confirmation soil samples, collected from the final excavation extent, confirmed that all COC concentrations are compliant with the Site Closure Criteria, indicating no further remediation is necessary. The excavation of the impacted soil has effectively mitigated the impacts at this Site, ensuring the protection of human health, the environment, and groundwater. Therefore, Hilcorp respectfully requests the closure of Incident Number nAPP2401660821.

REFERENCES

Stone, W.; Lyford, F.; Frenzel, P.; Mizell, N.; and Padgett, E. (1983). *Hydrogeology and Water Resources of San Juan Basin, New Mexico.* Socorro: New Mexico Bureau of Mines and Mineral Resources.

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: Initial Excavation Soil Sample Locations
Figure 3: Final Excavation Extent & Soil Sample Locations

Table 1: Soil Sample Analytical Results

Appendix A: NMOSE Point of Diversion Summary
Appendix B: Agency Correspondence
Appendix C: Laboratory Analytical Reports
Appendix D: Photographic Log

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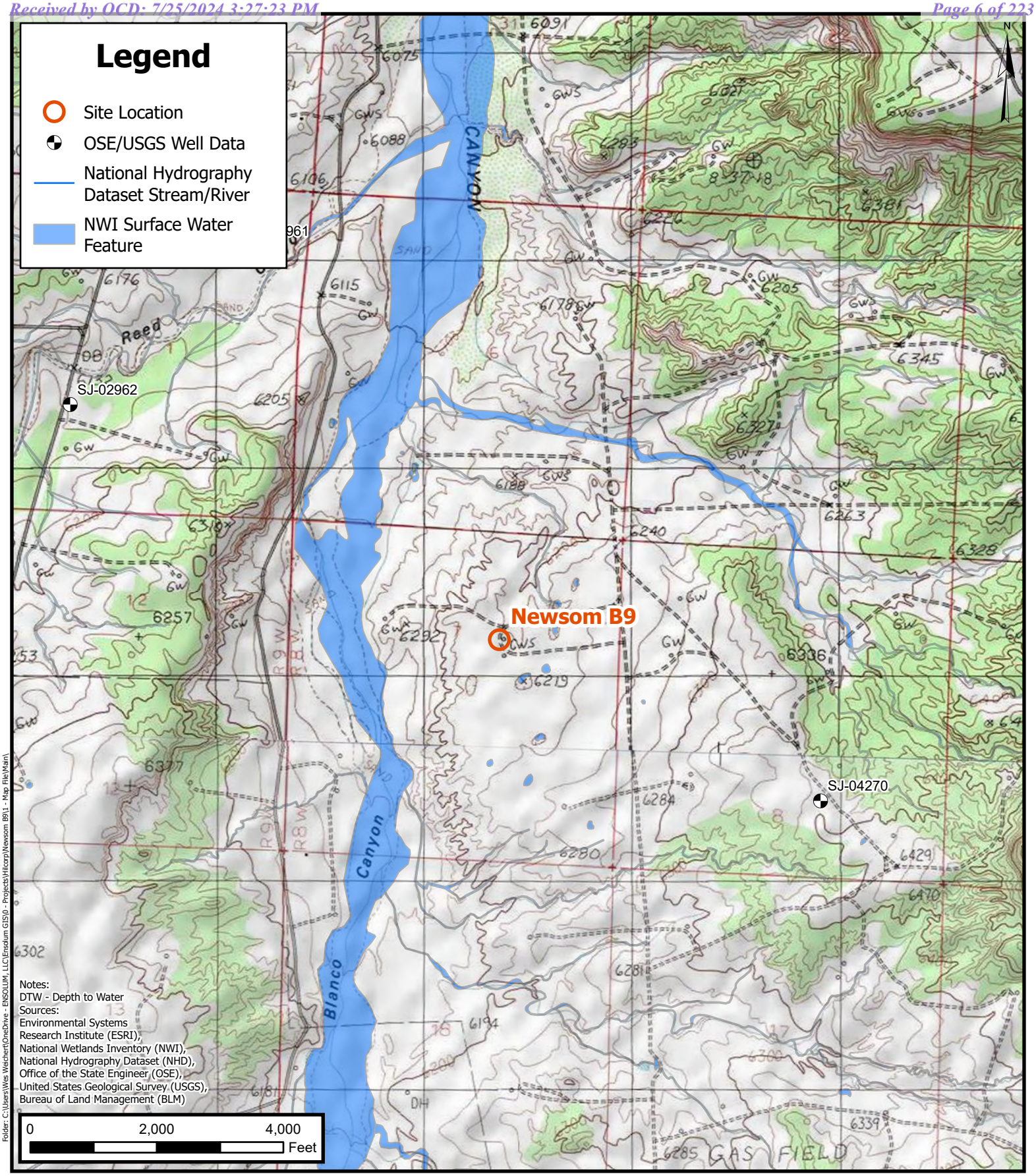
FIGURES



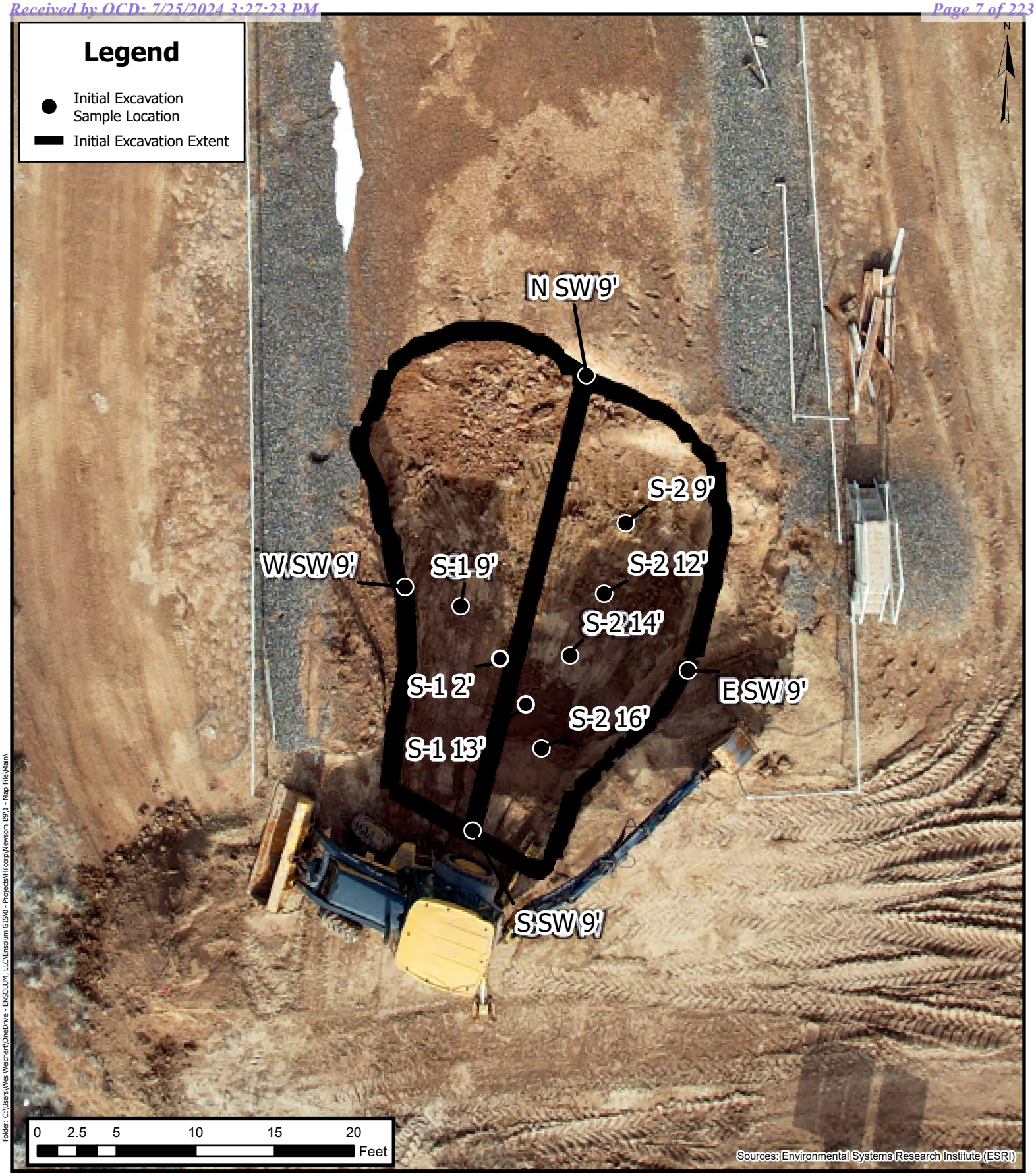
Folder: C:\Users\Wes Welchert\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Hilcorp\Newsom B9\1 - Map File\Main\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Hilcorp Energy Company
Newsom B 9
Incident Number: nAPP2401660821
Unit G, Sec 7, T26N R8W
San Juan County, New Mexico, United States

FIGURE 1



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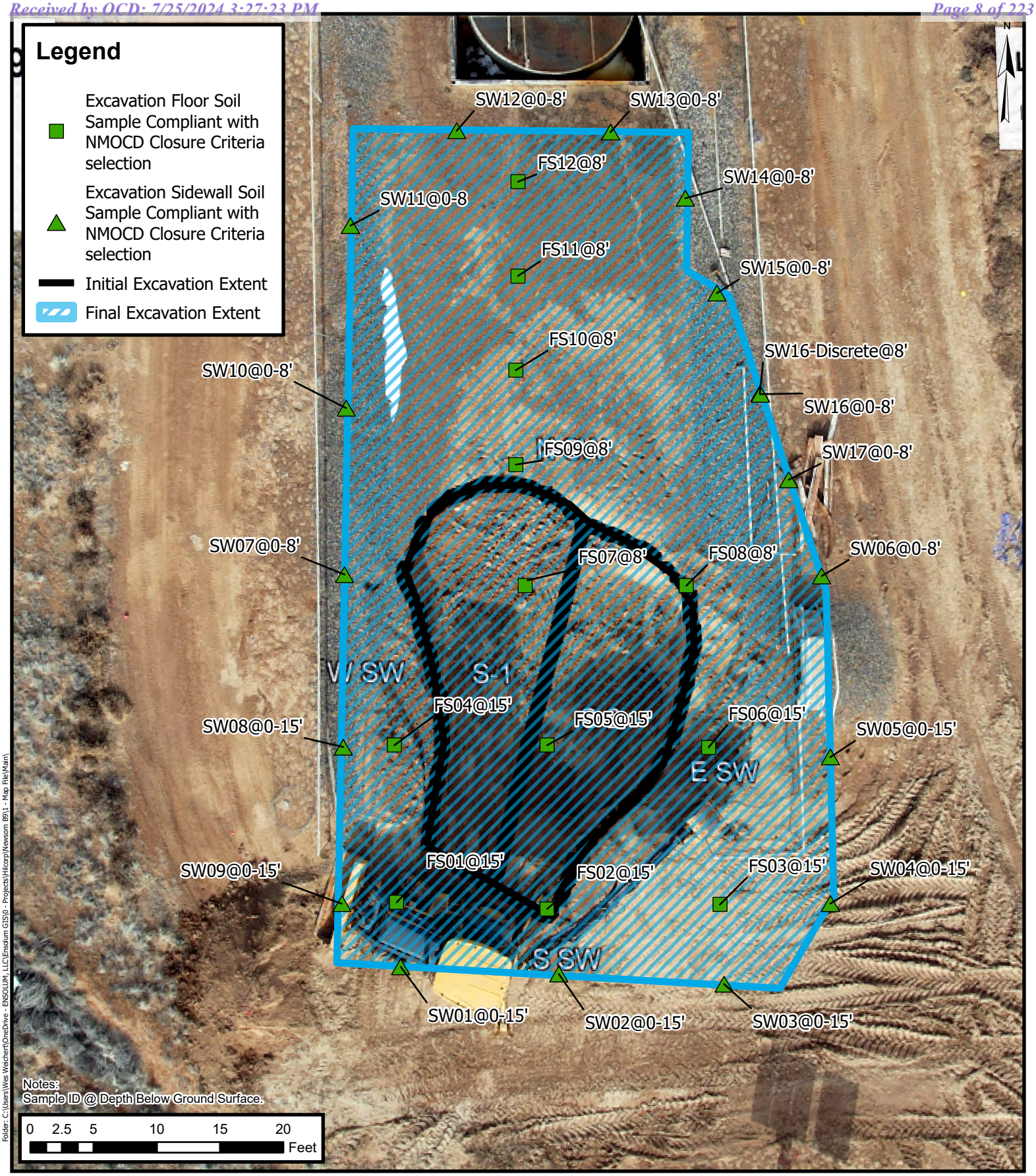
Environmental, Engineering and Hydrogeologic Consultants

Initial Excavation Soil Sample Locations

Hilcorp Energy Company
Newsom B 9
Incident Number: nAPP2401660821
Unit G, Sec 7, T26N R8W
San Juan County, New Mexico, United States

FIGURE 2



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ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Final Excavation Extent & Soil Sample Locations

Hilcorp Energy Company
Newsom B 9
Incident Number: nAPP2401660821
Unit G, Sec 7, T26N R8W
San Juan County, New Mexico, United States

FIGURE 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Newsom B 9
Hilcorp Energy Company
San Juan 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)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Initial Excavation Samples													
S-1 *	1/29/2024	10	0.025	1.5	0.88	11	13.405	170	430	81	600	681	<60
S-2 *	1/29/2024	10	<1.2	38	16	190	**244**	2,800	1,200	100	**4,000**	**4,100**	<61
N SW *	1/29/2024	0-10	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.5	<47	<9.5	<47	<61
S-1 2' *	4/5/2024	2	**49**	590	81	860 F1	**1,580**	15,000	5,400	1,000	**20,400**	**21,400**	<60
S-1 9' *	3/13/2024	9	<0.13	<0.25	<0.25	1.6	1.6	31	330	87	361	448	<61
S-1 13' *	4/5/2024	13	**30**	330	46	510	**916**	8,200	2,500	<480	**10,700**	**10,700**	<60
S-2 9' *	3/13/2024	9	<0.24	5.6	4.6	51	**61.2**	620	2,200	460	**2,820**	**3,280**	<60
S-2 12' *	3/13/2024	12	**43**	390	53	490	**976**	11,000	820	140	**11,820**	**11,960**	<60
S-2 14' *	3/13/2024	14	**24**	250	42	390	**706**	7,800	820	130	**8,620**	**8,750**	<60
S-2 16' *	3/13/2024	16	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.6	<48	<9.6	<48	<60
E SW 9' *	3/13/2024	0-9	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<8.9	<45	<8.9	<45	<60
N SW 9' *	3/13/2024	0-9	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	14	<46	14	14	<60
S SW 9' *	3/13/2024	0-9	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	<9.3	<46	<9.3	<46	<61
W SW 9' *	3/13/2024	0-9	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<9.6	<48	92
Final Excavation Floor Samples													
FS01@15	6/11/2024	15	<0.017	<0.035	<0.035	<0.070	<0.070	<3.5	<9.6	<48	<9.6	<48	<59
FS02	6/13/2024	15	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<8.8	<44	<8.8	<44	<60
FS03	6/13/2024	15	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.3	<46	<9.3	<46	<60
FS04	6/13/2024	15	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	12	<46	12	12	<60
FS05	6/13/2024	15	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.6	<48	<9.6	<48	<60
FS06	6/13/2024	15	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.2	<46	<9.2	<46	<60
FS07	6/13/2024	8	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.1	<46	<9.1	<46	<60
FS08	6/13/2024	8	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.9	<49	<9.9	<49	<60
FS09	6/17/2024	8	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.1	<45	<9.1	<45	<60
FS10	6/17/2024	8	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.4	<47	<9.4	<47	<60
FS11	6/17/2024	8	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.1	<45	<9.1	<45	<60
FS12	6/17/2024	8	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<9.8	<49	<60
Final Excavation Sidewall Samples													
SW01	6/11/2024	0-15	<0.016	<0.033	<0.033	<0.066	<0.066	<3.3	<9.8	<49	<9.8	<49	<60
SW02	6/11/2024	0-15	<0.017	<0.034	<0.034	<0.068	<0.068	<3.4	<9.7	<49	<9.7	<49	<60
SW03	6/11/2024	0-15	<0.017	<0.034	<0.034	<0.067	<0.067	<3.4	<9.8	<49	<9.8	<49	<60
SW04	6/13/2024	0-15	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.0	<45	<9.0	<45	<60
SW05	6/13/2024	0-15	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<10	<50	<10	<50	<60
SW06	6/13/2024	0-8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.0	<45	<9.0	<45	<60
SW07	6/14/2024	0-8	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<10	<50	<10	<50	<60
SW08	6/14/2024	0-15	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	<9.3	<46	<9.3	<46	<60

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Newsom B 9
Hilcorp Energy Company
San Juan 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)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
SW09	6/14/2024	0-15	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<8.9	<45	<8.9	<45	<60
SW10	6/17/2024	0-8	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<8.9	<45	<8.9	<45	<60
SW11	6/17/2024	0-8	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	15	<48	15	15	<60
SW12	6/17/2024	0-8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.1	<46	<9.1	<46	<60
SW13	6/17/2024	0-8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.9	<49	<9.9	<49	<60
SW14	6/17/2024	0-8	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.6	<48	<9.6	<48	<60
SW15	6/17/2024	0-8	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<8.5	<43	<8.5	<43	<60
SW16	6/17/2024	0-8	0.089	4.3	1.2	15	20.589	170	240	95	410	505	<60
SW16-Discrete	6/17/2024	8	0.21	2.9	0.56	6.4	10.07	74	30	<48	104	104	<60
SW17	6/17/2024	0-8	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.5	<47	<9.5	<47	<60

Notes:

** : Indicates composite sample aliquot was excavated further and re-sampled.*
bgs: below ground surface
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
MRO: Motor Oil Range Organics
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
' : feet
NE: Not Established
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 1 Closure Criteria for Soils Impacted by a Release*
F1: MS and/or MSD recovery exceeds control limits.

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APPENDIX A

NMOCD Point of Diversion Summary

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	SJ 03811 POD1	3	3	3	12	26N	09W	253790	4042506*

Driller License:	717	**Driller Company:**	WESTERN WATER WELLS		
Driller Name:	HOOD, TERRY				
Drill Start Date:	01/19/2008	**Drill Finish Date:**	01/23/2008	**Plug Date:**	
Log File Date:	01/28/2008	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	7 GPM
Casing Size:	4.50	**Depth Well:**	348 feet	**Depth Water:**	175 feet

Water Bearing Stratifications:	Top	Bottom	Description
	175	220	Sandstone/Gravel/Conglomerate
	290	335	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	175	348

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

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APPENDIX B

Agency Correspondence

Wes Weichert

From: OCDOnline@state.nm.us
Sent: Friday, March 8, 2024 3:34 PM
To: Samantha Grabert
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 321745

To whom it may concern (c/o Samantha Grabert for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2401660821.

The sampling event is expected to take place:

When: 03/13/2024 @ 08:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

Additional Information: Brandon Sinclair: 505-?386?-8996

Additional Instructions: Lat: 36.504517, Long: -107.72005

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

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

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

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

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 330049
Date: Thursday, April 4, 2024 9:37:51 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#) nAPP2401660821.

The sampling event is expected to take place:

When: 04/05/2024 @ 09:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

We are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12.D.(1).(a) in order to collect confirmation samples on Friday April 5, 2024 beginning at 9:30 AM.

Additional Instructions: Newsom B9 Site coordinates: 36.504517, -107.72005

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

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

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

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

From: Velez, Nelson, EMNRD
To: Stuart Hyde; Adeloye, Abiodun A
Cc: Samantha Grabert
Subject: Re: [EXTERNAL] napp2401660821 - Hilcorp Newsom B 9 Sampling Notification Variance Request
Date: Thursday, April 4, 2024 10:15:38 AM
Attachments: image001.png
image002.png
image003.png
image004.png
Outlook-ynovvaf4.png

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

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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, April 4, 2024 9:43 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: [EXTERNAL] napp2401660821 - Hilcorp Newsom B 9 Sampling Notification Variance Request

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

Nelson,

On behalf of Hilcorp Energy Company, we are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12.D.(1).(a) in order to collect confirmation samples on Friday April 5, 2024 beginning at 9:30 AM at the Newsom B 9 site. Removal of impacted soil has been completed and several additional soil samples need to be collected for confirmation sampling.

Please reach out with any questions regarding the site or this request. 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: Thursday, April 4, 2024 9:38 AM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 330049

[**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#) nAPP2401660821.

The sampling event is expected to take place:

When: 04/05/2024 @ 09:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

We are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12.D.(1).(a) in order to collect confirmation samples on Friday April 5, 2024 beginning at 9:30 AM.

Additional Instructions: Newsom B9 Site coordinates: 36.504517, -107.72005

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 349713

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 349713
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2401660821**
Incident Name	**NAPP2401660821 NEWSOM B 9 @ 30-045-05943**
Incident Type	**Oil Release**
Incident Status	**Initial C-141 Approved**
Incident Well	**[30-045-05943] NEWSOM B #009**

Location of Release Source	
Site Name	**NEWSOM B 9**
Date Release Discovered	**01/16/2024**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	600
What is the estimated number of samples that will be gathered	12
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/05/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	Contact PM Stuart Hyde 970-903-1607
Please provide any information necessary for navigation to sampling site	Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 349713
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
shyde	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.	5/31/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 349727

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 349727
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2401660821**
Incident Name	**NAPP2401660821 NEWSOM B 9 @ 30-045-05943**
Incident Type	**Oil Release**
Incident Status	**Initial C-141 Approved**
Incident Well	**[30-045-05943] NEWSOM B #009**

Location of Release Source	
Site Name	**NEWSOM B 9**
Date Release Discovered	**01/16/2024**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	600
What is the estimated number of samples that will be gathered	12
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/06/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	Contact PM Stuart Hyde 970-903-1607
Please provide any information necessary for navigation to sampling site	Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
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District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 349727
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
shyde	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.	5/31/2024

Wes Weichert

From: Adeloye, Abiodun A <aadeloye@blm.gov>
Sent: Friday, May 31, 2024 2:49 PM
To: Wes Weichert
Cc: Stuart Hyde; Samantha Grabert
Subject: RE: [EXTERNAL] Newsom B9 Sampling Notification

Thanks, Samatha, Hilcorp can proceed with sampling if the BLM representative is not present as scheduled. Pleas notify the BLM immediately if the schedule changes.
Please include this conversation in your closure report.
Please let me know if you have any questions.
Thank you.

Abiodun Adeloye (Emmanuel)
Natural Resources Specialist (NRS)
6251 College Blvd., Suite A
Farmington, NM 87402
Office: 505-564-7665
Mobile: 505-635-0984

From: Wes Weichert <wweichert@ensolum.com>
Sent: Friday, May 31, 2024 9:37 AM
To: Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: [EXTERNAL] Newsom B9 Sampling Notification

Emmanuel,

On behalf of Hilcorp Energy Company, Ensolum is submitting this notification for excavation soil sampling activities to be conducted at the Newsom B9 Site on Wednesday June 5, 2024 and Thursday June 6, 2024 at 8:30 AM. Please reach out with any questions. Thanks.

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

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 350951
Date: Wednesday, June 5, 2024 9:09:38 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#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/10/2024 @ 09:00
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

Additional Instructions: Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

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: Wes Weichert
To: Adeloye, Abiodun A
Cc: Stuart Hyde; Samantha Grabert
Subject: RE: [EXTERNAL] Newsom B9 Sampling Notification
Date: Wednesday, June 5, 2024 9:20:59 AM
Attachments: image001.png
image002.png
image003.png
image004.png

Emmanuel,

I am writing to inform you that we need to reschedule the soil sampling at the Newsom B9 Site. The new date and time for the sampling activities are Monday, June 10, 2024, at 9:00 AM and Tuesday, June 11, 2024 at 9:00 am. We apologize for the late notice and any inconvenience this may cause.

As requested, we will include this conversation in our closure report.

Please let us know if you have any questions or need further information.

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

From: Adeloye, Abiodun A <aadeloye@blm.gov>
Sent: Friday, May 31, 2024 2:49 PM
To: Wes Weichert <wweichert@ensolum.com>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: RE: [EXTERNAL] Newsom B9 Sampling Notification

[**EXTERNAL EMAIL**]

Thanks, Samatha, Hilcorp can proceed with sampling if the BLM representative is not present as scheduled. Pleas notify the BLM immediately if the schedule changes.
Please include this conversation in your closure report.
Please let me know if you have any questions.
Thank you.

Abiodun Adeloye (Emmanuel)
Natural Resources Specialist (NRS)
6251 College Blvd., Suite A
Farmington, NM 87402

Office: 505-564-7665
Mobile: 505-635-0984

From: Wes Weichert <wweichert@ensolum.com>
Sent: Friday, May 31, 2024 9:37 AM
To: Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: [EXTERNAL] Newsom B9 Sampling Notification

Emmanuel,

On behalf of Hilcorp Energy Company, Ensolum is submitting this notification for excavation soil sampling activities to be conducted at the Newsom B9 Site on Wednesday June 5, 2024 and Thursday June 6, 2024 at 8:30 AM. Please reach out with any questions. Thanks.

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

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185
Date: Friday, June 7, 2024 3:05:10 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/11/2024 @ 08:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

Additional Instructions: Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

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

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

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

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

From: Velez, Nelson, EMNRD
To: Stuart Hyde
Cc: Wes Weichert
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185
Date: Monday, June 10, 2024 8:09:27 AM
Attachments: image001.png
image002.png
image003.png
Outlook-zqiisiil.png

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

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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: Friday, June 7, 2024 3:31 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

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

Nelson,

We are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect confirmation samples on Tuesday June 11, 2024 beginning at 8:30 AM at the Hilcorp Newsom B 9 site. We are planning to begin soil removal and soil sampling on June 10, 2024 (sampling notification submitted two days ago), however, we may go into a second day of work depending on how much soil needs to be removed. Please reach out with any questions and have a great weekend.

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: Friday, June 7, 2024 3:05 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

[**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#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/11/2024 @ 08:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

Additional Instructions: Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

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

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

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

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

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352912
Date: Tuesday, June 11, 2024 8:46:37 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#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/12/2024 @ 09:00
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

Additional Instructions: Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

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: Sidney Mahanay
Cc: Stuart Hyde; Wes Weichert
Subject: Re: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024
Date: Tuesday, June 11, 2024 9:38:10 AM
Attachments: image001.png
image002.png
image003.png
image004.png
image006.png
image007.png
Outlook-kgsimpew.png

[**EXTERNAL EMAIL**]

Good morning Sidney,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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: Sidney Mahanay <smahanay@ensolum.com>
Sent: Tuesday, June 11, 2024 9:35 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

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

Hello Nelson,

Due to some logistical delays yesterday (Monday, June10, 2024), we submitted a new sampling notification this morning for tomorrow (Wednesday, June 12, 2024) and are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect any remaining confirmation samples on Wednesday June 12, 2024 beginning at 9:00 AM at the Hilcorp Newsom B 9 site. We are planning to continue soil removal and begin soil sampling today, June 11, 2024 (sampling notification submitted June 7th, 2024). Please reach out with any questions and have a great day.

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, June 10, 2024 8:09 AM
To: Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

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

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure

sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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: Friday, June 7, 2024 3:31 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

Nelson,

We are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect confirmation samples on Tuesday June 11, 2024 beginning at 8:30 AM at the Hilcorp Newsom B 9 site. We are planning to begin soil removal and soil sampling on June 10, 2024 (sampling notification submitted two days ago), however, we may go into a second day of work depending on how much soil needs to be removed. Please reach out with any questions and have a great weekend.

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: Friday, June 7, 2024 3:05 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

[**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#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/11/2024 @ 08:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

Additional Instructions: Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

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

Sidney Mahanay
Project Geologist
979-877-8887
Ensolum, LLC

From: Adeloye, Abiodun A
To: Sidney Mahanay
Cc: Stuart Hyde; Wes Weichert; Samantha Grabert
Subject: RE: [EXTERNAL] Newsom B9 Sampling Notification
Date: Tuesday, June 11, 2024 2:54:35 PM
Attachments: image001.png
image002.png
image003.png
image004.png

[**EXTERNAL EMAIL**]

Thanks for the notification.

Abiodun Adeloye (Emmanuel)
Natural Resources Specialist (NRS)
6251 College Blvd., Suite A
Farmington, NM 87402
Office: 505-564-7665
Mobile: 505-635-0984

From: Sidney Mahanay <smahanay@ensolum.com>
Sent: Tuesday, June 11, 2024 9:25 AM
To: Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: [EXTERNAL] Newsom B9 Sampling Notification

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello Emmanuel,

I am writing to inform you that we will need to extend the soil sampling at the Newsom B9 Site. Due to some logistical delays yesterday, the sampling activities will continue today (Tuesday, June 11, 2024 at 9:00 am) and into tomorrow Wednesday, June 12, 2024 at 9:00 am. We apologize for the late notice and any inconvenience this may cause.

As requested, we will include this conversation in our closure report.

Please let us know if you have any questions or need further information.

Sidney Mahanay
Project Geologist
979-877-8887
Ensolum, LLC

From: Adeloye, Abiodun A <aadeloye@blm.gov>
Sent: Monday, June 10, 2024 7:44 AM
To: Wes Weichert <wweichert@ensolum.com>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: RE: [EXTERNAL] Newsom B9 Sampling Notification

[**EXTERNAL EMAIL**]

Hi, Wes, Hilcorp can proceed with the sampling if the BLM representative is not there present as scheduled.
Thank you.

Abiodun Adeloye (Emmanuel)
Natural Resources Specialist (NRS)
6251 College Blvd., Suite A
Farmington, NM 87402
Office: 505-564-7665
Mobile: 505-635-0984

From: Wes Weichert <wweichert@ensolum.com>
Sent: Wednesday, June 5, 2024 9:21 AM
To: Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: RE: [EXTERNAL] Newsom B9 Sampling Notification

Emmanuel,

I am writing to inform you that we need to reschedule the soil sampling at the Newsom B9 Site. The new date and time for the sampling activities are Monday, June 10, 2024, at

9:00 AM and Tuesday, June 11, 2024 at 9:00 am. We apologize for the late notice and any inconvenience this may cause.

As requested, we will include this conversation in our closure report.

Please let us know if you have any questions or need further information.

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

From: Adeloye, Abiodun A <aadeloye@blm.gov>
Sent: Friday, May 31, 2024 2:49 PM
To: Wes Weichert <wweichert@ensolum.com>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: RE: [EXTERNAL] Newsom B9 Sampling Notification

[**EXTERNAL EMAIL**]

Thanks, Samatha, Hilcorp can proceed with sampling if the BLM representative is not present as scheduled. Pleas notify the BLM immediately if the schedule changes.
Please include this conversation in your closure report.
Please let me know if you have any questions.
Thank you.

Abiodun Adeloye (Emmanuel)
Natural Resources Specialist (NRS)
6251 College Blvd., Suite A
Farmington, NM 87402
Office: 505-564-7665
Mobile: 505-635-0984

From: Wes Weichert <wweichert@ensolum.com>
Sent: Friday, May 31, 2024 9:37 AM

To: Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: [EXTERNAL] Newsom B9 Sampling Notification

Emmanuel,

On behalf of Hilcorp Energy Company, Ensolum is submitting this notification for excavation soil sampling activities to be conducted at the Newsom B9 Site on Wednesday June 5, 2024 and Thursday June 6, 2024 at 8:30 AM. Please reach out with any questions. Thanks.

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

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 353472
Date: Wednesday, June 12, 2024 1:58:21 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/13/2024 @ 09:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

Additional Information: Project Manager: Wes Weichert - 816-266-8732
Additional Contact: Stuart Hyde - 970-903-1607

Additional Instructions: Hilcorp Newsom B9 Coordinates: 36.504517, -107.72005
From Bloomfield Head south on 550 (23 miles), left on Co Rd 7452

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: Sidney Mahanay
Cc: Stuart Hyde; Wes Weichert
Subject: Re: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024
Date: Wednesday, June 12, 2024 2:11:21 PM
Attachments: image006.png
image008.png
image009.png
image010.png
image011.png
image012.png
Outlook-ek1ihtxp.png

[**EXTERNAL EMAIL**]
Good afternoon Sidney,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

You have a great day as well!

Regards,

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

From: Sidney Mahanay <smahanay@ensolum.com>
Sent: Wednesday, June 12, 2024 2:00 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: RE: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

Hello again Nelson,

We encountered equipment failure and collapse of a sidewall today (Wednesday June 12, 2024) that has delayed our sampling. As a result we submitted a new sampling notification just a few minutes ago for tomorrow (Thursday, June 13, 2024) and are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect the remaining confirmation samples on Thursday June 13, 2024 beginning at 9:30 AM at the Hilcorp Newsom B 9 site. Please reach out with any questions and have a great day.

Thanks,

Sidney Mahanay
Project Geologist
979-877-8887
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Tuesday, June 11, 2024 9:38 AM
To: Sidney Mahanay <smahanay@ensolum.com>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: Re: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

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

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per

19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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: Sidney Mahanay <smahanay@ensolum.com>
Sent: Tuesday, June 11, 2024 9:35 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

Hello Nelson,

Due to some logistical delays yesterday (Monday, June10, 2024), we submitted a new sampling notification this morning for tomorrow (Wednesday, June 12, 2024) and are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect any remaining confirmation samples on Wednesday June 12, 2024 beginning at

9:00 AM at the Hilcorp Newsom B 9 site. We are planning to continue soil removal and begin soil sampling today, June 11, 2024 (sampling notification submitted June 7th, 2024). Please reach out with any questions and have a great day.

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, June 10, 2024 8:09 AM
To: Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

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

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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: Friday, June 7, 2024 3:31 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

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

We are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect confirmation samples on Tuesday June 11, 2024 beginning at 8:30 AM at the Hilcorp Newsom B 9 site. We are planning to begin soil removal and soil sampling on June 10, 2024 (sampling notification submitted two days ago), however, we may go into a second day of work depending on how much soil needs to be removed. Please reach out with any questions and have a great weekend.

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: Friday, June 7, 2024 3:05 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

[**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#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/11/2024 @ 08:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

Additional Instructions: Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

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

Sidney Mahanay
Project Geologist
979-877-8887
Ensolum, LLC

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 354020
Date: Thursday, June 13, 2024 3:14:37 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/14/2024 @ 09:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

Additional Information: PM - Wes Weichert: 816-266-8732
Alternate Contact - Stuart Hyde: 970-903-1607

Additional Instructions: Site coordinates: 36.504517, -107.72005

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: Sidney Mahanay
Cc: Stuart Hyde; Wes Weichert
Subject: Re: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024
Date: Thursday, June 13, 2024 3:27:13 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png
Outlook-b32vlkfh.png

[**EXTERNAL EMAIL**]
Hi Sidney,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

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

From: Sidney Mahanay <smahanay@ensolum.com>
Sent: Thursday, June 13, 2024 3:23 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: RE: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

Hello Nelson,

We haven't been able to sample yet at the Newsom B 9 Site (Thursday June 13, 2024) and submitted a new sampling notification for tomorrow (Friday, June 14, 2024) and are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect confirmation samples on Friday June 14, 2024 beginning at 9:30 AM at the Hilcorp Newsom B 9 site. Please reach out with any questions and have a great day.

Thanks,

Sidney Mahanay
Project Geologist
979-877-8887
Ensolum, LLC

From: Sidney Mahanay
Sent: Wednesday, June 12, 2024 2:00 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: RE: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

Hello again Nelson,

We encountered equipment failure and collapse of a sidewall today (Wednesday June 12, 2024) that has delayed our sampling. As a result we submitted a new sampling notification just a few minutes ago for tomorrow (Thursday, June 13, 2024) and are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect the remaining confirmation samples on Thursday June 13, 2024 beginning at 9:30 AM at the Hilcorp Newsom B 9 site. Please reach out with any questions and have a great day.

Thanks,

Sidney Mahanay
Project Geologist
979-877-8887
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Tuesday, June 11, 2024 9:38 AM
To: Sidney Mahanay <smahanay@ensolum.com>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: Re: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

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

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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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: Sidney Mahanay <smahanay@ensolum.com>
Sent: Tuesday, June 11, 2024 9:35 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] Newsom B 9 Sampling Notification and Variance - 12June2024

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

Hello Nelson,

Due to some logistical delays yesterday (Monday, June10, 2024), we submitted a new sampling notification this morning for tomorrow (Wednesday, June 12, 2024) and are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect any remaining confirmation samples on Wednesday June 12, 2024 beginning at 9:00 AM at the Hilcorp Newsom B 9 site. We are planning to continue soil removal and begin soil sampling today, June 11, 2024 (sampling notification submitted June 7th, 2024). Please reach out with any questions and have a great day.

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, June 10, 2024 8:09 AM
To: Stuart Hyde <shyde@ensolum.com>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

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

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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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: Friday, June 7, 2024 3:31 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

Nelson,

We are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to potentially collect confirmation samples on Tuesday June 11, 2024 beginning at 8:30 AM at the Hilcorp Newsom B 9 site. We are planning to begin soil removal and soil sampling on June 10, 2024 (sampling notification submitted two days ago), however, we may go into a second day of work depending on how much soil needs to be removed. Please reach out with any questions and have a great weekend.

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: Friday, June 7, 2024 3:05 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 352185

[**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#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/11/2024 @ 08:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

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

Additional Instructions: Newsom B 9 (API: 30-045-05943) in San Juan County (36.504982,-107.7206573)

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

Sidney Mahanay
Project Geologist
979-877-8887
Ensolum, LLC

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 354331
Date: Friday, June 14, 2024 3:25:39 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2401660821.

The sampling event is expected to take place:

When: 06/17/2024 @ 09:30
Where: G-07-26N-08W 1595 FNL 1815 FEL (36.504982,-107.7206573)

Additional Information: This Sampling event will start Monday (June 17, 2024) and continue through Friday (June 21, 2024).
PM: Wes Weichert - 816-266-8732
Alternate Contact: Stuart Hyde - 970-903-1607

Additional Instructions: Site Coordinates: 36.504517, -107.72005

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: Samantha Grabert; Stuart Hyde
Subject: Re: [EXTERNAL] nAPP2401660821 - Newsom B-9 Reporting Extension Request
Date: Friday, April 12, 2024 3:02:16 PM
Attachments: image001.png
image002.png
image003.png
image004.png
Outlook-1jun0uzw.png

[**EXTERNAL EMAIL**]
Good afternoon Wes,

Your time extension request is approved. Remediation Due date has been updated to June 14, 2024.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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: Wes Weichert <wweichert@ensolum.com>
Sent: Friday, April 12, 2024 2:52 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Samantha Grabert <Samantha.Grabert@hilcorp.com>; Stuart Hyde <shyde@ensolum.com>
Subject: [EXTERNAL] nAPP2401660821 - Newsom B-9 Reporting Extension Request

Nelson,

On behalf of Hilcorp Energy Company, we are requesting a 45-day extension to the April 15, 2024, reporting deadline for the Newsom B 9 site (nAPP2401660821). We have received preliminary laboratory results and are currently waiting on the final laboratory report. We anticipate receiving results soon and will be able to finalize the remediation work plan by May 30, 2024. Please reach out with any questions.

Thanks, and have a great weekend.

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

From: Velez, Nelson, EMNRD
To: Wes Weichert
Cc: Stuart Hyde; Samantha Grabert; Sidney Mahanay
Subject: Re: [EXTERNAL] nAPP2401660821 - Newsom B-9 Reporting Extension Request
Date: Wednesday, June 26, 2024 12:04:20 PM
Attachments: image001.png
image002.png
image003.png
image004.png
Outlook-vqgebbjr.png

[**EXTERNAL EMAIL**]
Good afternoon Wes,

Thank you for the inquiry. My apology for not responding until now. Your 60-day time extension request is approved. Remediation Due date has been updated to August 13, 2024.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

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

From: Wes Weichert <wweichert@ensolum.com>
Sent: Thursday, June 13, 2024 3:48 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stuart Hyde <shyde@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>; Sidney Mahanay <smahanay@ensolum.com>

Subject: [EXTERNAL] nAPP2401660821 - Newsom B-9 Reporting Extension Request

Nelson,

On behalf of Hilcorp Energy Company, we are requesting a 60-day extension to the June 14, 2024, reporting deadline for the Newsom B 9 site (nAPP2401660821). Our previous extension request was due to pending final laboratory results, which indicated that impacts were still present at the Site. While excavation activities have resumed and are ongoing, there are still impacts present that require removal. We anticipate several more days of excavation and, pending the new laboratory results, expect to complete the Remediation and Closure Report by August 13, 2024. Please contact us if you have any questions.

Thanks, and have a great day.

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

ENSOLUM

APPENDIX C

Laboratory Analytical Reports

eurofins | Environment Testing

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

February 13, 2024

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

RE: Newsome B 9 OrderNo.: 2401B49

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 1/30/2024 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2401B49**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: S-1
Project: Newsome B 9
Collection Date: 1/29/2024 12:45:00 PM
Lab ID: 2401B49-001 **Matrix:** SOIL **Received Date:** 1/30/2024 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	430	9.1		mg/Kg	1	2/2/2024 2:29:42 PM
Motor Oil Range Organics (MRO)	81	46		mg/Kg	1	2/2/2024 2:29:42 PM
Surr: DNOP	87.6	61.2-134		%Rec	1	2/2/2024 2:29:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	170	4.8		mg/Kg	1	2/3/2024 12:37:28 AM
Surr: BFB	945	15-244	S	%Rec	1	2/3/2024 12:37:28 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	0.025	0.024		mg/Kg	1	2/3/2024 12:37:28 AM
Toluene	1.5	0.048		mg/Kg	1	2/3/2024 12:37:28 AM
Ethylbenzene	0.88	0.048		mg/Kg	1	2/3/2024 12:37:28 AM
Xylenes, Total	11	0.097		mg/Kg	1	2/3/2024 12:37:28 AM
Surr: 4-Bromofluorobenzene	120	39.1-146		%Rec	1	2/3/2024 12:37:28 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	2/2/2024 4:00:43 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2401B49**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: S-2
Project: Newsome B 9
Collection Date: 1/29/2024 12:55:00 PM
Lab ID: 2401B49-002 **Matrix:** SOIL **Received Date:** 1/30/2024 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	1200	19		mg/Kg	2	2/7/2024 1:22:14 PM
Motor Oil Range Organics (MRO)	100	97		mg/Kg	2	2/7/2024 1:22:14 PM
Surr: DNOP	79.0	61.2-134		%Rec	2	2/7/2024 1:22:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	2800	250		mg/Kg	50	2/5/2024 3:01:04 PM
Surr: BFB	352	15-244	S	%Rec	50	2/5/2024 3:01:04 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	1.2		mg/Kg	50	2/5/2024 3:01:04 PM
Toluene	38	2.5		mg/Kg	50	2/5/2024 3:01:04 PM
Ethylbenzene	16	2.5		mg/Kg	50	2/5/2024 3:01:04 PM
Xylenes, Total	190	5.0		mg/Kg	50	2/5/2024 3:01:04 PM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	50	2/5/2024 3:01:04 PM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	61		mg/Kg	20	2/2/2024 4:15:52 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2401B49**
Date Reported: **2/13/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: N SW
Project: Newsome B 9
Collection Date: 1/29/2024 1:05:00 PM
Lab ID: 2401B49-003 **Matrix:** SOIL **Received Date:** 1/30/2024 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/2/2024 2:53:59 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/2/2024 2:53:59 PM
Surr: DNOP	105	61.2-134		%Rec	1	2/2/2024 2:53:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/3/2024 1:23:58 AM
Surr: BFB	114	15-244		%Rec	1	2/3/2024 1:23:58 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/3/2024 1:23:58 AM
Toluene	ND	0.049		mg/Kg	1	2/3/2024 1:23:58 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/3/2024 1:23:58 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/3/2024 1:23:58 AM
Surr: 4-Bromofluorobenzene	83.1	39.1-146		%Rec	1	2/3/2024 1:23:58 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	61		mg/Kg	20	2/2/2024 5:01:21 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B49**

13-Feb-24

Client: HILCORP ENERGY

Project: Newsome B 9

Sample ID: **MB-80226**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **80226**	RunNo: **102851**
Prep Date: **2/2/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800318** Units: **mg/Kg**

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

Sample ID: **LCS-80226**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **80226**	RunNo: **102851**
Prep Date: **2/2/2024**	Analysis Date: **2/2/2024**	SeqNo: **3800319** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.9	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B49**

13-Feb-24

Client: HILCORP ENERGY

Project: Newsome B 9

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

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

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

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

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

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

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

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

Sample ID: **MB-80314**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80314**	RunNo: **102924**
Prep Date: **2/7/2024**	Analysis Date: **2/7/2024**	SeqNo: **3803690** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		84.6	61.2	134			

Sample ID: **LCS-80314**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80314**	RunNo: **102924**
Prep Date: **2/7/2024**	Analysis Date: **2/7/2024**	SeqNo: **3803691** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B49**

13-Feb-24

Client: HILCORP ENERGY

Project: Newsome B 9

Sample ID: **LCS-80314**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80314**	RunNo: **102924**
Prep Date: **2/7/2024**	Analysis Date: **2/7/2024**	SeqNo: **3803691** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.2	59.7	135			
Surr: DNOP	4.2		5.000		84.2	61.2	134			

Sample ID: **2401B49-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-2**	Batch ID: **80314**	RunNo: **102924**
Prep Date: **2/7/2024**	Analysis Date: **2/7/2024**	SeqNo: **3804414** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	1200	18	45.41	1187	22.4	43.7	136			S
Surr: DNOP	3.8		4.541		83.1	61.2	134			

Sample ID: **2401B49-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-2**	Batch ID: **80314**	RunNo: **102924**
Prep Date: **2/7/2024**	Analysis Date: **2/7/2024**	SeqNo: **3804415** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	1300	19	46.25	1187	310	43.7	136	10.5	31.3	S
Surr: DNOP	4.0		4.625		86.6	61.2	134	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B49**

13-Feb-24

Client: HILCORP ENERGY

Project: Newsome B 9

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

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

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

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B49**

13-Feb-24

Client: HILCORP ENERGY

Project: Newsome B 9

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

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

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

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

Qualifiers:

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

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

Sample Log-In Check List

Client Name: **HILCORP ENERGY** Work Order Number: **2401B49** RcptNo: **1**

Received By: **Juan Rojas** **1/30/2024 7:45:00 AM**

Completed By: **Desiree Dominguez** **1/30/2024 8:07:38 AM**

Reviewed By: JR 1/30/24

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: JR 1/30/24

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

Complete client information not provided on COC. -DAD 1/30/24

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: Hilcorp

Mailing Address:

Phone #:

email or Fax#: brandon.sinclair@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard (5 day) ☐ Rush

Project Name: Newsom B 9

Project #:

Project Manager: Samantha Grabert

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

# of Coolers: 1 (Yoa)

Cooler Temp(including CF): 1.9-0.1=1.8 (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2401B49	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1-29	1245	soil	S-1	4 oz jar	cool	-001	✓	✓					✓			
1-29	1255	soil	S-2			-002	✓	✓					✓			
1-29	1305	soil	N SW			-003	✓	✓					✓			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
1-29	1649				1/29/24	1649
1/29/24	1728			courier	1/30/24	7:45

Remarks:

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

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/28/2024 6:56:14 PM

JOB DESCRIPTION

Newsom B9

JOB NUMBER

885-1240-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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

Authorization

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3/28/2024 6:56:14 PM

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

Client: Hilcorp Energy
Project/Site: Newsom B9

Laboratory Job ID: 885-1240-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Newsom B9

Job ID: 885-1240-1

Job ID: 885-1240-1 Eurofins Albuquerque

Job Narrative
885-1240-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 3/14/2024 7:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.1°C.

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

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

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: S-1 9'

Date Collected: 03/13/24 08:40
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**31**		25		mg/Kg		03/15/24 12:11	03/19/24 01:27	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*		*15 - 244*	*03/15/24 12:11*	*03/19/24 01:27*	*5*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**1.6**		0.50		mg/Kg		03/15/24 12:11	03/19/24 01:27	5
Benzene	ND		0.13		mg/Kg		03/15/24 12:11	03/19/24 01:27	5
Toluene	ND		0.25		mg/Kg		03/15/24 12:11	03/19/24 01:27	5
Ethylbenzene	ND		0.25		mg/Kg		03/15/24 12:11	03/19/24 01:27	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*39 - 146*	*03/15/24 12:11*	*03/19/24 01:27*	*5*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**330**		8.7		mg/Kg		03/18/24 10:59	03/18/24 16:46	1
Motor Oil Range Organics [C28-C40]	**87**		43		mg/Kg		03/18/24 10:59	03/18/24 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*95*		*62 - 134*	*03/18/24 10:59*	*03/18/24 16:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61		mg/Kg		03/18/24 10:55	03/18/24 19:17	20

Client Sample ID: W SW 9'

Date Collected: 03/13/24 09:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		03/15/24 12:11	03/19/24 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 244*	*03/15/24 12:11*	*03/19/24 01:48*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.097		mg/Kg		03/15/24 12:11	03/19/24 01:48	1
Benzene	ND		0.024		mg/Kg		03/15/24 12:11	03/19/24 01:48	1
Toluene	ND		0.049		mg/Kg		03/15/24 12:11	03/19/24 01:48	1
Ethylbenzene	ND		0.049		mg/Kg		03/15/24 12:11	03/19/24 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*39 - 146*	*03/15/24 12:11*	*03/19/24 01:48*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		03/18/24 10:59	03/18/24 16:59	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: W SW 9'
Date Collected: 03/13/24 09:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/18/24 10:59	03/18/24 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*97*		*62 - 134*	*03/18/24 10:59*	*03/18/24 16:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**92**		60		mg/Kg		03/18/24 10:55	03/18/24 19:29	20

Client Sample ID: N SW 9'
Date Collected: 03/13/24 09:10
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		03/15/24 12:11	03/19/24 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 244*	*03/15/24 12:11*	*03/19/24 02:10*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.097		mg/Kg		03/15/24 12:11	03/19/24 02:10	1
Benzene	ND		0.024		mg/Kg		03/15/24 12:11	03/19/24 02:10	1
Toluene	ND		0.049		mg/Kg		03/15/24 12:11	03/19/24 02:10	1
Ethylbenzene	ND		0.049		mg/Kg		03/15/24 12:11	03/19/24 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*39 - 146*	*03/15/24 12:11*	*03/19/24 02:10*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**14**		9.2		mg/Kg		03/18/24 10:59	03/18/24 17:11	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		03/18/24 10:59	03/18/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*03/18/24 10:59*	*03/18/24 17:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/18/24 10:55	03/18/24 19:41	20

Client Sample ID: E SW 9'
Date Collected: 03/13/24 09:20
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		03/15/24 12:11	03/19/24 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*15 - 244*	*03/15/24 12:11*	*03/19/24 02:54*	*1*

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: E SW 9'
Date Collected: 03/13/24 09:20
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.095	mg/Kg		03/15/24 12:11	03/19/24 02:54	1
Benzene	ND		0.024	mg/Kg		03/15/24 12:11	03/19/24 02:54	1
Toluene	ND		0.047	mg/Kg		03/15/24 12:11	03/19/24 02:54	1
Ethylbenzene	ND		0.047	mg/Kg		03/15/24 12:11	03/19/24 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*03/15/24 12:11*	*03/19/24 02:54*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		03/18/24 10:59	03/18/24 17:23	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/18/24 10:59	03/18/24 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*03/18/24 10:59*	*03/18/24 17:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/18/24 10:55	03/18/24 19:54	20

Client Sample ID: S SW 9'
Date Collected: 03/13/24 09:30
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/15/24 12:11	03/19/24 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*15 - 244*	*03/15/24 12:11*	*03/19/24 03:16*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.093	mg/Kg		03/15/24 12:11	03/19/24 03:16	1
Benzene	ND		0.023	mg/Kg		03/15/24 12:11	03/19/24 03:16	1
Toluene	ND		0.046	mg/Kg		03/15/24 12:11	03/19/24 03:16	1
Ethylbenzene	ND		0.046	mg/Kg		03/15/24 12:11	03/19/24 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*39 - 146*	*03/15/24 12:11*	*03/19/24 03:16*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		03/18/24 10:59	03/18/24 17:47	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		03/18/24 10:59	03/18/24 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*03/18/24 10:59*	*03/18/24 17:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61	mg/Kg		03/18/24 15:43	03/18/24 17:47	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: S-2 9'

Date Collected: 03/13/24 08:50
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	620		49		mg/Kg		03/15/24 12:11	03/19/24 03:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*218*		*15 - 244*	*03/15/24 12:11*	*03/19/24 03:37*	*10*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	51		0.98		mg/Kg		03/15/24 12:11	03/19/24 03:37	10
Benzene	ND		0.24		mg/Kg		03/15/24 12:11	03/19/24 03:37	10
Toluene	5.6		0.49		mg/Kg		03/15/24 12:11	03/19/24 03:37	10
Ethylbenzene	4.6		0.49		mg/Kg		03/15/24 12:11	03/19/24 03:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*165*	*S1+*	*39 - 146*	*03/15/24 12:11*	*03/19/24 03:37*	*10*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2200		45		mg/Kg		03/18/24 10:59	03/19/24 17:03	5
Motor Oil Range Organics [C28-C40]	460		230		mg/Kg		03/18/24 10:59	03/19/24 17:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*68*		*62 - 134*	*03/18/24 10:59*	*03/19/24 17:03*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/18/24 15:43	03/18/24 18:49	20

Client Sample ID: S-2 12'

Date Collected: 03/13/24 10:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	11000		920		mg/Kg		03/15/24 12:11	03/19/24 18:41	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*193*		*15 - 244*	*03/15/24 12:11*	*03/19/24 18:41*	*200*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	490		18		mg/Kg		03/15/24 12:11	03/19/24 18:41	200
Benzene	43		0.46		mg/Kg		03/15/24 12:11	03/19/24 03:59	20
Toluene	390		9.2		mg/Kg		03/15/24 12:11	03/19/24 18:41	200
Ethylbenzene	53		0.92		mg/Kg		03/15/24 12:11	03/19/24 03:59	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*154*	*S1+*	*39 - 146*	*03/15/24 12:11*	*03/19/24 03:59*	*20*

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: S-2 12'
Date Collected: 03/13/24 10:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	820		9.5		mg/Kg		03/18/24 10:59	03/18/24 18:11	1
Motor Oil Range Organics [C28-C40]	140		47		mg/Kg		03/18/24 10:59	03/18/24 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*03/18/24 10:59*	*03/18/24 18:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/18/24 15:43	03/18/24 19:26	20

Client Sample ID: S-2 14'
Date Collected: 03/13/24 10:30
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	7800		480		mg/Kg		03/15/24 12:11	03/19/24 19:03	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*252*	*S1+*	*15 - 244*	*03/15/24 12:11*	*03/19/24 19:03*	*100*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	390		9.6		mg/Kg		03/15/24 12:11	03/19/24 19:03	100
Benzene	24		0.24		mg/Kg		03/15/24 12:11	03/19/24 04:21	10
Toluene	250		4.8		mg/Kg		03/15/24 12:11	03/19/24 19:03	100
Ethylbenzene	42		0.48		mg/Kg		03/15/24 12:11	03/19/24 04:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*177*	*S1+*	*39 - 146*	*03/15/24 12:11*	*03/19/24 04:21*	*10*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	820		9.1		mg/Kg		03/18/24 11:00	03/18/24 18:23	1
Motor Oil Range Organics [C28-C40]	130		45		mg/Kg		03/18/24 11:00	03/18/24 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*03/18/24 11:00*	*03/18/24 18:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/18/24 15:43	03/18/24 19:38	20

Client Sample ID: S-2 16'
Date Collected: 03/13/24 11:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		03/15/24 12:11	03/19/24 19:25	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: S-2 16'
Date Collected: 03/13/24 11:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-9
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*111*		*15 - 244*	*03/15/24 12:11*	*03/19/24 19:25*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.095	mg/Kg		03/15/24 12:11	03/19/24 04:43	1
Benzene	ND		0.024	mg/Kg		03/15/24 12:11	03/19/24 04:43	1
Toluene	ND		0.047	mg/Kg		03/15/24 12:11	03/19/24 04:43	1
Ethylbenzene	ND		0.047	mg/Kg		03/15/24 12:11	03/19/24 04:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*91*		*39 - 146*	*03/15/24 12:11*	*03/19/24 04:43*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		03/18/24 11:00	03/18/24 18:35	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/18/24 11:00	03/18/24 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*107*		*62 - 134*	*03/18/24 11:00*	*03/18/24 18:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/18/24 15:43	03/18/24 19:50	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

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

Lab Sample ID: MB 885-1670/1-A
Matrix: Solid
Analysis Batch: 1972

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1670

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/13/24 15:53	03/18/24 10:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*15 - 244*	*03/13/24 15:53*	*03/18/24 10:53*	*1*

Lab Sample ID: MB 885-1786/1-A
Matrix: Solid
Analysis Batch: 1972

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1786

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/15/24 12:11	03/18/24 21:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*15 - 244*	*03/15/24 12:11*	*03/18/24 21:05*	*1*

Lab Sample ID: LCS 885-1786/2-A
Matrix: Solid
Analysis Batch: 1972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1786

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	22.1		mg/Kg		88	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*211*		*15 - 244*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-1786/1-A
Matrix: Solid
Analysis Batch: 1973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1786

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10		mg/Kg		03/15/24 12:11	03/18/24 21:05	1
Benzene	ND		0.025		mg/Kg		03/15/24 12:11	03/18/24 21:05	1
Toluene	ND		0.050		mg/Kg		03/15/24 12:11	03/18/24 21:05	1
Ethylbenzene	ND		0.050		mg/Kg		03/15/24 12:11	03/18/24 21:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*39 - 146*	*03/15/24 12:11*	*03/18/24 21:05*	*1*

Lab Sample ID: LCS 885-1786/3-A
Matrix: Solid
Analysis Batch: 1973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1786

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Xylenes, Total			3.00	3.06		mg/Kg		102	70 - 130		
m&p-Xylene			2.00	2.04		mg/Kg		102	70 - 130		

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QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

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

Lab Sample ID: LCS 885-1786/3-A
Matrix: Solid
Analysis Batch: 1973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.00		mg/Kg		100	70 - 130
o-Xylene	1.00	1.02		mg/Kg		102	70 - 130
Toluene	1.00	1.00		mg/Kg		100	70 - 130
Ethylbenzene	1.00	1.02		mg/Kg		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*39 - 146*

Lab Sample ID: MB 885-1864/1-A
Matrix: Solid
Analysis Batch: 2026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1864

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		03/18/24 13:01	03/19/24 18:20	1
Benzene	ND		0.025	mg/Kg		03/18/24 13:01	03/19/24 18:20	1
Toluene	ND		0.050	mg/Kg		03/18/24 13:01	03/19/24 18:20	1
Ethylbenzene	ND		0.050	mg/Kg		03/18/24 13:01	03/19/24 18:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*03/18/24 13:01*	*03/19/24 18:20*	*1*

Lab Sample ID: LCS 885-1864/3-A
Matrix: Solid
Analysis Batch: 2026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1864

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Xylenes, Total	3.00	2.60		mg/Kg		87	70 - 130
m&p-Xylene	2.00	1.73		mg/Kg		87	70 - 130
Benzene	1.00	0.837		mg/Kg		84	70 - 130
o-Xylene	1.00	0.867		mg/Kg		87	70 - 130
Toluene	1.00	0.850		mg/Kg		85	70 - 130
Ethylbenzene	1.00	0.863		mg/Kg		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*39 - 146*

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

Lab Sample ID: MB 885-1847/1-A
Matrix: Solid
Analysis Batch: 1898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1847

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		03/18/24 10:59	03/18/24 14:13	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/18/24 10:59	03/18/24 14:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*122*		*62 - 134*	*03/18/24 10:59*	*03/18/24 14:13*	*1*

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QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

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

Lab Sample ID: LCS 885-1847/2-A
Matrix: Solid
Analysis Batch: 1898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1847

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	48.9		mg/Kg		98	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*118*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-1845/1-A
Matrix: Solid
Analysis Batch: 1909

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1845

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		03/18/24 10:55	03/18/24 13:56	1

Lab Sample ID: LCS 885-1845/2-A
Matrix: Solid
Analysis Batch: 1909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1845

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	28.2		mg/Kg		94	90 - 110		

Lab Sample ID: MB 885-1878/1-A
Matrix: Solid
Analysis Batch: 1907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1878

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		03/18/24 15:43	03/18/24 17:22	1

Lab Sample ID: LCS 885-1878/2-A
Matrix: Solid
Analysis Batch: 1907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1878

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	28.7		mg/Kg		96	90 - 110		

Lab Sample ID: 885-1240-5 MS
Matrix: Solid
Analysis Batch: 1907

Client Sample ID: S SW 9'
Prep Type: Total/NA
Prep Batch: 1878

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

Lab Sample ID: 885-1240-5 MSD
Matrix: Solid
Analysis Batch: 1907

Client Sample ID: S SW 9'
Prep Type: Total/NA
Prep Batch: 1878

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		29.9	ND		mg/Kg		NC	50 - 150	NC	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-1240-6 MS
Matrix: Solid
Analysis Batch: 1907

Client Sample ID: S-2 9'
Prep Type: Total/NA
Prep Batch: 1878

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

Lab Sample ID: 885-1240-6 MSD
Matrix: Solid
Analysis Batch: 1907

Client Sample ID: S-2 9'
Prep Type: Total/NA
Prep Batch: 1878

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

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

GC VOA

Prep Batch: 1670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-1670/1-A	Method Blank	Total/NA	Solid	5030C	

Prep Batch: 1786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-1	S-1 9'	Total/NA	Solid	5030C	
885-1240-2	W SW 9'	Total/NA	Solid	5030C	
885-1240-3	N SW 9'	Total/NA	Solid	5030C	
885-1240-4	E SW 9'	Total/NA	Solid	5030C	
885-1240-5	S SW 9'	Total/NA	Solid	5030C	
885-1240-6	S-2 9'	Total/NA	Solid	5030C	
885-1240-7	S-2 12'	Total/NA	Solid	5030C	
885-1240-8	S-2 14'	Total/NA	Solid	5030C	
885-1240-9	S-2 16'	Total/NA	Solid	5030C	
MB 885-1786/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1786/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1786/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 1864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-1864/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1864/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 1972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-1	S-1 9'	Total/NA	Solid	8015D	1786
885-1240-2	W SW 9'	Total/NA	Solid	8015D	1786
885-1240-3	N SW 9'	Total/NA	Solid	8015D	1786
885-1240-4	E SW 9'	Total/NA	Solid	8015D	1786
885-1240-5	S SW 9'	Total/NA	Solid	8015D	1786
885-1240-6	S-2 9'	Total/NA	Solid	8015D	1786
MB 885-1670/1-A	Method Blank	Total/NA	Solid	8015D	1670
MB 885-1786/1-A	Method Blank	Total/NA	Solid	8015D	1786
LCS 885-1786/2-A	Lab Control Sample	Total/NA	Solid	8015D	1786

Analysis Batch: 1973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-1	S-1 9'	Total/NA	Solid	8021B	1786
885-1240-2	W SW 9'	Total/NA	Solid	8021B	1786
885-1240-3	N SW 9'	Total/NA	Solid	8021B	1786
885-1240-4	E SW 9'	Total/NA	Solid	8021B	1786
885-1240-5	S SW 9'	Total/NA	Solid	8021B	1786
885-1240-6	S-2 9'	Total/NA	Solid	8021B	1786
885-1240-7	S-2 12'	Total/NA	Solid	8021B	1786
885-1240-8	S-2 14'	Total/NA	Solid	8021B	1786
885-1240-9	S-2 16'	Total/NA	Solid	8021B	1786
MB 885-1786/1-A	Method Blank	Total/NA	Solid	8021B	1786
LCS 885-1786/3-A	Lab Control Sample	Total/NA	Solid	8021B	1786

Analysis Batch: 2026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-7	S-2 12'	Total/NA	Solid	8021B	1786

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

GC VOA (Continued)

Analysis Batch: 2026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-8	S-2 14'	Total/NA	Solid	8021B	1786
MB 885-1864/1-A	Method Blank	Total/NA	Solid	8021B	1864
LCS 885-1864/3-A	Lab Control Sample	Total/NA	Solid	8021B	1864

Analysis Batch: 2048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-7	S-2 12'	Total/NA	Solid	8015D	1786
885-1240-8	S-2 14'	Total/NA	Solid	8015D	1786
885-1240-9	S-2 16'	Total/NA	Solid	8015D	1786

GC Semi VOA

Prep Batch: 1847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-1	S-1 9'	Total/NA	Solid	SHAKE	
885-1240-2	W SW 9'	Total/NA	Solid	SHAKE	
885-1240-3	N SW 9'	Total/NA	Solid	SHAKE	
885-1240-4	E SW 9'	Total/NA	Solid	SHAKE	
885-1240-5	S SW 9'	Total/NA	Solid	SHAKE	
885-1240-6	S-2 9'	Total/NA	Solid	SHAKE	
885-1240-7	S-2 12'	Total/NA	Solid	SHAKE	
885-1240-8	S-2 14'	Total/NA	Solid	SHAKE	
885-1240-9	S-2 16'	Total/NA	Solid	SHAKE	
MB 885-1847/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1847/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 1898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-1	S-1 9'	Total/NA	Solid	8015D	1847
885-1240-2	W SW 9'	Total/NA	Solid	8015D	1847
885-1240-3	N SW 9'	Total/NA	Solid	8015D	1847
885-1240-4	E SW 9'	Total/NA	Solid	8015D	1847
885-1240-5	S SW 9'	Total/NA	Solid	8015D	1847
885-1240-7	S-2 12'	Total/NA	Solid	8015D	1847
885-1240-8	S-2 14'	Total/NA	Solid	8015D	1847
885-1240-9	S-2 16'	Total/NA	Solid	8015D	1847
MB 885-1847/1-A	Method Blank	Total/NA	Solid	8015D	1847
LCS 885-1847/2-A	Lab Control Sample	Total/NA	Solid	8015D	1847

Analysis Batch: 1998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-6	S-2 9'	Total/NA	Solid	8015D	1847

HPLC/IC

Prep Batch: 1845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-1	S-1 9'	Total/NA	Solid	300_Prep	
885-1240-2	W SW 9'	Total/NA	Solid	300_Prep	
885-1240-3	N SW 9'	Total/NA	Solid	300_Prep	
885-1240-4	E SW 9'	Total/NA	Solid	300_Prep	
MB 885-1845/1-A	Method Blank	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

HPLC/IC (Continued)

Prep Batch: 1845 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-1845/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 1878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-5	S SW 9'	Total/NA	Solid	300_Prep	
885-1240-6	S-2 9'	Total/NA	Solid	300_Prep	
885-1240-7	S-2 12'	Total/NA	Solid	300_Prep	
885-1240-8	S-2 14'	Total/NA	Solid	300_Prep	
885-1240-9	S-2 16'	Total/NA	Solid	300_Prep	
MB 885-1878/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1878/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-1240-5 MS	S SW 9'	Total/NA	Solid	300_Prep	
885-1240-5 MSD	S SW 9'	Total/NA	Solid	300_Prep	
885-1240-6 MS	S-2 9'	Total/NA	Solid	300_Prep	
885-1240-6 MSD	S-2 9'	Total/NA	Solid	300_Prep	

Analysis Batch: 1907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-5	S SW 9'	Total/NA	Solid	300.0	1878
885-1240-6	S-2 9'	Total/NA	Solid	300.0	1878
885-1240-7	S-2 12'	Total/NA	Solid	300.0	1878
885-1240-8	S-2 14'	Total/NA	Solid	300.0	1878
885-1240-9	S-2 16'	Total/NA	Solid	300.0	1878
MB 885-1878/1-A	Method Blank	Total/NA	Solid	300.0	1878
LCS 885-1878/2-A	Lab Control Sample	Total/NA	Solid	300.0	1878
885-1240-5 MS	S SW 9'	Total/NA	Solid	300.0	1878
885-1240-5 MSD	S SW 9'	Total/NA	Solid	300.0	1878
885-1240-6 MS	S-2 9'	Total/NA	Solid	300.0	1878
885-1240-6 MSD	S-2 9'	Total/NA	Solid	300.0	1878

Analysis Batch: 1909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1240-1	S-1 9'	Total/NA	Solid	300.0	1845
885-1240-2	W SW 9'	Total/NA	Solid	300.0	1845
885-1240-3	N SW 9'	Total/NA	Solid	300.0	1845
885-1240-4	E SW 9'	Total/NA	Solid	300.0	1845
MB 885-1845/1-A	Method Blank	Total/NA	Solid	300.0	1845
LCS 885-1845/2-A	Lab Control Sample	Total/NA	Solid	300.0	1845

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: S-1 9'
Date Collected: 03/13/24 08:40
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		5	1972	RA	EET ALB	03/19/24 01:27
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		5	1973	RA	EET ALB	03/19/24 01:27
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 10:59
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 16:46
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 19:17

Client Sample ID: W SW 9'
Date Collected: 03/13/24 09:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 01:48
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 01:48
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 10:59
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 16:59
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 19:29

Client Sample ID: N SW 9'
Date Collected: 03/13/24 09:10
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 02:10
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 02:10
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 10:59
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 17:11
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 19:41

Client Sample ID: E SW 9'
Date Collected: 03/13/24 09:20
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 02:54

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: E SW 9'
Date Collected: 03/13/24 09:20
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 02:54
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 10:59
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 17:23
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 19:54

Client Sample ID: S SW 9'
Date Collected: 03/13/24 09:30
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 03:16
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 03:16
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 10:59
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 17:47
Total/NA	Prep	300_Prep			1878	JT	EET ALB	03/18/24 15:43
Total/NA	Analysis	300.0		20	1907	KB	EET ALB	03/18/24 17:47

Client Sample ID: S-2 9'
Date Collected: 03/13/24 08:50
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		10	1972	RA	EET ALB	03/19/24 03:37
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		10	1973	RA	EET ALB	03/19/24 03:37
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 10:59
Total/NA	Analysis	8015D		5	1998	DH	EET ALB	03/19/24 17:03
Total/NA	Prep	300_Prep			1878	JT	EET ALB	03/18/24 15:43
Total/NA	Analysis	300.0		20	1907	KB	EET ALB	03/18/24 18:49

Client Sample ID: S-2 12'
Date Collected: 03/13/24 10:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		200	2048	RA	EET ALB	03/19/24 18:41
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		20	1973	RA	EET ALB	03/19/24 03:59

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Client Sample ID: S-2 12'
Date Collected: 03/13/24 10:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		200	2026	RA	EET ALB	03/19/24 18:41
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 10:59
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 18:11
Total/NA	Prep	300_Prep			1878	JT	EET ALB	03/18/24 15:43
Total/NA	Analysis	300.0		20	1907	KB	EET ALB	03/18/24 19:26

Client Sample ID: S-2 14'
Date Collected: 03/13/24 10:30
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		100	2048	RA	EET ALB	03/19/24 19:03
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		10	1973	RA	EET ALB	03/19/24 04:21
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		100	2026	RA	EET ALB	03/19/24 19:03
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 11:00
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 18:23
Total/NA	Prep	300_Prep			1878	JT	EET ALB	03/18/24 15:43
Total/NA	Analysis	300.0		20	1907	KB	EET ALB	03/18/24 19:38

Client Sample ID: S-2 16'
Date Collected: 03/13/24 11:00
Date Received: 03/14/24 07:15

Lab Sample ID: 885-1240-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	2048	RA	EET ALB	03/19/24 19:25
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 04:43
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 11:00
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 18:35
Total/NA	Prep	300_Prep			1878	JT	EET ALB	03/18/24 15:43
Total/NA	Analysis	300.0		20	1907	KB	EET ALB	03/18/24 19:50

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Laboratory: Eurofins Albuquerque

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Method Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-1240-1

Method	Method Description	Protocol	Laboratory
8015D	Gasoline Range Organics (GRO) (GC)	SW846	EET ALB
8021B	Volatile Organic Compounds (GC)	SW846	EET ALB
8015D	Diesel Range Organics (DRO) (GC)	SW846	EET ALB
300.0	Anions, Ion Chromatography	EPA	EET ALB
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET ALB
5030C	Purge and Trap	SW846	EET ALB
SHAKE	Preparation, Shake Jar	TestAmerica SOP	EET ALB

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TestAmerica SOP = TestAmerica, Inc., Standard Operating Procedure

Laboratory References:

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

Chain-of-Custody Record

Client: Hilcorp

Mailing Address:

Phone #:

email or Fax#: brandon.sinclair@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard (5 day) ☐ Rush

Project Name: Newsom B 9

Project #:

Project Manager: Samantha Grabert

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No 40g

# of Coolers: 1

Cooler Temp(Including CF): 2.1+0=2.1 (°C)

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

885-1240 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3-13	840	soil	S-1 9'	4 oz jar	cool		✓	✓					✓			
	900		W SW 9'				✓	✓					✓			
	910		N SW 9'				✓	✓					✓			
	920		E SW 9'				✓	✓					✓			
	930		S SW 9'				✓	✓					✓			
	850		S-2 9'				✓	✓					✓			
	1000		S-2 12'				✓	✓					✓			
	1030		S-2 14'				✓	✓					✓			
	1100		S-2 16'				✓	✓					✓			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/13/24	1543		Chase Wall		3/13/24	1543
3/13/24	1744	Chase Wall		Courier	3/14/24	7:15

Remarks:

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-1240-1

Login Number: 1240 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Sundquist, Sean V

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/18/2024 9:09:11 AM

JOB DESCRIPTION

Newsom B9

JOB NUMBER

885-2485-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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

Authorization

Generated
4/18/2024 9:09:11 AM

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

Client: Hilcorp Energy
Project/Site: Newsom B9

Laboratory Job ID: 885-2485-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Newsom B9

Job ID: 885-2485-1

Job ID: 885-2485-1 Eurofins Albuquerque

Job Narrative
885-2485-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 4/6/2024 7:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.7°C.

Gasoline Range Organics
Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following sample: S-1 2' (885-2485-3). The sample(s) shows evidence of matrix interference.

Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following samples: (885-2485-A-2-B MS) and (885-2485-A-2-C MSD). The sample(s) shows evidence of matrix interference.

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

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

Diesel Range Organics
Method 8015D_DRO: The following samples were diluted due to the nature of the sample matrix: S-1 13' (885-2485-2) and S-1 2' (885-2485-3). Elevated reporting limits (RLs) are provided.

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

Client Sample ID: S-1 13'

Date Collected: 04/05/24 12:12
Date Received: 04/06/24 07:00

Lab Sample ID: 885-2485-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	8200		400		mg/Kg		04/08/24 10:02	04/08/24 13:59	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*235*		*15 - 244*	*04/08/24 10:02*	*04/08/24 13:59*	*100*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	30		0.20		mg/Kg		04/08/24 10:02	04/08/24 12:01	10
Ethylbenzene	46		4.0		mg/Kg		04/08/24 10:02	04/08/24 13:59	100
Toluene	330		4.0		mg/Kg		04/08/24 10:02	04/08/24 13:59	100
Xylenes, Total	510		8.1		mg/Kg		04/08/24 10:02	04/08/24 13:59	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*39 - 146*	*04/08/24 10:02*	*04/08/24 13:59*	*100*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2500		96		mg/Kg		04/09/24 10:06	04/09/24 12:56	10
Motor Oil Range Organics [C28-C40]	ND	D	480		mg/Kg		04/09/24 10:06	04/09/24 12:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*S1- D*	*62 - 134*	*04/09/24 10:06*	*04/09/24 12:56*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		04/08/24 14:53	04/09/24 12:58	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

Client Sample ID: S-1 2'

Date Collected: 04/05/24 12:14
Date Received: 04/06/24 07:00

Lab Sample ID: 885-2485-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	15000		430		mg/Kg		04/08/24 10:02	04/08/24 14:46	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*343*	*S1+*	*15 - 244*	*04/08/24 10:02*	*04/08/24 14:46*	*100*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	49		2.2		mg/Kg		04/08/24 10:02	04/08/24 14:46	100
Ethylbenzene	81		4.3		mg/Kg		04/08/24 10:02	04/08/24 14:46	100
Toluene	590		8.7		mg/Kg		04/08/24 10:02	04/08/24 15:34	200
Xylenes, Total	860	F1	8.7		mg/Kg		04/08/24 10:02	04/08/24 14:46	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*39 - 146*	*04/08/24 10:02*	*04/08/24 14:46*	*100*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5400		90		mg/Kg		04/09/24 10:06	04/09/24 13:07	10
Motor Oil Range Organics [C28-C40]	1000		450		mg/Kg		04/09/24 10:06	04/09/24 13:07	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*0*	*S1- D*	*62 - 134*	*04/09/24 10:06*	*04/09/24 13:07*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		04/08/24 14:53	04/09/24 13:10	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

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

Lab Sample ID: MB 885-2894/1-A
Matrix: Solid
Analysis Batch: 2942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2894

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		04/08/24 09:02	04/08/24 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 244*	*04/08/24 09:02*	*04/08/24 11:37*	*1*

Lab Sample ID: LCS 885-2894/2-A
Matrix: Solid
Analysis Batch: 2942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2894

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	26.5		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*208*		*15 - 244*

Lab Sample ID: 885-2485-2 MS
Matrix: Solid
Analysis Batch: 2942

Client Sample ID: S-1 13'
Prep Type: Total/NA
Prep Batch: 2894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	8200		2020	9520	4	mg/Kg		66	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*341*	*S1+*	*15 - 244*

Lab Sample ID: 885-2485-2 MSD
Matrix: Solid
Analysis Batch: 2942

Client Sample ID: S-1 13'
Prep Type: Total/NA
Prep Batch: 2894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	8200		2020	9640	4	mg/Kg		72	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*337*	*S1+*	*15 - 244*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-2894/1-A
Matrix: Solid
Analysis Batch: 2943

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2894

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Ethylbenzene	ND		0.050		mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Toluene	ND		0.050		mg/Kg		04/08/24 09:02	04/08/24 11:37	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

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

Lab Sample ID: MB 885-2894/1-A
Matrix: Solid
Analysis Batch: 2943

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2894

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10		mg/Kg		04/08/24 09:02	04/08/24 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*39 - 146*	*04/08/24 09:02*	*04/08/24 11:37*	*1*

Lab Sample ID: LCS 885-2894/3-A
Matrix: Solid
Analysis Batch: 2943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2894

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.856		mg/Kg		86	70 - 130		
Ethylbenzene			1.00	0.864		mg/Kg		86	70 - 130		
m&p-Xylene			2.00	1.75		mg/Kg		88	70 - 130		
o-Xylene			1.00	0.853		mg/Kg		85	70 - 130		
Toluene			1.00	0.861		mg/Kg		86	70 - 130		
Xylenes, Total			3.00	2.60		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*39 - 146*

Lab Sample ID: 885-2485-3 MS
Matrix: Solid
Analysis Batch: 2943

Client Sample ID: S-1 2'
Prep Type: Total/NA
Prep Batch: 2894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	49		86.6	122		mg/Kg		85	70 - 130		
Ethylbenzene	81		86.6	152		mg/Kg		81	70 - 130		
m&p-Xylene	710		173	778	4	mg/Kg		41	70 - 130		
o-Xylene	150	F1	86.6	213		mg/Kg		73	70 - 130		
Toluene	590		86.6	605	4	mg/Kg		16	70 - 130		
Xylenes, Total	860	F1	260	990	F1	mg/Kg		52	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*39 - 146*

Lab Sample ID: 885-2485-3 MSD
Matrix: Solid
Analysis Batch: 2943

Client Sample ID: S-1 2'
Prep Type: Total/NA
Prep Batch: 2894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	49		86.6	117		mg/Kg		79	70 - 130	4	20
Ethylbenzene	81		86.6	149		mg/Kg		78	70 - 130	2	20
m&p-Xylene	710		173	767	4	mg/Kg		35	70 - 130	1	20
o-Xylene	150	F1	86.6	209	F1	mg/Kg		68	70 - 130	2	20
Toluene	590		86.6	593	4	mg/Kg		1	70 - 130	2	20
Xylenes, Total	860	F1	260	976	F1	mg/Kg		46	70 - 130	2	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

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

Lab Sample ID: 885-2485-3 MSD
Matrix: Solid
Analysis Batch: 2943

Client Sample ID: S-1 2'
Prep Type: Total/NA
Prep Batch: 2894

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*96*		*39 - 146*

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

Lab Sample ID: MB 885-2948/1-A
Matrix: Solid
Analysis Batch: 2961

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2948

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		04/09/24 10:06	04/09/24 12:35	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		04/09/24 10:06	04/09/24 12:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*92*		*62 - 134*	*04/09/24 10:06*	*04/09/24 12:35*	*1*

Lab Sample ID: LCS 885-2948/2-A
Matrix: Solid
Analysis Batch: 2961

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2948

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	43.8		mg/Kg		88	60 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	*88*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-2919/1-A
Matrix: Solid
Analysis Batch: 2984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2919

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5		mg/Kg		04/08/24 14:53	04/09/24 12:09	1

Lab Sample ID: LCS 885-2919/2-A
Matrix: Solid
Analysis Batch: 2984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2919

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			15.0	13.9		mg/Kg		93	90 - 110		

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

GC VOA

Prep Batch: 2894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2485-2	S-1 13'	Total/NA	Solid	5035	
885-2485-3	S-1 2'	Total/NA	Solid	5035	
MB 885-2894/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-2894/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-2894/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-2485-2 MS	S-1 13'	Total/NA	Solid	5035	
885-2485-2 MSD	S-1 13'	Total/NA	Solid	5035	
885-2485-3 MS	S-1 2'	Total/NA	Solid	5035	
885-2485-3 MSD	S-1 2'	Total/NA	Solid	5035	

Analysis Batch: 2942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2485-2	S-1 13'	Total/NA	Solid	8015D	2894
885-2485-3	S-1 2'	Total/NA	Solid	8015D	2894
MB 885-2894/1-A	Method Blank	Total/NA	Solid	8015D	2894
LCS 885-2894/2-A	Lab Control Sample	Total/NA	Solid	8015D	2894
885-2485-2 MS	S-1 13'	Total/NA	Solid	8015D	2894
885-2485-2 MSD	S-1 13'	Total/NA	Solid	8015D	2894

Analysis Batch: 2943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2485-2	S-1 13'	Total/NA	Solid	8021B	2894
885-2485-2	S-1 13'	Total/NA	Solid	8021B	2894
885-2485-3	S-1 2'	Total/NA	Solid	8021B	2894
885-2485-3	S-1 2'	Total/NA	Solid	8021B	2894
MB 885-2894/1-A	Method Blank	Total/NA	Solid	8021B	2894
LCS 885-2894/3-A	Lab Control Sample	Total/NA	Solid	8021B	2894
885-2485-3 MS	S-1 2'	Total/NA	Solid	8021B	2894
885-2485-3 MSD	S-1 2'	Total/NA	Solid	8021B	2894

GC Semi VOA

Prep Batch: 2948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2485-2	S-1 13'	Total/NA	Solid	SHAKE	
885-2485-3	S-1 2'	Total/NA	Solid	SHAKE	
MB 885-2948/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-2948/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 2961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2485-2	S-1 13'	Total/NA	Solid	8015D	2948
885-2485-3	S-1 2'	Total/NA	Solid	8015D	2948
MB 885-2948/1-A	Method Blank	Total/NA	Solid	8015D	2948
LCS 885-2948/2-A	Lab Control Sample	Total/NA	Solid	8015D	2948

HPLC/IC

Prep Batch: 2919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2485-2	S-1 13'	Total/NA	Solid	300_Prep	
885-2485-3	S-1 2'	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

HPLC/IC (Continued)

Prep Batch: 2919 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-2919/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-2919/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 2984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2485-2	S-1 13'	Total/NA	Solid	300.0	2919
885-2485-3	S-1 2'	Total/NA	Solid	300.0	2919
MB 885-2919/1-A	Method Blank	Total/NA	Solid	300.0	2919
LCS 885-2919/2-A	Lab Control Sample	Total/NA	Solid	300.0	2919

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

Client Sample ID: S-1 13'
Date Collected: 04/05/24 12:12
Date Received: 04/06/24 07:00

Lab Sample ID: 885-2485-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			2894	JP	EET ALB	04/08/24 10:02
Total/NA	Analysis	8015D		100	2942	JP	EET ALB	04/08/24 13:59
Total/NA	Prep	5035			2894	JP	EET ALB	04/08/24 10:02
Total/NA	Analysis	8021B		10	2943	JP	EET ALB	04/08/24 12:01
Total/NA	Prep	5035			2894	JP	EET ALB	04/08/24 10:02
Total/NA	Analysis	8021B		100	2943	JP	EET ALB	04/08/24 13:59
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		10	2961	PD	EET ALB	04/09/24 12:56
Total/NA	Prep	300_Prep			2919	KB	EET ALB	04/08/24 14:53
Total/NA	Analysis	300.0		20	2984	KB	EET ALB	04/09/24 12:58

Client Sample ID: S-1 2'
Date Collected: 04/05/24 12:14
Date Received: 04/06/24 07:00

Lab Sample ID: 885-2485-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			2894	JP	EET ALB	04/08/24 10:02
Total/NA	Analysis	8015D		100	2942	JP	EET ALB	04/08/24 14:46
Total/NA	Prep	5035			2894	JP	EET ALB	04/08/24 10:02
Total/NA	Analysis	8021B		100	2943	JP	EET ALB	04/08/24 14:46
Total/NA	Prep	5035			2894	JP	EET ALB	04/08/24 10:02
Total/NA	Analysis	8021B		200	2943	JP	EET ALB	04/08/24 15:34
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		10	2961	PD	EET ALB	04/09/24 13:07
Total/NA	Prep	300_Prep			2919	KB	EET ALB	04/08/24 14:53
Total/NA	Analysis	300.0		20	2984	KB	EET ALB	04/09/24 13:10

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-2485-1

Laboratory: Eurofins Albuquerque

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015D	5035	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

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

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015D	5035	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total

Chain-of-Custody Record

Client: HEC

Attn: Samantha Grabert

Mailing Address:

Phone #:

email or Fax#: Samantha.Grabert@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☑ Rush Next day

Project Name: Newsom B 9

Project #:

Project Manager: Stuart Hyde

Sampler: PA

On Ice: ☑ Yes ☐ No marty

# of Coolers: 1

Cooler Temp(including CF): 2.7+0=2.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 871
Tel. 505-345-3975 Fax 505-345-4107

885-2485 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	HOLD
4/5/24	1210	Soil	GS-1 0-0.5'	4oz	Cool		X	X					X				X
	1212		S-1 13'														
	1214		S-1 2'														

Date	Time	Relinquished by	Received by	Via	Date	Time
4/5/24	1430	PA	Chase Wall		4/5/24	1430
4/5/24	1720	Chase Wall		courier	4/6/24	7:00

Remarks: Please Hold Sample ID: GS-1 0-0.5
CC: Shyde
wweichert@Ensolum.com
Panderson

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-2485-1

Login Number: 2485 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/17/2024 7:08:31 PM

JOB DESCRIPTION

Newsom B 9

JOB NUMBER

885-6029-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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

Authorization

Generated
6/17/2024 7:08:31 PM

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

Client: Hilcorp Energy
Project/Site: Newsom B 9

Laboratory Job ID: 885-6029-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Newsom B 9

Job ID: 885-6029-1

Job ID: 885-6029-1 Eurofins Albuquerque

Job Narrative
885-6029-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 6/12/2024 6:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.3°C.

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

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

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Client Sample ID: FS01@15

Date Collected: 06/11/24 14:50
Date Received: 06/12/24 06:30

Lab Sample ID: 885-6029-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.5		mg/Kg		06/12/24 09:11	06/12/24 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*06/12/24 09:11*	*06/12/24 18:34*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017		mg/Kg		06/12/24 09:11	06/12/24 18:34	1
Ethylbenzene	ND		0.035		mg/Kg		06/12/24 09:11	06/12/24 18:34	1
Toluene	ND		0.035		mg/Kg		06/12/24 09:11	06/12/24 18:34	1
Xylenes, Total	ND		0.070		mg/Kg		06/12/24 09:11	06/12/24 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*48 - 145*	*06/12/24 09:11*	*06/12/24 18:34*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		06/14/24 14:06	06/14/24 15:45	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/14/24 14:06	06/14/24 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*97*		*62 - 134*	*06/14/24 14:06*	*06/14/24 15:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59		mg/Kg		06/13/24 09:39	06/13/24 19:41	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Client Sample ID: SW01

Date Collected: 06/11/24 15:00
Date Received: 06/12/24 06:30

Lab Sample ID: 885-6029-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.3		mg/Kg		06/12/24 09:11	06/12/24 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*06/12/24 09:11*	*06/12/24 19:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.016		mg/Kg		06/12/24 09:11	06/12/24 19:45	1
Ethylbenzene	ND		0.033		mg/Kg		06/12/24 09:11	06/12/24 19:45	1
Toluene	ND		0.033		mg/Kg		06/12/24 09:11	06/12/24 19:45	1
Xylenes, Total	ND		0.066		mg/Kg		06/12/24 09:11	06/12/24 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*06/12/24 09:11*	*06/12/24 19:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		06/14/24 14:06	06/14/24 15:56	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/14/24 14:06	06/14/24 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*95*		*62 - 134*	*06/14/24 14:06*	*06/14/24 15:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/13/24 09:39	06/13/24 19:54	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Client Sample ID: SW02

Date Collected: 06/11/24 15:10
Date Received: 06/12/24 06:30

Lab Sample ID: 885-6029-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.4		mg/Kg		06/12/24 09:42	06/12/24 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/12/24 09:42*	*06/12/24 21:19*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017		mg/Kg		06/12/24 09:42	06/12/24 21:19	1
Ethylbenzene	ND		0.034		mg/Kg		06/12/24 09:42	06/12/24 21:19	1
Toluene	ND		0.034		mg/Kg		06/12/24 09:42	06/12/24 21:19	1
Xylenes, Total	ND		0.068		mg/Kg		06/12/24 09:42	06/12/24 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*	*06/12/24 09:42*	*06/12/24 21:19*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		06/14/24 14:06	06/14/24 16:06	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/14/24 14:06	06/14/24 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*	*06/14/24 14:06*	*06/14/24 16:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/13/24 09:39	06/13/24 20:31	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Client Sample ID: SW03

Date Collected: 06/11/24 15:20
Date Received: 06/12/24 06:30

Lab Sample ID: 885-6029-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.4		mg/Kg		06/12/24 09:42	06/12/24 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*06/12/24 09:42*	*06/12/24 21:42*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017		mg/Kg		06/12/24 09:42	06/12/24 21:42	1
Ethylbenzene	ND		0.034		mg/Kg		06/12/24 09:42	06/12/24 21:42	1
Toluene	ND		0.034		mg/Kg		06/12/24 09:42	06/12/24 21:42	1
Xylenes, Total	ND		0.067		mg/Kg		06/12/24 09:42	06/12/24 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*06/12/24 09:42*	*06/12/24 21:42*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		06/14/24 14:06	06/14/24 16:17	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/14/24 14:06	06/14/24 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*06/14/24 14:06*	*06/14/24 16:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/13/24 09:39	06/13/24 20:43	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

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

Lab Sample ID: MB 885-6034/1-A
Matrix: Solid
Analysis Batch: 6633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6034

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/03/24 15:07	06/12/24 18:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/03/24 15:07*	*06/12/24 18:11*	*1*

Lab Sample ID: LCS 885-6034/2-A
Matrix: Solid
Analysis Batch: 6633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6034

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.9		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*208*	*S1+*	*35 - 166*

Lab Sample ID: MB 885-6216/1-A
Matrix: Solid
Analysis Batch: 6634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6216

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/06/24 10:06	06/12/24 18:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/06/24 10:06*	*06/12/24 18:11*	*1*

Lab Sample ID: LCS 885-6216/2-A
Matrix: Solid
Analysis Batch: 6634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6216

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.9		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*208*	*S1+*	*35 - 166*

Lab Sample ID: MB 885-6547/1-A
Matrix: Solid
Analysis Batch: 6577

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6547

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/12/24 09:11	06/12/24 18:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/12/24 09:11*	*06/12/24 18:11*	*1*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

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

Lab Sample ID: LCS 885-6547/2-A
Matrix: Solid
Analysis Batch: 6577

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6547

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	25.9		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*208*	*S1+*	*35 - 166*

Lab Sample ID: 885-6029-1 MS
Matrix: Solid
Analysis Batch: 6577

Client Sample ID: FS01@15
Prep Type: Total/NA
Prep Batch: 6547

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		17.4	17.6		mg/Kg		101	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*206*	*S1+*	*35 - 166*

Lab Sample ID: 885-6029-1 MSD
Matrix: Solid
Analysis Batch: 6577

Client Sample ID: FS01@15
Prep Type: Total/NA
Prep Batch: 6547

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		17.4	18.0		mg/Kg		103	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*209*	*S1+*	*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-6547/1-A
Matrix: Solid
Analysis Batch: 6578

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6547

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/12/24 09:11	06/12/24 18:11	1
Ethylbenzene	ND		0.050		mg/Kg		06/12/24 09:11	06/12/24 18:11	1
Toluene	ND		0.050		mg/Kg		06/12/24 09:11	06/12/24 18:11	1
Xylenes, Total	ND		0.10		mg/Kg		06/12/24 09:11	06/12/24 18:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*48 - 145*	*06/12/24 09:11*	*06/12/24 18:11*	*1*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

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

Lab Sample ID: LCS 885-6547/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6578 — **Prep Batch: 6547**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.934		mg/Kg		93	70 - 130		
Ethylbenzene			1.00	0.886		mg/Kg		89	70 - 130		
m&p-Xylene			2.00	1.79		mg/Kg		89	70 - 130		
o-Xylene			1.00	0.884		mg/Kg		88	70 - 130		
Toluene			1.00	0.887		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*

Lab Sample ID: 885-6029-2 MS — **Client Sample ID: SW01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6578 — **Prep Batch: 6547**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.657	0.598		mg/Kg		91	70 - 130		
Ethylbenzene	ND		0.657	0.572		mg/Kg		87	70 - 130		
m&p-Xylene	ND		1.31	1.16		mg/Kg		87	70 - 130		
o-Xylene	ND		0.657	0.563		mg/Kg		86	70 - 130		
Toluene	ND		0.657	0.564		mg/Kg		84	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*48 - 145*

Lab Sample ID: 885-6029-2 MSD — **Client Sample ID: SW01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6578 — **Prep Batch: 6547**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.657	0.595		mg/Kg		91	70 - 130	1	20
Ethylbenzene	ND		0.657	0.571		mg/Kg		87	70 - 130	0	20
m&p-Xylene	ND		1.31	1.16		mg/Kg		87	70 - 130	0	20
o-Xylene	ND		0.657	0.564		mg/Kg		86	70 - 130	0	20
Toluene	ND		0.657	0.562		mg/Kg		84	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*

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

Lab Sample ID: MB 885-6765/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6727 — **Prep Batch: 6765**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/14/24 13:54	06/14/24 15:23	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/14/24 13:54	06/14/24 15:23	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

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

Lab Sample ID: MB 885-6765/1-A
Matrix: Solid
Analysis Batch: 6727

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6765

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*90*		*62 - 134*	*06/14/24 13:54*	*06/14/24 15:23*	*1*

Lab Sample ID: LCS 885-6765/2-A
Matrix: Solid
Analysis Batch: 6727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	47.2		mg/Kg		94	60 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	*92*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-6637/1-A
Matrix: Solid
Analysis Batch: 6716

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6637

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		06/13/24 09:39	06/13/24 11:27	1

Lab Sample ID: LCS 885-6637/2-A
Matrix: Solid
Analysis Batch: 6716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.7		mg/Kg		96	90 - 110

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

GC VOA

Prep Batch: 6034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-6034/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-6034/2-A	Lab Control Sample	Total/NA	Solid	5035	

Prep Batch: 6216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-6216/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-6216/2-A	Lab Control Sample	Total/NA	Solid	5035	

Prep Batch: 6547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6029-1	FS01@15	Total/NA	Solid	5035	
885-6029-2	SW01	Total/NA	Solid	5035	
885-6029-3	SW02	Total/NA	Solid	5035	
885-6029-4	SW03	Total/NA	Solid	5035	
MB 885-6547/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-6547/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-6547/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-6029-1 MS	FS01@15	Total/NA	Solid	5035	
885-6029-1 MSD	FS01@15	Total/NA	Solid	5035	
885-6029-2 MS	SW01	Total/NA	Solid	5035	
885-6029-2 MSD	SW01	Total/NA	Solid	5035	

Analysis Batch: 6577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6029-1	FS01@15	Total/NA	Solid	8015M/D	6547
885-6029-2	SW01	Total/NA	Solid	8015M/D	6547
885-6029-3	SW02	Total/NA	Solid	8015M/D	6547
885-6029-4	SW03	Total/NA	Solid	8015M/D	6547
MB 885-6547/1-A	Method Blank	Total/NA	Solid	8015M/D	6547
LCS 885-6547/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6547
885-6029-1 MS	FS01@15	Total/NA	Solid	8015M/D	6547
885-6029-1 MSD	FS01@15	Total/NA	Solid	8015M/D	6547

Analysis Batch: 6578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6029-1	FS01@15	Total/NA	Solid	8021B	6547
885-6029-2	SW01	Total/NA	Solid	8021B	6547
885-6029-3	SW02	Total/NA	Solid	8021B	6547
885-6029-4	SW03	Total/NA	Solid	8021B	6547
MB 885-6547/1-A	Method Blank	Total/NA	Solid	8021B	6547
LCS 885-6547/3-A	Lab Control Sample	Total/NA	Solid	8021B	6547
885-6029-2 MS	SW01	Total/NA	Solid	8021B	6547
885-6029-2 MSD	SW01	Total/NA	Solid	8021B	6547

Analysis Batch: 6633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-6034/1-A	Method Blank	Total/NA	Solid	8015M/D	6034
LCS 885-6034/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6034

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

GC VOA

Analysis Batch: 6634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-6216/1-A	Method Blank	Total/NA	Solid	8015M/D	6216
LCS 885-6216/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6216

GC Semi VOA

Analysis Batch: 6727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6029-1	FS01@15	Total/NA	Solid	8015M/D	6765
885-6029-2	SW01	Total/NA	Solid	8015M/D	6765
885-6029-3	SW02	Total/NA	Solid	8015M/D	6765
885-6029-4	SW03	Total/NA	Solid	8015M/D	6765
MB 885-6765/1-A	Method Blank	Total/NA	Solid	8015M/D	6765
LCS 885-6765/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6765

Prep Batch: 6765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6029-1	FS01@15	Total/NA	Solid	SHAKE	
885-6029-2	SW01	Total/NA	Solid	SHAKE	
885-6029-3	SW02	Total/NA	Solid	SHAKE	
885-6029-4	SW03	Total/NA	Solid	SHAKE	
MB 885-6765/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-6765/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 6637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6029-1	FS01@15	Total/NA	Solid	300_Prep	
885-6029-2	SW01	Total/NA	Solid	300_Prep	
885-6029-3	SW02	Total/NA	Solid	300_Prep	
885-6029-4	SW03	Total/NA	Solid	300_Prep	
MB 885-6637/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-6637/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 6716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6029-1	FS01@15	Total/NA	Solid	300.0	6637
885-6029-2	SW01	Total/NA	Solid	300.0	6637
885-6029-3	SW02	Total/NA	Solid	300.0	6637
885-6029-4	SW03	Total/NA	Solid	300.0	6637
MB 885-6637/1-A	Method Blank	Total/NA	Solid	300.0	6637
LCS 885-6637/2-A	Lab Control Sample	Total/NA	Solid	300.0	6637

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Client Sample ID: FS01@15

Lab Sample ID: 885-6029-1
Matrix: Solid
Date Collected: 06/11/24 14:50
Date Received: 06/12/24 06:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:11
Total/NA	Analysis	8015M/D		1	6577	JP	EET ALB	06/12/24 18:34
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:11
Total/NA	Analysis	8021B		1	6578	JP	EET ALB	06/12/24 18:34
Total/NA	Prep	SHAKE			6765	SB	EET ALB	06/14/24 14:06
Total/NA	Analysis	8015M/D		1	6727	PD	EET ALB	06/14/24 15:45
Total/NA	Prep	300_Prep			6637	JT	EET ALB	06/13/24 09:39
Total/NA	Analysis	300.0		20	6716	RC	EET ALB	06/13/24 19:41

Client Sample ID: SW01

Lab Sample ID: 885-6029-2
Matrix: Solid
Date Collected: 06/11/24 15:00
Date Received: 06/12/24 06:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:11
Total/NA	Analysis	8015M/D		1	6577	JP	EET ALB	06/12/24 19:45
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:11
Total/NA	Analysis	8021B		1	6578	JP	EET ALB	06/12/24 19:45
Total/NA	Prep	SHAKE			6765	SB	EET ALB	06/14/24 14:06
Total/NA	Analysis	8015M/D		1	6727	PD	EET ALB	06/14/24 15:56
Total/NA	Prep	300_Prep			6637	JT	EET ALB	06/13/24 09:39
Total/NA	Analysis	300.0		20	6716	RC	EET ALB	06/13/24 19:54

Client Sample ID: SW02

Lab Sample ID: 885-6029-3
Matrix: Solid
Date Collected: 06/11/24 15:10
Date Received: 06/12/24 06:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:42
Total/NA	Analysis	8015M/D		1	6577	JP	EET ALB	06/12/24 21:19
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:42
Total/NA	Analysis	8021B		1	6578	JP	EET ALB	06/12/24 21:19
Total/NA	Prep	SHAKE			6765	SB	EET ALB	06/14/24 14:06
Total/NA	Analysis	8015M/D		1	6727	PD	EET ALB	06/14/24 16:06
Total/NA	Prep	300_Prep			6637	JT	EET ALB	06/13/24 09:39
Total/NA	Analysis	300.0		20	6716	RC	EET ALB	06/13/24 20:31

Client Sample ID: SW03

Lab Sample ID: 885-6029-4
Matrix: Solid
Date Collected: 06/11/24 15:20
Date Received: 06/12/24 06:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:42
Total/NA	Analysis	8015M/D		1	6577	JP	EET ALB	06/12/24 21:42

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Client Sample ID: SW03

Date Collected: 06/11/24 15:20
Date Received: 06/12/24 06:30

Lab Sample ID: 885-6029-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			6547	AT	EET ALB	06/12/24 09:42
Total/NA	Analysis	8021B		1	6578	JP	EET ALB	06/12/24 21:42
Total/NA	Prep	SHAKE			6765	SB	EET ALB	06/14/24 14:06
Total/NA	Analysis	8015M/D		1	6727	PD	EET ALB	06/14/24 16:17
Total/NA	Prep	300_Prep			6637	JT	EET ALB	06/13/24 09:39
Total/NA	Analysis	300.0		20	6716	RC	EET ALB	06/13/24 20:43

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Newsom B 9

Job ID: 885-6029-1

Laboratory: Eurofins Albuquerque

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5035	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp Energy Company
Attn: Samantha Grabert
Mailing Address:
Phone #:
email or Fax#: Samantha.grabert@hilcorp.com
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☑ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush Next Day
Project Name: Newsom B 9
Project #:
Project Manager: Stuart Hyde
Sampler: Al Thomson
On Ice: ☐ Yes ☐ No
# of Coolers: 1 Yoqi
Cooler Temp(including CF): 0.1+0.2=0.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM
Tel. 505-345-3975 Fax 505-345-4
885-6029 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / ~~MTBE~~ / ~~TMBs~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
6-11	1450	Soil	FS01@15	1x 4oz	Cool	1	X	X					X			
	1500		SW01			2										
	1510		SW02			3										
	1520		SW03			4										

Date.	Time.	Relinquished by:	Received by:	Via.	Date	Time
6-11	16:20	Al Thomson	Christ Walk		6/11/24	1620
6/11/24	1800			courier	6/12/24	6:30

Remarks: Please cc: Shyde@ensolum.com athomson@ "

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-6029-1

Login Number: 6029 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/25/2024 1:39:02 PM

JOB DESCRIPTION

Newsom B9

JOB NUMBER

885-6304-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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

Authorization

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6/25/2024 1:39:02 PM

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

Client: Hilcorp Energy
Project/Site: Newsom B9

Laboratory Job ID: 885-6304-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Newsom B9

Job ID: 885-6304-1

Job ID: 885-6304-1 Eurofins Albuquerque

Job Narrative
885-6304-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 6/14/2024 7:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C.

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

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

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: SW04

Date Collected: 06/13/24 14:30
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/14/24 14:58	06/17/24 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*35 - 166*	*06/14/24 14:58*	*06/17/24 15:09*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/14/24 14:58	06/17/24 15:09	1
Ethylbenzene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 15:09	1
Toluene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 15:09	1
Xylenes, Total	ND		0.098		mg/Kg		06/14/24 14:58	06/17/24 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/14/24 14:58*	*06/17/24 15:09*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0		mg/Kg		06/18/24 10:22	06/18/24 12:41	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/18/24 10:22	06/18/24 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*110*		*62 - 134*	*06/18/24 10:22*	*06/18/24 12:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 12:25	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: SW05

Date Collected: 06/13/24 14:35
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		06/14/24 14:58	06/17/24 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*06/14/24 14:58*	*06/17/24 15:33*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		06/14/24 14:58	06/17/24 15:33	1
Ethylbenzene	ND		0.047		mg/Kg		06/14/24 14:58	06/17/24 15:33	1
Toluene	ND		0.047		mg/Kg		06/14/24 14:58	06/17/24 15:33	1
Xylenes, Total	ND		0.093		mg/Kg		06/14/24 14:58	06/17/24 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/14/24 14:58*	*06/17/24 15:33*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/18/24 10:22	06/18/24 12:53	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/18/24 10:22	06/18/24 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*06/18/24 10:22*	*06/18/24 12:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 12:37	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: SW06

Date Collected: 06/13/24 14:40
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/14/24 14:58	06/17/24 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*35 - 166*	*06/14/24 14:58*	*06/17/24 15:56*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/14/24 14:58	06/17/24 15:56	1
Ethylbenzene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 15:56	1
Toluene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 15:56	1
Xylenes, Total	ND		0.098		mg/Kg		06/14/24 14:58	06/17/24 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*48 - 145*	*06/14/24 14:58*	*06/17/24 15:56*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0		mg/Kg		06/18/24 10:22	06/18/24 13:06	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/18/24 10:22	06/18/24 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*06/18/24 10:22*	*06/18/24 13:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 12:49	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS02

Date Collected: 06/13/24 14:45
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		06/14/24 14:58	06/17/24 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*35 - 166*	*06/14/24 14:58*	*06/17/24 16:20*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/14/24 14:58	06/17/24 16:20	1
Ethylbenzene	ND		0.048		mg/Kg		06/14/24 14:58	06/17/24 16:20	1
Toluene	ND		0.048		mg/Kg		06/14/24 14:58	06/17/24 16:20	1
Xylenes, Total	ND		0.096		mg/Kg		06/14/24 14:58	06/17/24 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*48 - 145*	*06/14/24 14:58*	*06/17/24 16:20*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8		mg/Kg		06/18/24 10:22	06/18/24 13:18	1
Motor Oil Range Organics [C28-C40]	ND		44		mg/Kg		06/18/24 10:22	06/18/24 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*06/18/24 10:22*	*06/18/24 13:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 13:02	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS03

Date Collected: 06/13/24 14:50
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		06/14/24 14:58	06/17/24 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*06/14/24 14:58*	*06/17/24 16:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/14/24 14:58	06/17/24 16:44	1
Ethylbenzene	ND		0.048		mg/Kg		06/14/24 14:58	06/17/24 16:44	1
Toluene	ND		0.048		mg/Kg		06/14/24 14:58	06/17/24 16:44	1
Xylenes, Total	ND		0.095		mg/Kg		06/14/24 14:58	06/17/24 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*48 - 145*	*06/14/24 14:58*	*06/17/24 16:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		06/18/24 10:22	06/18/24 13:31	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/18/24 10:22	06/18/24 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*06/18/24 10:22*	*06/18/24 13:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 13:14	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS04

Lab Sample ID: 885-6304-6

Date Collected: 06/13/24 14:55
Matrix: Solid
Date Received: 06/14/24 07:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/14/24 14:58	06/17/24 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*06/14/24 14:58*	*06/17/24 17:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/14/24 14:58	06/17/24 17:08	1
Ethylbenzene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 17:08	1
Toluene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 17:08	1
Xylenes, Total	ND		0.098		mg/Kg		06/14/24 14:58	06/17/24 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*48 - 145*	*06/14/24 14:58*	*06/17/24 17:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**12**		9.3		mg/Kg		06/18/24 10:22	06/18/24 13:43	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/18/24 10:22	06/18/24 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*06/18/24 10:22*	*06/18/24 13:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 13:27	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS05

Date Collected: 06/13/24 15:00
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6		mg/Kg		06/14/24 14:58	06/17/24 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*35 - 166*	*06/14/24 14:58*	*06/17/24 17:55*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		06/14/24 14:58	06/17/24 17:55	1
Ethylbenzene	ND		0.046		mg/Kg		06/14/24 14:58	06/17/24 17:55	1
Toluene	ND		0.046		mg/Kg		06/14/24 14:58	06/17/24 17:55	1
Xylenes, Total	ND		0.092		mg/Kg		06/14/24 14:58	06/17/24 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*48 - 145*	*06/14/24 14:58*	*06/17/24 17:55*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		06/18/24 10:22	06/18/24 13:56	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/18/24 10:22	06/18/24 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*	*06/18/24 10:22*	*06/18/24 13:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 14:04	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS06

Date Collected: 06/13/24 15:05
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		06/14/24 14:58	06/17/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*35 - 166*	*06/14/24 14:58*	*06/17/24 18:19*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/14/24 14:58	06/17/24 18:19	1
Ethylbenzene	ND		0.048		mg/Kg		06/14/24 14:58	06/17/24 18:19	1
Toluene	ND		0.048		mg/Kg		06/14/24 14:58	06/17/24 18:19	1
Xylenes, Total	ND		0.097		mg/Kg		06/14/24 14:58	06/17/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*48 - 145*	*06/14/24 14:58*	*06/17/24 18:19*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		06/18/24 10:22	06/18/24 14:08	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/18/24 10:22	06/18/24 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*	*06/18/24 10:22*	*06/18/24 14:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 14:16	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS07

Date Collected: 06/13/24 15:10
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/14/24 14:58	06/17/24 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*35 - 166*	*06/14/24 14:58*	*06/17/24 18:42*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/14/24 14:58	06/17/24 18:42	1
Ethylbenzene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 18:42	1
Toluene	ND		0.049		mg/Kg		06/14/24 14:58	06/17/24 18:42	1
Xylenes, Total	ND		0.098		mg/Kg		06/14/24 14:58	06/17/24 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*48 - 145*	*06/14/24 14:58*	*06/17/24 18:42*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/18/24 10:22	06/18/24 14:21	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/18/24 10:22	06/18/24 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*06/18/24 10:22*	*06/18/24 14:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 14:28	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS08

Date Collected: 06/13/24 15:15
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6		mg/Kg		06/14/24 14:58	06/17/24 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*35 - 166*	*06/14/24 14:58*	*06/17/24 19:06*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		06/14/24 14:58	06/17/24 19:06	1
Ethylbenzene	ND		0.046		mg/Kg		06/14/24 14:58	06/17/24 19:06	1
Toluene	ND		0.046		mg/Kg		06/14/24 14:58	06/17/24 19:06	1
Xylenes, Total	ND		0.092		mg/Kg		06/14/24 14:58	06/17/24 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*	*06/14/24 14:58*	*06/17/24 19:06*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		06/18/24 10:22	06/18/24 14:33	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/18/24 10:22	06/18/24 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*	*06/18/24 10:22*	*06/18/24 14:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 14:41	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

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

Lab Sample ID: MB 885-6775/1-A
Matrix: Solid
Analysis Batch: 6889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6775

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/14/24 14:58	06/17/24 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*35 - 166*	*06/14/24 14:58*	*06/17/24 11:38*	*1*

Lab Sample ID: LCS 885-6775/2-A
Matrix: Solid
Analysis Batch: 6889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6775

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.4		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*217*	*S1+*	*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-6775/1-A
Matrix: Solid
Analysis Batch: 6890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6775

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/14/24 14:58	06/17/24 11:38	1
Ethylbenzene	ND		0.050		mg/Kg		06/14/24 14:58	06/17/24 11:38	1
Toluene	ND		0.050		mg/Kg		06/14/24 14:58	06/17/24 11:38	1
Xylenes, Total	ND		0.10		mg/Kg		06/14/24 14:58	06/17/24 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*	*06/14/24 14:58*	*06/17/24 11:38*	*1*

Lab Sample ID: LCS 885-6775/3-A
Matrix: Solid
Analysis Batch: 6890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6775

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	1.02		mg/Kg		102	70 - 130		
Ethylbenzene			1.00	0.973		mg/Kg		97	70 - 130		
m&p-Xylene			2.00	1.94		mg/Kg		97	70 - 130		
o-Xylene			1.00	0.949		mg/Kg		95	70 - 130		
Toluene			1.00	0.964		mg/Kg		96	70 - 130		
Xylenes, Total			3.00	2.88		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*48 - 145*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

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

Lab Sample ID: MB 885-6897/1-A
Matrix: Solid
Analysis Batch: 6935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6897

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/18/24 10:22	06/18/24 12:17	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/18/24 10:22	06/18/24 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*	*06/18/24 10:22*	*06/18/24 12:17*	*1*

Lab Sample ID: LCS 885-6897/2-A
Matrix: Solid
Analysis Batch: 6935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6897

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	38.0		mg/Kg		76	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*94*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-6987/1-A
Matrix: Solid
Analysis Batch: 7029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6987

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5		mg/Kg		06/19/24 10:20	06/19/24 11:35	1

Lab Sample ID: LCS 885-6987/2-A
Matrix: Solid
Analysis Batch: 7029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6987

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			15.0	14.0		mg/Kg		93	90 - 110		

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

GC VOA

Prep Batch: 6775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-1	SW04	Total/NA	Solid	5030C	
885-6304-2	SW05	Total/NA	Solid	5030C	
885-6304-3	SW06	Total/NA	Solid	5030C	
885-6304-4	FS02	Total/NA	Solid	5030C	
885-6304-5	FS03	Total/NA	Solid	5030C	
885-6304-6	FS04	Total/NA	Solid	5030C	
885-6304-7	FS05	Total/NA	Solid	5030C	
885-6304-8	FS06	Total/NA	Solid	5030C	
885-6304-9	FS07	Total/NA	Solid	5030C	
885-6304-10	FS08	Total/NA	Solid	5030C	
MB 885-6775/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-6775/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-6775/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 6889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-1	SW04	Total/NA	Solid	8015M/D	6775
885-6304-2	SW05	Total/NA	Solid	8015M/D	6775
885-6304-3	SW06	Total/NA	Solid	8015M/D	6775
885-6304-4	FS02	Total/NA	Solid	8015M/D	6775
885-6304-5	FS03	Total/NA	Solid	8015M/D	6775
885-6304-6	FS04	Total/NA	Solid	8015M/D	6775
885-6304-7	FS05	Total/NA	Solid	8015M/D	6775
885-6304-8	FS06	Total/NA	Solid	8015M/D	6775
885-6304-9	FS07	Total/NA	Solid	8015M/D	6775
885-6304-10	FS08	Total/NA	Solid	8015M/D	6775
MB 885-6775/1-A	Method Blank	Total/NA	Solid	8015M/D	6775
LCS 885-6775/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6775

Analysis Batch: 6890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-1	SW04	Total/NA	Solid	8021B	6775
885-6304-2	SW05	Total/NA	Solid	8021B	6775
885-6304-3	SW06	Total/NA	Solid	8021B	6775
885-6304-4	FS02	Total/NA	Solid	8021B	6775
885-6304-5	FS03	Total/NA	Solid	8021B	6775
885-6304-6	FS04	Total/NA	Solid	8021B	6775
885-6304-7	FS05	Total/NA	Solid	8021B	6775
885-6304-8	FS06	Total/NA	Solid	8021B	6775
885-6304-9	FS07	Total/NA	Solid	8021B	6775
885-6304-10	FS08	Total/NA	Solid	8021B	6775
MB 885-6775/1-A	Method Blank	Total/NA	Solid	8021B	6775
LCS 885-6775/3-A	Lab Control Sample	Total/NA	Solid	8021B	6775

GC Semi VOA

Prep Batch: 6897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-1	SW04	Total/NA	Solid	SHAKE	
885-6304-2	SW05	Total/NA	Solid	SHAKE	
885-6304-3	SW06	Total/NA	Solid	SHAKE	

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

GC Semi VOA (Continued)

Prep Batch: 6897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-4	FS02	Total/NA	Solid	SHAKE	
885-6304-5	FS03	Total/NA	Solid	SHAKE	
885-6304-6	FS04	Total/NA	Solid	SHAKE	
885-6304-7	FS05	Total/NA	Solid	SHAKE	
885-6304-8	FS06	Total/NA	Solid	SHAKE	
885-6304-9	FS07	Total/NA	Solid	SHAKE	
885-6304-10	FS08	Total/NA	Solid	SHAKE	
MB 885-6897/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-6897/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 6935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-1	SW04	Total/NA	Solid	8015M/D	6897
885-6304-2	SW05	Total/NA	Solid	8015M/D	6897
885-6304-3	SW06	Total/NA	Solid	8015M/D	6897
885-6304-4	FS02	Total/NA	Solid	8015M/D	6897
885-6304-5	FS03	Total/NA	Solid	8015M/D	6897
885-6304-6	FS04	Total/NA	Solid	8015M/D	6897
885-6304-7	FS05	Total/NA	Solid	8015M/D	6897
885-6304-8	FS06	Total/NA	Solid	8015M/D	6897
885-6304-9	FS07	Total/NA	Solid	8015M/D	6897
885-6304-10	FS08	Total/NA	Solid	8015M/D	6897
MB 885-6897/1-A	Method Blank	Total/NA	Solid	8015M/D	6897
LCS 885-6897/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6897

HPLC/IC

Prep Batch: 6987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-1	SW04	Total/NA	Solid	300_Prep	
885-6304-2	SW05	Total/NA	Solid	300_Prep	
885-6304-3	SW06	Total/NA	Solid	300_Prep	
885-6304-4	FS02	Total/NA	Solid	300_Prep	
885-6304-5	FS03	Total/NA	Solid	300_Prep	
885-6304-6	FS04	Total/NA	Solid	300_Prep	
885-6304-7	FS05	Total/NA	Solid	300_Prep	
885-6304-8	FS06	Total/NA	Solid	300_Prep	
885-6304-9	FS07	Total/NA	Solid	300_Prep	
885-6304-10	FS08	Total/NA	Solid	300_Prep	
MB 885-6987/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-6987/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 7029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-1	SW04	Total/NA	Solid	300.0	6987
885-6304-2	SW05	Total/NA	Solid	300.0	6987
885-6304-3	SW06	Total/NA	Solid	300.0	6987
885-6304-4	FS02	Total/NA	Solid	300.0	6987
885-6304-5	FS03	Total/NA	Solid	300.0	6987
885-6304-6	FS04	Total/NA	Solid	300.0	6987
885-6304-7	FS05	Total/NA	Solid	300.0	6987

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

HPLC/IC (Continued)

Analysis Batch: 7029 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6304-8	FS06	Total/NA	Solid	300.0	6987
885-6304-9	FS07	Total/NA	Solid	300.0	6987
885-6304-10	FS08	Total/NA	Solid	300.0	6987
MB 885-6987/1-A	Method Blank	Total/NA	Solid	300.0	6987
LCS 885-6987/2-A	Lab Control Sample	Total/NA	Solid	300.0	6987

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: SW04

Lab Sample ID: 885-6304-1

Date Collected: 06/13/24 14:30
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 15:09
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 15:09
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 12:41
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 12:25

Client Sample ID: SW05

Lab Sample ID: 885-6304-2

Date Collected: 06/13/24 14:35
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 15:33
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 15:33
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 12:53
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 12:37

Client Sample ID: SW06

Lab Sample ID: 885-6304-3

Date Collected: 06/13/24 14:40
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 15:56
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 15:56
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 13:06
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 12:49

Client Sample ID: FS02

Lab Sample ID: 885-6304-4

Date Collected: 06/13/24 14:45
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 16:20

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS02

Lab Sample ID: 885-6304-4
Matrix: Solid
Date Collected: 06/13/24 14:45
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 16:20
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 13:18
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 13:02

Client Sample ID: FS03

Lab Sample ID: 885-6304-5
Matrix: Solid
Date Collected: 06/13/24 14:50
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 16:44
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 16:44
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 13:31
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 13:14

Client Sample ID: FS04

Lab Sample ID: 885-6304-6
Matrix: Solid
Date Collected: 06/13/24 14:55
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 17:08
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 17:08
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 13:43
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 13:27

Client Sample ID: FS05

Lab Sample ID: 885-6304-7
Matrix: Solid
Date Collected: 06/13/24 15:00
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 17:55
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 17:55

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS05

Lab Sample ID: 885-6304-7

Date Collected: 06/13/24 15:00
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 13:56
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 14:04

Client Sample ID: FS06

Lab Sample ID: 885-6304-8

Date Collected: 06/13/24 15:05
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 18:19
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 18:19
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 14:08
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 14:16

Client Sample ID: FS07

Lab Sample ID: 885-6304-9

Date Collected: 06/13/24 15:10
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 18:42
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 18:42
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 14:21
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 14:28

Client Sample ID: FS08

Lab Sample ID: 885-6304-10

Date Collected: 06/13/24 15:15
Matrix: Solid
Date Received: 06/14/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8015M/D		1	6889	JP	EET ALB	06/17/24 19:06
Total/NA	Prep	5030C			6775	JP	EET ALB	06/14/24 14:58
Total/NA	Analysis	8021B		1	6890	JP	EET ALB	06/17/24 19:06
Total/NA	Prep	SHAKE			6897	DH	EET ALB	06/18/24 10:22
Total/NA	Analysis	8015M/D		1	6935	DH	EET ALB	06/18/24 14:33

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Client Sample ID: FS08

Date Collected: 06/13/24 15:15
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6304-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 14:41

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6304-1

Laboratory: Eurofins Albuquerque

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp Energy Company
Attn: Samantha Graber+

Mailing Address:

Phone #:

email or Fax#: Samantha.graber+@hilcorp.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☑ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 3-day

Project Name: Newsom B 9

Project #:

Project Manager: Stuart Hyde

Sampler: Al Thomson
On Ice: ☑ Yes ☐ No yogi
# of Coolers: 1
Cooler Temp(including CF): 4.5 -0.1 = 4.4 (°C)

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

885-6304 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / ~~MTBE / TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
6-13	1430	Soil	SW04	1x 4oz	Cool	1	X	X					X			
	1435		SW05			2										
	1440		SW06			3										
	1445		FS02			4										
	1450		FS03			5										
	1455		FS04			6										
	1500		FS05			7										
	1505		FS06			8										
	1510		FS07			9										
	1515		FS08			10										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6-13	1645	Al Thomson			6/13/24	1645
6/13/24	1719			courier	6/14/24	7:00

Remarks: Please CC: Shyde@ensolum.com

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-6304-1

Login Number: 6304 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 7/1/2024 10:13:37 AM

JOB DESCRIPTION

Newson B9

JOB NUMBER

885-6346-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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

Authorization

Generated
7/1/2024 10:13:37 AM

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

Client: Hilcorp Energy
Project/Site: Newson B9

Laboratory Job ID: 885-6346-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Newson B9

Job ID: 885-6346-1

Job ID: 885-6346-1 Eurofins Albuquerque

Job Narrative
885-6346-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 6/15/2024 1:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.3°C.

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

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

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

HPLC/IC
Method 300_OF_28D_PREC: The matrix spike/matrix spike duplicate (MS/MSD) for preparation batch 885-6948 and analytical batch 885-7075 exceeded control limits for the following analyte(s): Chloride, Note that this analyte is a known poor performer when analyzed using this method.

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

Client Sample ID: SW07

Date Collected: 06/14/24 12:05
Date Received: 06/15/24 13:00

Lab Sample ID: 885-6346-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		06/17/24 15:23	06/21/24 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*35 - 166*	*06/17/24 15:23*	*06/21/24 05:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/17/24 15:23	06/21/24 05:08	1
Ethylbenzene	ND		0.047		mg/Kg		06/17/24 15:23	06/21/24 05:08	1
Toluene	ND		0.047		mg/Kg		06/17/24 15:23	06/21/24 05:08	1
Xylenes, Total	ND		0.095		mg/Kg		06/17/24 15:23	06/21/24 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*48 - 145*	*06/17/24 15:23*	*06/21/24 05:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/20/24 15:27	06/21/24 12:15	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/20/24 15:27	06/21/24 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*06/20/24 15:27*	*06/21/24 12:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 08:33	06/19/24 11:05	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

Client Sample ID: SW08

Date Collected: 06/14/24 12:10
Date Received: 06/15/24 13:00

Lab Sample ID: 885-6346-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6		mg/Kg		06/17/24 15:23	06/21/24 05:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*35 - 166*	*06/17/24 15:23*	*06/21/24 05:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		06/17/24 15:23	06/21/24 05:31	1
Ethylbenzene	ND		0.046		mg/Kg		06/17/24 15:23	06/21/24 05:31	1
Toluene	ND		0.046		mg/Kg		06/17/24 15:23	06/21/24 05:31	1
Xylenes, Total	ND		0.093		mg/Kg		06/17/24 15:23	06/21/24 05:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*06/17/24 15:23*	*06/21/24 05:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		06/20/24 15:27	06/21/24 12:28	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/20/24 15:27	06/21/24 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*106*		*62 - 134*	*06/20/24 15:27*	*06/21/24 12:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 08:33	06/19/24 11:17	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

Client Sample ID: SW09

Date Collected: 06/14/24 12:15
Date Received: 06/15/24 13:00

Lab Sample ID: 885-6346-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/17/24 15:23	06/21/24 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*35 - 166*	*06/17/24 15:23*	*06/21/24 05:55*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/17/24 15:23	06/21/24 05:55	1
Ethylbenzene	ND		0.049		mg/Kg		06/17/24 15:23	06/21/24 05:55	1
Toluene	ND		0.049		mg/Kg		06/17/24 15:23	06/21/24 05:55	1
Xylenes, Total	ND		0.098		mg/Kg		06/17/24 15:23	06/21/24 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*48 - 145*	*06/17/24 15:23*	*06/21/24 05:55*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9		mg/Kg		06/20/24 15:27	06/21/24 12:40	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/20/24 15:27	06/21/24 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*06/20/24 15:27*	*06/21/24 12:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 08:33	06/19/24 11:30	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

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

Lab Sample ID: MB 885-6855/1-A
Matrix: Solid
Analysis Batch: 7162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6855

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/17/24 15:23	06/20/24 16:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*35 - 166*	*06/17/24 15:23*	*06/20/24 16:14*	*1*

Lab Sample ID: LCS 885-6855/2-A
Matrix: Solid
Analysis Batch: 7162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6855

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	23.0		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*212*	*S1+*	*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-6855/1-A
Matrix: Solid
Analysis Batch: 7164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6855

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/17/24 15:23	06/20/24 16:14	1
Ethylbenzene	ND		0.050		mg/Kg		06/17/24 15:23	06/20/24 16:14	1
Toluene	ND		0.050		mg/Kg		06/17/24 15:23	06/20/24 16:14	1
Xylenes, Total	ND		0.10		mg/Kg		06/17/24 15:23	06/20/24 16:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*	*06/17/24 15:23*	*06/20/24 16:14*	*1*

Lab Sample ID: LCS 885-6855/3-A
Matrix: Solid
Analysis Batch: 7164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6855

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.956		mg/Kg		96	70 - 130		
Ethylbenzene			1.00	0.907		mg/Kg		91	70 - 130		
m&p-Xylene			2.00	1.83		mg/Kg		91	70 - 130		
o-Xylene			1.00	0.893		mg/Kg		89	70 - 130		
Toluene			1.00	0.891		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

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

Lab Sample ID: MB 885-7115/1-A
Matrix: Solid
Analysis Batch: 7189

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7115

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/20/24 15:27	06/21/24 11:50	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/20/24 15:27	06/21/24 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*114*		*62 - 134*	*06/20/24 15:27*	*06/21/24 11:50*	*1*

Lab Sample ID: LCS 885-7115/2-A
Matrix: Solid
Analysis Batch: 7189

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7115

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	46.9		mg/Kg		94	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*108*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-6948/1-A
Matrix: Solid
Analysis Batch: 7075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6948

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5		mg/Kg		06/19/24 08:33	06/19/24 09:34	1

Lab Sample ID: LCS 885-6948/2-A
Matrix: Solid
Analysis Batch: 7075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6948

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			15.0	14.5		mg/Kg		97	90 - 110		

Lab Sample ID: 885-6346-1 MS
Matrix: Solid
Analysis Batch: 7075

Client Sample ID: SW07
Prep Type: Total/NA
Prep Batch: 6948

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		30.0	ND		mg/Kg		NC	50 - 150		

Lab Sample ID: 885-6346-1 MSD
Matrix: Solid
Analysis Batch: 7075

Client Sample ID: SW07
Prep Type: Total/NA
Prep Batch: 6948

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

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-7075/35
Matrix: Solid
Analysis Batch: 7075

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/Kg			06/19/24 16:38	1

Lab Sample ID: MRL 885-7075/34
Matrix: Solid
Analysis Batch: 7075

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.533		mg/L		107	50 - 150		

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

GC VOA

Prep Batch: 6855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6346-1	SW07	Total/NA	Solid	5030C	
885-6346-2	SW08	Total/NA	Solid	5030C	
885-6346-3	SW09	Total/NA	Solid	5030C	
MB 885-6855/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-6855/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-6855/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 7162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6346-1	SW07	Total/NA	Solid	8015M/D	6855
885-6346-2	SW08	Total/NA	Solid	8015M/D	6855
885-6346-3	SW09	Total/NA	Solid	8015M/D	6855
MB 885-6855/1-A	Method Blank	Total/NA	Solid	8015M/D	6855
LCS 885-6855/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6855

Analysis Batch: 7164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6346-1	SW07	Total/NA	Solid	8021B	6855
885-6346-2	SW08	Total/NA	Solid	8021B	6855
885-6346-3	SW09	Total/NA	Solid	8021B	6855
MB 885-6855/1-A	Method Blank	Total/NA	Solid	8021B	6855
LCS 885-6855/3-A	Lab Control Sample	Total/NA	Solid	8021B	6855

GC Semi VOA

Prep Batch: 7115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6346-1	SW07	Total/NA	Solid	SHAKE	
885-6346-2	SW08	Total/NA	Solid	SHAKE	
885-6346-3	SW09	Total/NA	Solid	SHAKE	
MB 885-7115/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-7115/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 7189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6346-1	SW07	Total/NA	Solid	8015M/D	7115
885-6346-2	SW08	Total/NA	Solid	8015M/D	7115
885-6346-3	SW09	Total/NA	Solid	8015M/D	7115
MB 885-7115/1-A	Method Blank	Total/NA	Solid	8015M/D	7115
LCS 885-7115/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7115

HPLC/IC

Prep Batch: 6948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6346-1	SW07	Total/NA	Solid	300_Prep	
885-6346-2	SW08	Total/NA	Solid	300_Prep	
885-6346-3	SW09	Total/NA	Solid	300_Prep	
MB 885-6948/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-6948/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-6346-1 MS	SW07	Total/NA	Solid	300_Prep	
885-6346-1 MSD	SW07	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

HPLC/IC

Analysis Batch: 7075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6346-1	SW07	Total/NA	Solid	300.0	6948
885-6346-2	SW08	Total/NA	Solid	300.0	6948
885-6346-3	SW09	Total/NA	Solid	300.0	6948
MB 885-6948/1-A	Method Blank	Total/NA	Solid	300.0	6948
MB 885-7075/35	Method Blank	Total/NA	Solid	300.0	
LCS 885-6948/2-A	Lab Control Sample	Total/NA	Solid	300.0	6948
MRL 885-7075/34	Lab Control Sample	Total/NA	Solid	300.0	
885-6346-1 MS	SW07	Total/NA	Solid	300.0	6948
885-6346-1 MSD	SW07	Total/NA	Solid	300.0	6948

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

Client Sample ID: SW07

Lab Sample ID: 885-6346-1
Matrix: Solid
Date Collected: 06/14/24 12:05
Date Received: 06/15/24 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6855	AT	EET ALB	06/17/24 15:23
Total/NA	Analysis	8015M/D		1	7162	JP	EET ALB	06/21/24 05:08
Total/NA	Prep	5030C			6855	AT	EET ALB	06/17/24 15:23
Total/NA	Analysis	8021B		1	7164	JP	EET ALB	06/21/24 05:08
Total/NA	Prep	SHAKE			7115	DH	EET ALB	06/20/24 15:27
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 12:15
Total/NA	Prep	300_Prep			6948	RC	EET ALB	06/19/24 08:33
Total/NA	Analysis	300.0		20	7075	SS	EET ALB	06/19/24 11:05

Client Sample ID: SW08

Lab Sample ID: 885-6346-2
Matrix: Solid
Date Collected: 06/14/24 12:10
Date Received: 06/15/24 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6855	AT	EET ALB	06/17/24 15:23
Total/NA	Analysis	8015M/D		1	7162	JP	EET ALB	06/21/24 05:31
Total/NA	Prep	5030C			6855	AT	EET ALB	06/17/24 15:23
Total/NA	Analysis	8021B		1	7164	JP	EET ALB	06/21/24 05:31
Total/NA	Prep	SHAKE			7115	DH	EET ALB	06/20/24 15:27
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 12:28
Total/NA	Prep	300_Prep			6948	RC	EET ALB	06/19/24 08:33
Total/NA	Analysis	300.0		20	7075	SS	EET ALB	06/19/24 11:17

Client Sample ID: SW09

Lab Sample ID: 885-6346-3
Matrix: Solid
Date Collected: 06/14/24 12:15
Date Received: 06/15/24 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6855	AT	EET ALB	06/17/24 15:23
Total/NA	Analysis	8015M/D		1	7162	JP	EET ALB	06/21/24 05:55
Total/NA	Prep	5030C			6855	AT	EET ALB	06/17/24 15:23
Total/NA	Analysis	8021B		1	7164	JP	EET ALB	06/21/24 05:55
Total/NA	Prep	SHAKE			7115	DH	EET ALB	06/20/24 15:27
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 12:40
Total/NA	Prep	300_Prep			6948	RC	EET ALB	06/19/24 08:33
Total/NA	Analysis	300.0		20	7075	SS	EET ALB	06/19/24 11:30

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Newson B9

Job ID: 885-6346-1

Laboratory: Eurofins Albuquerque

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp Energy Company
Attn: Samantha Grabert
Mailing Address:
Phone #:
email or Fax#: samantha.grabert@hilcorp.com
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☑ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 3-day
Project Name: Newsom B 9
Project #:
Project Manager: Stuart Hyde
Sampler: Al Thomson
On Ice: ☑ Yes ☐ No Yes
# of Coolers: 1
Cooler Temp(including CF): 3.3±0=3.3 (°C)

HALL ENVIRONMI
ANALYSIS LABOR
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107
885-6346 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / ~~MTBE~~ / ~~TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
6-14	1205	soil	SW07	1x 4oz	cool	1	X	X					X			
	1210		SW08			2										
↓	1215	↓	SW09	↓	↓	3	↓	↓					↓			

Analysis Request

Date.	Time.	Relinquished by.	Received by.	Via.	Date	Time
6-14	1430	Al Thomson				
6/14/24	1718			courier	6/15/24	13:08

Remarks: Please CC: shyde@ensolum.com

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-6346-1

Login Number: 6346 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 7/2/2024 3:03:32 PM

JOB DESCRIPTION

Newsom B9

JOB NUMBER

885-6488-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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

Authorization

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7/2/2024 3:03:32 PM

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

Client: Hilcorp Energy
Project/Site: Newsom B9

Laboratory Job ID: 885-6488-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Newsom B9

Job ID: 885-6488-1

Job ID: 885-6488-1 Eurofins Albuquerque

Job Narrative
885-6488-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 6/19/2024 7:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.7°C.

Gasoline Range Organics
Method 8015D_GRO: Surrogate recovery for the following samples were outside control limits: SW16 (885-6488-11) and SW16-Discrete (885-6488-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Diesel Range Organics
Method 8015D_DRO: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-6946 and analytical batch 885-7016 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: FS09

Date Collected: 06/17/24 11:30
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/19/24 09:36	06/22/24 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*06/19/24 09:36*	*06/22/24 22:02*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/22/24 22:02	1
Ethylbenzene	ND		0.050		mg/Kg		06/19/24 09:36	06/22/24 22:02	1
Toluene	ND		0.050		mg/Kg		06/19/24 09:36	06/22/24 22:02	1
Xylenes, Total	ND		0.099		mg/Kg		06/19/24 09:36	06/22/24 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*06/19/24 09:36*	*06/22/24 22:02*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/20/24 17:05	06/21/24 17:15	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/20/24 17:05	06/21/24 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*06/20/24 17:05*	*06/21/24 17:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 10:35	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: FS10

Date Collected: 06/17/24 11:40
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/19/24 09:36	06/22/24 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*35 - 166*	*06/19/24 09:36*	*06/22/24 23:12*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/22/24 23:12	1
Ethylbenzene	ND		0.050		mg/Kg		06/19/24 09:36	06/22/24 23:12	1
Toluene	ND		0.050		mg/Kg		06/19/24 09:36	06/22/24 23:12	1
Xylenes, Total	ND		0.10		mg/Kg		06/19/24 09:36	06/22/24 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/19/24 09:36*	*06/22/24 23:12*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		06/20/24 17:05	06/21/24 17:27	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		06/20/24 17:05	06/21/24 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*06/20/24 17:05*	*06/21/24 17:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 10:47	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: FS11

Date Collected: 06/17/24 11:45
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/19/24 09:36	06/23/24 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*06/19/24 09:36*	*06/23/24 00:22*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/23/24 00:22	1
Ethylbenzene	ND		0.050		mg/Kg		06/19/24 09:36	06/23/24 00:22	1
Toluene	ND		0.050		mg/Kg		06/19/24 09:36	06/23/24 00:22	1
Xylenes, Total	ND		0.10		mg/Kg		06/19/24 09:36	06/23/24 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*06/19/24 09:36*	*06/23/24 00:22*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/20/24 17:05	06/21/24 17:40	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/20/24 17:05	06/21/24 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*	*06/20/24 17:05*	*06/21/24 17:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 10:59	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: FS12

Date Collected: 06/17/24 11:48
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/19/24 09:36	06/23/24 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*06/19/24 09:36*	*06/23/24 00:46*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/23/24 00:46	1
Ethylbenzene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 00:46	1
Toluene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 00:46	1
Xylenes, Total	ND		0.098		mg/Kg		06/19/24 09:36	06/23/24 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*06/19/24 09:36*	*06/23/24 00:46*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		06/20/24 17:05	06/21/24 17:52	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/20/24 17:05	06/21/24 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*109*		*62 - 134*	*06/20/24 17:05*	*06/21/24 17:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 11:12	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW10

Date Collected: 06/17/24 11:52
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		06/19/24 09:36	06/23/24 01:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*06/19/24 09:36*	*06/23/24 01:09*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/19/24 09:36	06/23/24 01:09	1
Ethylbenzene	ND		0.048		mg/Kg		06/19/24 09:36	06/23/24 01:09	1
Toluene	ND		0.048		mg/Kg		06/19/24 09:36	06/23/24 01:09	1
Xylenes, Total	ND		0.096		mg/Kg		06/19/24 09:36	06/23/24 01:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*	*06/19/24 09:36*	*06/23/24 01:09*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9		mg/Kg		06/20/24 17:05	06/21/24 18:05	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/20/24 17:05	06/21/24 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*06/20/24 17:05*	*06/21/24 18:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 11:24	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW11

Date Collected: 06/17/24 11:55
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		06/19/24 09:36	06/23/24 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*06/19/24 09:36*	*06/23/24 01:33*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/19/24 09:36	06/23/24 01:33	1
Ethylbenzene	ND		0.048		mg/Kg		06/19/24 09:36	06/23/24 01:33	1
Toluene	ND		0.048		mg/Kg		06/19/24 09:36	06/23/24 01:33	1
Xylenes, Total	ND		0.097		mg/Kg		06/19/24 09:36	06/23/24 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*	*06/19/24 09:36*	*06/23/24 01:33*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**15**		9.6		mg/Kg		06/20/24 17:05	06/24/24 13:59	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/20/24 17:05	06/24/24 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*112*		*62 - 134*	*06/20/24 17:05*	*06/24/24 13:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 11:36	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW12

Date Collected: 06/17/24 11:58
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/19/24 09:36	06/23/24 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*06/19/24 09:36*	*06/23/24 01:56*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/19/24 09:36	06/23/24 01:56	1
Ethylbenzene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 01:56	1
Toluene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 01:56	1
Xylenes, Total	ND		0.098		mg/Kg		06/19/24 09:36	06/23/24 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/19/24 09:36*	*06/23/24 01:56*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/20/24 17:05	06/21/24 18:30	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/20/24 17:05	06/21/24 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*06/20/24 17:05*	*06/21/24 18:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 11:49	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW13

Date Collected: 06/17/24 12:02
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/19/24 09:36	06/23/24 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/19/24 09:36*	*06/23/24 02:20*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/19/24 09:36	06/23/24 02:20	1
Ethylbenzene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 02:20	1
Toluene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 02:20	1
Xylenes, Total	ND		0.098		mg/Kg		06/19/24 09:36	06/23/24 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*	*06/19/24 09:36*	*06/23/24 02:20*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		06/20/24 17:05	06/21/24 18:43	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/20/24 17:05	06/21/24 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*121*		*62 - 134*	*06/20/24 17:05*	*06/21/24 18:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 09:32	06/20/24 12:01	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW14

Date Collected: 06/17/24 16:30
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/19/24 09:36	06/23/24 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*35 - 166*	*06/19/24 09:36*	*06/23/24 02:43*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/23/24 02:43	1
Ethylbenzene	ND		0.050		mg/Kg		06/19/24 09:36	06/23/24 02:43	1
Toluene	ND		0.050		mg/Kg		06/19/24 09:36	06/23/24 02:43	1
Xylenes, Total	ND		0.10		mg/Kg		06/19/24 09:36	06/23/24 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/19/24 09:36*	*06/23/24 02:43*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		06/20/24 17:05	06/21/24 18:56	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/20/24 17:05	06/21/24 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*06/20/24 17:05*	*06/21/24 18:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 12:48	06/20/24 20:57	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW15

Date Collected: 06/17/24 16:31
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/19/24 09:36	06/23/24 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*06/19/24 09:36*	*06/23/24 03:07*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/23/24 03:07	1
Ethylbenzene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 03:07	1
Toluene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 03:07	1
Xylenes, Total	ND		0.098		mg/Kg		06/19/24 09:36	06/23/24 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/19/24 09:36*	*06/23/24 03:07*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.5		mg/Kg		06/20/24 17:05	06/21/24 19:09	1
Motor Oil Range Organics [C28-C40]	ND		43		mg/Kg		06/20/24 17:05	06/21/24 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*06/20/24 17:05*	*06/21/24 19:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 12:48	06/20/24 21:10	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW16

Date Collected: 06/17/24 16:32
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	170		18		mg/Kg		06/19/24 08:48	06/19/24 11:07	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*244*	*S1+*	*35 - 166*	*06/19/24 08:48*	*06/19/24 11:07*	*5*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.089		0.088		mg/Kg		06/19/24 08:48	06/19/24 11:07	5
Ethylbenzene	1.2		0.18		mg/Kg		06/19/24 08:48	06/19/24 11:07	5
Toluene	4.3		0.18		mg/Kg		06/19/24 08:48	06/19/24 11:07	5
Xylenes, Total	15		0.35		mg/Kg		06/19/24 08:48	06/19/24 11:07	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*48 - 145*	*06/19/24 08:48*	*06/19/24 11:07*	*5*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	240		9.4		mg/Kg		06/19/24 08:21	06/19/24 11:08	1
Motor Oil Range Organics [C28-C40]	95		47		mg/Kg		06/19/24 08:21	06/19/24 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*106*		*62 - 134*	*06/19/24 08:21*	*06/19/24 11:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 10:20	06/19/24 17:09	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW17

Date Collected: 06/17/24 16:33
Date Received: 06/19/24 07:00

Lab Sample ID: 885-6488-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/19/24 09:36	06/23/24 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*06/19/24 09:36*	*06/23/24 03:54*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/23/24 03:54	1
Ethylbenzene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 03:54	1
Toluene	ND		0.049		mg/Kg		06/19/24 09:36	06/23/24 03:54	1
Xylenes, Total	ND		0.099		mg/Kg		06/19/24 09:36	06/23/24 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/19/24 09:36*	*06/23/24 03:54*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5		mg/Kg		06/20/24 17:05	06/21/24 19:21	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		06/20/24 17:05	06/21/24 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*06/20/24 17:05*	*06/21/24 19:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/20/24 12:48	06/20/24 21:22	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW16-Discrete

Lab Sample ID: 885-6488-13

Date Collected: 06/17/24 16:34

Matrix: Solid

Date Received: 06/19/24 07:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	74		5.1		mg/Kg		06/19/24 08:48	06/19/24 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*318*	*S1+*	*35 - 166*	*06/19/24 08:48*	*06/19/24 11:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.21		0.026		mg/Kg		06/19/24 08:48	06/19/24 11:31	1
Ethylbenzene	0.56		0.051		mg/Kg		06/19/24 08:48	06/19/24 11:31	1
Toluene	2.9		0.051		mg/Kg		06/19/24 08:48	06/19/24 11:31	1
Xylenes, Total	6.4		0.10		mg/Kg		06/19/24 08:48	06/19/24 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*48 - 145*	*06/19/24 08:48*	*06/19/24 11:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	30		9.5		mg/Kg		06/19/24 08:21	06/19/24 11:19	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/19/24 08:21	06/19/24 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*06/19/24 08:21*	*06/19/24 11:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		06/19/24 17:33	06/19/24 18:12	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

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

Lab Sample ID: MB 885-6400/1-A
Matrix: Solid
Analysis Batch: 7072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6400

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/10/24 13:00	06/19/24 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*35 - 166*	*06/10/24 13:00*	*06/19/24 10:44*	*1*

Lab Sample ID: LCS 885-6400/2-A
Matrix: Solid
Analysis Batch: 7072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6400

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.8		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*204*	*S1+*	*35 - 166*

Lab Sample ID: MB 885-6951/1-A
Matrix: Solid
Analysis Batch: 7006

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6951

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/19/24 08:48	06/19/24 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*35 - 166*	*06/19/24 08:48*	*06/19/24 10:44*	*1*

Lab Sample ID: LCS 885-6951/2-A
Matrix: Solid
Analysis Batch: 7006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6951

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.8		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*204*	*S1+*	*35 - 166*

Lab Sample ID: MB 885-6972/1-A
Matrix: Solid
Analysis Batch: 7259

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6972

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/19/24 09:36	06/22/24 21:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/19/24 09:36*	*06/22/24 21:38*	*1*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

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

Lab Sample ID: LCS 885-6972/2-A
Matrix: Solid
Analysis Batch: 7259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6972

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*209*	*S1+*	*35 - 166*

Lab Sample ID: 885-6488-1 MS
Matrix: Solid
Analysis Batch: 7259

Client Sample ID: FS09
Prep Type: Total/NA
Prep Batch: 6972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		25.0	24.3		mg/Kg		97	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*205*	*S1+*	*35 - 166*

Lab Sample ID: 885-6488-1 MSD
Matrix: Solid
Analysis Batch: 7259

Client Sample ID: FS09
Prep Type: Total/NA
Prep Batch: 6972

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.8	25.2		mg/Kg		102	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*206*	*S1+*	*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-6951/1-A
Matrix: Solid
Analysis Batch: 7007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6951

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 08:48	06/19/24 10:44	1
Ethylbenzene	ND		0.050		mg/Kg		06/19/24 08:48	06/19/24 10:44	1
Toluene	ND		0.050		mg/Kg		06/19/24 08:48	06/19/24 10:44	1
Xylenes, Total	ND		0.10		mg/Kg		06/19/24 08:48	06/19/24 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*48 - 145*	*06/19/24 08:48*	*06/19/24 10:44*	*1*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

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

Lab Sample ID: LCS 885-6951/3-A
Matrix: Solid
Analysis Batch: 7007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6951

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.923		mg/Kg		92	70 - 130		
Ethylbenzene			1.00	0.887		mg/Kg		89	70 - 130		
m&p-Xylene			2.00	1.79		mg/Kg		90	70 - 130		
o-Xylene			1.00	0.860		mg/Kg		86	70 - 130		
Toluene			1.00	0.875		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*

Lab Sample ID: MB 885-6972/1-A
Matrix: Solid
Analysis Batch: 7262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6972

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/19/24 09:36	06/22/24 21:38	1
Ethylbenzene	ND		0.050		mg/Kg		06/19/24 09:36	06/22/24 21:38	1
Toluene	ND		0.050		mg/Kg		06/19/24 09:36	06/22/24 21:38	1
Xylenes, Total	ND		0.10		mg/Kg		06/19/24 09:36	06/22/24 21:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*06/19/24 09:36*	*06/22/24 21:38*	*1*

Lab Sample ID: LCS 885-6972/3-A
Matrix: Solid
Analysis Batch: 7262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.960		mg/Kg		96	70 - 130		
Ethylbenzene			1.00	0.904		mg/Kg		90	70 - 130		
m&p-Xylene			2.00	1.84		mg/Kg		92	70 - 130		
o-Xylene			1.00	0.897		mg/Kg		90	70 - 130		
Toluene			1.00	0.906		mg/Kg		91	70 - 130		

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

Lab Sample ID: 885-6488-2 MS
Matrix: Solid
Analysis Batch: 7262

Client Sample ID: FS10
Prep Type: Total/NA
Prep Batch: 6972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.993	0.944		mg/Kg		95	70 - 130		
Ethylbenzene	ND		0.993	0.890		mg/Kg		88	70 - 130		
m&p-Xylene	ND		1.99	1.80		mg/Kg		89	70 - 130		
o-Xylene	ND		0.993	0.874		mg/Kg		86	70 - 130		
Toluene	ND		0.993	0.880		mg/Kg		87	70 - 130		

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

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

Lab Sample ID: 885-6488-2 MS
Matrix: Solid
Analysis Batch: 7262

Client Sample ID: FS10
Prep Type: Total/NA
Prep Batch: 6972

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*95*		*48 - 145*

Lab Sample ID: 885-6488-2 MSD
Matrix: Solid
Analysis Batch: 7262

Client Sample ID: FS10
Prep Type: Total/NA
Prep Batch: 6972

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.989	0.909		mg/Kg		92	70 - 130	4	20
Ethylbenzene	ND		0.989	0.870		mg/Kg		86	70 - 130	2	20
m&p-Xylene	ND		1.98	1.77		mg/Kg		88	70 - 130	2	20
o-Xylene	ND		0.989	0.870		mg/Kg		86	70 - 130	0	20
Toluene	ND		0.989	0.859		mg/Kg		85	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*

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

Lab Sample ID: MB 885-6946/1-A
Matrix: Solid
Analysis Batch: 7016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6946

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/19/24 08:21	06/19/24 10:47	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/19/24 08:21	06/19/24 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*	*06/19/24 08:21*	*06/19/24 10:47*	*1*

Lab Sample ID: LCS 885-6946/2-A
Matrix: Solid
Analysis Batch: 7016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6946

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	49.7		mg/Kg		99	60 - 135		

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

Lab Sample ID: MB 885-7128/1-A
Matrix: Solid
Analysis Batch: 7189

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7128

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/20/24 16:50	06/21/24 15:09	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/20/24 16:50	06/21/24 15:09	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

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

Lab Sample ID: MB 885-7128/1-A
Matrix: Solid
Analysis Batch: 7189

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7128

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*119*		*62 - 134*	*06/20/24 16:50*	*06/21/24 15:09*	*1*

Lab Sample ID: LCS 885-7128/2-A
Matrix: Solid
Analysis Batch: 7189

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	48.3		mg/Kg		97	60 - 135

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-6987/1-A
Matrix: Solid
Analysis Batch: 7029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6987

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		06/19/24 10:20	06/19/24 11:35	1

Lab Sample ID: LCS 885-6987/2-A
Matrix: Solid
Analysis Batch: 7029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.0		mg/Kg		93	90 - 110

Lab Sample ID: MB 885-7037/1-A
Matrix: Solid
Analysis Batch: 7029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7037

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		06/19/24 17:04	06/19/24 17:46	1

Lab Sample ID: LCS 885-7037/2-A
Matrix: Solid
Analysis Batch: 7029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7037

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	13.9		mg/Kg		93	90 - 110

Lab Sample ID: MB 885-7052/1-A
Matrix: Solid
Analysis Batch: 7150

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7052

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		06/20/24 09:32	06/20/24 09:56	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-7052/2-A
Matrix: Solid
Analysis Batch: 7150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.0		mg/Kg		93	90 - 110

Lab Sample ID: MB 885-7091/1-A
Matrix: Solid
Analysis Batch: 7106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7091

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5		mg/Kg		06/20/24 12:48	06/20/24 20:31	1

Lab Sample ID: LCS 885-7091/2-A
Matrix: Solid
Analysis Batch: 7106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.1		mg/Kg		94	90 - 110

Lab Sample ID: MB 885-7106/33
Matrix: Solid
Analysis Batch: 7106

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/Kg			06/21/24 02:57	1

Lab Sample ID: MRL 885-7106/35
Matrix: Solid
Analysis Batch: 7106

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.522		mg/L		104	50 - 150

Lab Sample ID: MB 885-7150/35
Matrix: Solid
Analysis Batch: 7150

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/Kg			06/20/24 16:33	1

Lab Sample ID: MRL 885-7150/34
Matrix: Solid
Analysis Batch: 7150

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.529		mg/L		106	50 - 150

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

GC VOA

Prep Batch: 6400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-6400/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-6400/2-A	Lab Control Sample	Total/NA	Solid	5035	

Prep Batch: 6951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-11	SW16	Total/NA	Solid	5035	
885-6488-13	SW16-Discrete	Total/NA	Solid	5035	
MB 885-6951/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-6951/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-6951/3-A	Lab Control Sample	Total/NA	Solid	5035	

Prep Batch: 6972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-1	FS09	Total/NA	Solid	5030C	
885-6488-2	FS10	Total/NA	Solid	5030C	
885-6488-3	FS11	Total/NA	Solid	5030C	
885-6488-4	FS12	Total/NA	Solid	5030C	
885-6488-5	SW10	Total/NA	Solid	5030C	
885-6488-6	SW11	Total/NA	Solid	5030C	
885-6488-7	SW12	Total/NA	Solid	5030C	
885-6488-8	SW13	Total/NA	Solid	5030C	
885-6488-9	SW14	Total/NA	Solid	5030C	
885-6488-10	SW15	Total/NA	Solid	5030C	
885-6488-12	SW17	Total/NA	Solid	5030C	
MB 885-6972/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-6972/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-6972/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-6488-1 MS	FS09	Total/NA	Solid	5030C	
885-6488-1 MSD	FS09	Total/NA	Solid	5030C	
885-6488-2 MS	FS10	Total/NA	Solid	5030C	
885-6488-2 MSD	FS10	Total/NA	Solid	5030C	

Analysis Batch: 7006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-11	SW16	Total/NA	Solid	8015M/D	6951
885-6488-13	SW16-Discrete	Total/NA	Solid	8015M/D	6951
MB 885-6951/1-A	Method Blank	Total/NA	Solid	8015M/D	6951
LCS 885-6951/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6951

Analysis Batch: 7007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-11	SW16	Total/NA	Solid	8021B	6951
885-6488-13	SW16-Discrete	Total/NA	Solid	8021B	6951
MB 885-6951/1-A	Method Blank	Total/NA	Solid	8021B	6951
LCS 885-6951/3-A	Lab Control Sample	Total/NA	Solid	8021B	6951

Analysis Batch: 7072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-6400/1-A	Method Blank	Total/NA	Solid	8015M/D	6400
LCS 885-6400/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6400

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

GC VOA

Analysis Batch: 7259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-1	FS09	Total/NA	Solid	8015M/D	6972
885-6488-2	FS10	Total/NA	Solid	8015M/D	6972
885-6488-3	FS11	Total/NA	Solid	8015M/D	6972
885-6488-4	FS12	Total/NA	Solid	8015M/D	6972
885-6488-5	SW10	Total/NA	Solid	8015M/D	6972
885-6488-6	SW11	Total/NA	Solid	8015M/D	6972
885-6488-7	SW12	Total/NA	Solid	8015M/D	6972
885-6488-8	SW13	Total/NA	Solid	8015M/D	6972
885-6488-9	SW14	Total/NA	Solid	8015M/D	6972
885-6488-10	SW15	Total/NA	Solid	8015M/D	6972
885-6488-12	SW17	Total/NA	Solid	8015M/D	6972
MB 885-6972/1-A	Method Blank	Total/NA	Solid	8015M/D	6972
LCS 885-6972/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6972
885-6488-1 MS	FS09	Total/NA	Solid	8015M/D	6972
885-6488-1 MSD	FS09	Total/NA	Solid	8015M/D	6972

Analysis Batch: 7262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-1	FS09	Total/NA	Solid	8021B	6972
885-6488-2	FS10	Total/NA	Solid	8021B	6972
885-6488-3	FS11	Total/NA	Solid	8021B	6972
885-6488-4	FS12	Total/NA	Solid	8021B	6972
885-6488-5	SW10	Total/NA	Solid	8021B	6972
885-6488-6	SW11	Total/NA	Solid	8021B	6972
885-6488-7	SW12	Total/NA	Solid	8021B	6972
885-6488-8	SW13	Total/NA	Solid	8021B	6972
885-6488-9	SW14	Total/NA	Solid	8021B	6972
885-6488-10	SW15	Total/NA	Solid	8021B	6972
885-6488-12	SW17	Total/NA	Solid	8021B	6972
MB 885-6972/1-A	Method Blank	Total/NA	Solid	8021B	6972
LCS 885-6972/3-A	Lab Control Sample	Total/NA	Solid	8021B	6972
885-6488-2 MS	FS10	Total/NA	Solid	8021B	6972
885-6488-2 MSD	FS10	Total/NA	Solid	8021B	6972

GC Semi VOA

Prep Batch: 6946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-11	SW16	Total/NA	Solid	SHAKE	
885-6488-13	SW16-Discrete	Total/NA	Solid	SHAKE	
MB 885-6946/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-6946/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 7016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-11	SW16	Total/NA	Solid	8015M/D	6946
885-6488-13	SW16-Discrete	Total/NA	Solid	8015M/D	6946
MB 885-6946/1-A	Method Blank	Total/NA	Solid	8015M/D	6946
LCS 885-6946/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6946

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

GC Semi VOA

Prep Batch: 7128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-1	FS09	Total/NA	Solid	SHAKE	
885-6488-2	FS10	Total/NA	Solid	SHAKE	
885-6488-3	FS11	Total/NA	Solid	SHAKE	
885-6488-4	FS12	Total/NA	Solid	SHAKE	
885-6488-5	SW10	Total/NA	Solid	SHAKE	
885-6488-6	SW11	Total/NA	Solid	SHAKE	
885-6488-7	SW12	Total/NA	Solid	SHAKE	
885-6488-8	SW13	Total/NA	Solid	SHAKE	
885-6488-9	SW14	Total/NA	Solid	SHAKE	
885-6488-10	SW15	Total/NA	Solid	SHAKE	
885-6488-12	SW17	Total/NA	Solid	SHAKE	
MB 885-7128/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-7128/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 7189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-1	FS09	Total/NA	Solid	8015M/D	7128
885-6488-2	FS10	Total/NA	Solid	8015M/D	7128
885-6488-3	FS11	Total/NA	Solid	8015M/D	7128
885-6488-4	FS12	Total/NA	Solid	8015M/D	7128
885-6488-5	SW10	Total/NA	Solid	8015M/D	7128
885-6488-7	SW12	Total/NA	Solid	8015M/D	7128
885-6488-8	SW13	Total/NA	Solid	8015M/D	7128
885-6488-9	SW14	Total/NA	Solid	8015M/D	7128
885-6488-10	SW15	Total/NA	Solid	8015M/D	7128
885-6488-12	SW17	Total/NA	Solid	8015M/D	7128
MB 885-7128/1-A	Method Blank	Total/NA	Solid	8015M/D	7128
LCS 885-7128/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7128

Analysis Batch: 7288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-6	SW11	Total/NA	Solid	8015M/D	7128

HPLC/IC

Prep Batch: 6987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-11	SW16	Total/NA	Solid	300_Prep	
MB 885-6987/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-6987/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 7029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-11	SW16	Total/NA	Solid	300.0	6987
885-6488-13	SW16-Discrete	Total/NA	Solid	300.0	7037
MB 885-6987/1-A	Method Blank	Total/NA	Solid	300.0	6987
MB 885-7037/1-A	Method Blank	Total/NA	Solid	300.0	7037
LCS 885-6987/2-A	Lab Control Sample	Total/NA	Solid	300.0	6987
LCS 885-7037/2-A	Lab Control Sample	Total/NA	Solid	300.0	7037

QC Association Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

HPLC/IC

Prep Batch: 7037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-13	SW16-Discrete	Total/NA	Solid	300_Prep	
MB 885-7037/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-7037/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 7052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-1	FS09	Total/NA	Solid	300_Prep	
885-6488-2	FS10	Total/NA	Solid	300_Prep	
885-6488-3	FS11	Total/NA	Solid	300_Prep	
885-6488-4	FS12	Total/NA	Solid	300_Prep	
885-6488-5	SW10	Total/NA	Solid	300_Prep	
885-6488-6	SW11	Total/NA	Solid	300_Prep	
885-6488-7	SW12	Total/NA	Solid	300_Prep	
885-6488-8	SW13	Total/NA	Solid	300_Prep	
MB 885-7052/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-7052/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 7091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-9	SW14	Total/NA	Solid	300_Prep	
885-6488-10	SW15	Total/NA	Solid	300_Prep	
885-6488-12	SW17	Total/NA	Solid	300_Prep	
MB 885-7091/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-7091/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 7106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-9	SW14	Total/NA	Solid	300.0	7091
885-6488-10	SW15	Total/NA	Solid	300.0	7091
885-6488-12	SW17	Total/NA	Solid	300.0	7091
MB 885-7091/1-A	Method Blank	Total/NA	Solid	300.0	7091
MB 885-7106/33	Method Blank	Total/NA	Solid	300.0	
LCS 885-7091/2-A	Lab Control Sample	Total/NA	Solid	300.0	7091
MRL 885-7106/35	Lab Control Sample	Total/NA	Solid	300.0	

Analysis Batch: 7150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6488-1	FS09	Total/NA	Solid	300.0	7052
885-6488-2	FS10	Total/NA	Solid	300.0	7052
885-6488-3	FS11	Total/NA	Solid	300.0	7052
885-6488-4	FS12	Total/NA	Solid	300.0	7052
885-6488-5	SW10	Total/NA	Solid	300.0	7052
885-6488-6	SW11	Total/NA	Solid	300.0	7052
885-6488-7	SW12	Total/NA	Solid	300.0	7052
885-6488-8	SW13	Total/NA	Solid	300.0	7052
MB 885-7052/1-A	Method Blank	Total/NA	Solid	300.0	7052
MB 885-7150/35	Method Blank	Total/NA	Solid	300.0	
LCS 885-7052/2-A	Lab Control Sample	Total/NA	Solid	300.0	7052
MRL 885-7150/34	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: FS09

Lab Sample ID: 885-6488-1

Date Collected: 06/17/24 11:30
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/22/24 22:02
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/22/24 22:02
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 17:15
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 10:35

Client Sample ID: FS10

Lab Sample ID: 885-6488-2

Date Collected: 06/17/24 11:40
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/22/24 23:12
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/22/24 23:12
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 17:27
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 10:47

Client Sample ID: FS11

Lab Sample ID: 885-6488-3

Date Collected: 06/17/24 11:45
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 00:22
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 00:22
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 17:40
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 10:59

Client Sample ID: FS12

Lab Sample ID: 885-6488-4

Date Collected: 06/17/24 11:48
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 00:46

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: FS12

Lab Sample ID: 885-6488-4
Matrix: Solid
Date Collected: 06/17/24 11:48
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 00:46
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 17:52
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 11:12

Client Sample ID: SW10

Lab Sample ID: 885-6488-5
Matrix: Solid
Date Collected: 06/17/24 11:52
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 01:09
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 01:09
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 18:05
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 11:24

Client Sample ID: SW11

Lab Sample ID: 885-6488-6
Matrix: Solid
Date Collected: 06/17/24 11:55
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 01:33
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 01:33
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7288	DH	EET ALB	06/24/24 13:59
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 11:36

Client Sample ID: SW12

Lab Sample ID: 885-6488-7
Matrix: Solid
Date Collected: 06/17/24 11:58
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 01:56
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 01:56

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW12

Lab Sample ID: 885-6488-7

Date Collected: 06/17/24 11:58
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 18:30
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 11:49

Client Sample ID: SW13

Lab Sample ID: 885-6488-8

Date Collected: 06/17/24 12:02
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 02:20
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 02:20
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 18:43
Total/NA	Prep	300_Prep			7052	RC	EET ALB	06/20/24 09:32
Total/NA	Analysis	300.0		20	7150	SS	EET ALB	06/20/24 12:01

Client Sample ID: SW14

Lab Sample ID: 885-6488-9

Date Collected: 06/17/24 16:30
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 02:43
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 02:43
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 18:56
Total/NA	Prep	300_Prep			7091	RC	EET ALB	06/20/24 12:48
Total/NA	Analysis	300.0		20	7106	RC	EET ALB	06/20/24 20:57

Client Sample ID: SW15

Lab Sample ID: 885-6488-10

Date Collected: 06/17/24 16:31
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 03:07
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 03:07
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 19:09

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Client Sample ID: SW15

Lab Sample ID: 885-6488-10

Date Collected: 06/17/24 16:31
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			7091	RC	EET ALB	06/20/24 12:48
Total/NA	Analysis	300.0		20	7106	RC	EET ALB	06/20/24 21:10

Client Sample ID: SW16

Lab Sample ID: 885-6488-11

Date Collected: 06/17/24 16:32
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			6951	AT	EET ALB	06/19/24 08:48
Total/NA	Analysis	8015M/D		5	7006	JP	EET ALB	06/19/24 11:07
Total/NA	Prep	5035			6951	AT	EET ALB	06/19/24 08:48
Total/NA	Analysis	8021B		5	7007	JP	EET ALB	06/19/24 11:07
Total/NA	Prep	SHAKE			6946	PD	EET ALB	06/19/24 08:21
Total/NA	Analysis	8015M/D		1	7016	PD	EET ALB	06/19/24 11:08
Total/NA	Prep	300_Prep			6987	SS	EET ALB	06/19/24 10:20
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 17:09

Client Sample ID: SW17

Lab Sample ID: 885-6488-12

Date Collected: 06/17/24 16:33
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8015M/D		1	7259	JP	EET ALB	06/23/24 03:54
Total/NA	Prep	5030C			6972	AT	EET ALB	06/19/24 09:36
Total/NA	Analysis	8021B		1	7262	JP	EET ALB	06/23/24 03:54
Total/NA	Prep	SHAKE			7128	DH	EET ALB	06/20/24 17:05
Total/NA	Analysis	8015M/D		1	7189	DH	EET ALB	06/21/24 19:21
Total/NA	Prep	300_Prep			7091	RC	EET ALB	06/20/24 12:48
Total/NA	Analysis	300.0		20	7106	RC	EET ALB	06/20/24 21:22

Client Sample ID: SW16-Discrete

Lab Sample ID: 885-6488-13

Date Collected: 06/17/24 16:34
Matrix: Solid
Date Received: 06/19/24 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			6951	AT	EET ALB	06/19/24 08:48
Total/NA	Analysis	8015M/D		1	7006	JP	EET ALB	06/19/24 11:31
Total/NA	Prep	5035			6951	AT	EET ALB	06/19/24 08:48
Total/NA	Analysis	8021B		1	7007	JP	EET ALB	06/19/24 11:31
Total/NA	Prep	SHAKE			6946	PD	EET ALB	06/19/24 08:21
Total/NA	Analysis	8015M/D		1	7016	PD	EET ALB	06/19/24 11:19
Total/NA	Prep	300_Prep			7037	SS	EET ALB	06/19/24 17:33
Total/NA	Analysis	300.0		20	7029	RC	EET ALB	06/19/24 18:12

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Newsom B9

Job ID: 885-6488-1

Laboratory: Eurofins Albuquerque

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	5035	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain of Custody

Page 1 of 2

885-6488 COC

Client Information	
Client:	Hilcorp Energy Company
Project Name:	Newsom-B9
Project Manager:	Samantha Grabert / Stuart Hyde
Address:	
City, State, Zip:	
Phone:	samantha.Grabert@Hilcorp.com
Email:	shyde@ensolum.com

Invoice Information	
Company:	Hilcorp Energy Company
Address:	
City, State, Zip:	
Phone:	337-781-9630
Email:	samantha.Grabert@hilcorp.com
Miscellaneous:	

Lab Use Only: Lab WO# E; Job Number

TAT: 1D | 2D | 3D ✓ | Std — see notes/remarks

NM | CO

EPA: SDWA | CWA | RC...

Compliance Y or N

PWSID #

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Field Filter	Lab Number	GRO/DRO/MRO by 8015D TPH (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
1130	6/17/24	soil	1	FS09	1	N		X		X		X							cooled/ice 3 day TAT
1140	↓	↓	1	FS10	2	↓		↓		↓		↓						↓	3 day TAT
1145	↓	↓	1	FS11	3	↓		↓		↓		↓						↓	3 day TAT
1148	↓	↓	1	FS12	4	↓		↓		↓		↓						↓	3 day TAT
1152	↓	↓	1	SW10	5	↓		↓		↓		↓						↓	3 day TAT
1155	↓	↓	1	SW11	6	↓		↓		↓		↓						↓	3 day TAT
1158	↓	↓	1	SW12	7	↓		↓		↓		↓						↓	3 day TAT
1202	↓	↓	1	SW13	8	↓		↓		↓		↓						↓	3 day TAT
1630	↓	↓	1	SW14	9	↓		↓		↓		↓						↓	3 day TAT
1631	↓	↓	1	SW15	10	↓		↓		↓		↓						↓	3 day TAT

Additional Instructions:

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

Sampled by ______

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
[signature]	6/17/24	1830	[signature]	6/17/24	1830
[signature]	6.18.24	1806	[signature] Courier	6/19/24	7:00

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 6.7 T2 6.7 T3 ______

AVG Temp °C 0.7

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.

HALL ENVIRONMENTAL ANALYSIS LAB
4901 Hawkins NE - Albuquerque NM 87109
P: 505-345-3975

envirotech

Chain of Custody

Page 2 of 2

Client Information	Invoice Information	Lab Use Only	
Client:	Company:	Lab WO# E	Job Number
Project Name:	Address:		
Project Manager:	City, State, Zip: See Page 1		
Address:	Phone:		
City, State, Zip: See Page 1	Email:		
Phone:	Miscellaneous:		
Email:			

TAT			
1D	2D	3D	Std
		✓	

See Notes/Remarks

State				
NM	CO	UT	TX	

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 MRO TPH 8015)	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Remarks
1632	6/17/24	soil	1	SW16	N	11	X		X		X				★ cooled/ice same day Rush
1633	↓	↓	1	SW17	↓	12	↓		↓		↓				3day Rush
1634	↓	↓	1	SW16-Discrete	↓	13	↓		↓		↓				★ same day Rush

SM

Additional Instructions:

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

Sampled by: ______

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
SM	6/17/24	1830	Chet Wd	6/17/24	1830
Chet Walter	6-18-24	1806	[signature] Courier	6/19/24	7:00

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 0.7 T2 0.7 T3 ______

AVG Temp °C 0.7

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-6488-1

Login Number: 6488 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

ENSOLUM

APPENDIX D

Photographic Log

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Photographic Log Hilcorp Energy Company
Newsom B 9

Photograph: 1 Date: 4/5/2024
Description: Site overview
View: West

Photograph: 2 Date: 4/5/2024
Description: Excavation activities
View: North

Photograph: 3 Date: 6/10/2024
Description: Excavation activities
View: North

Photograph: 4 Date: 6/10/2024
Description: Excavation activities
View: South

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Energy, Minerals and Natural Resources
Oil Conservation Division
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QUESTIONS

Action 367453

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 367453
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2401660821**
Incident Name	**NAPP2401660821 NEWSOM B 9 @ 30-045-05943**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-045-05943] NEWSOM B #009**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	NEWSOM B 9
Date Release Discovered	01/16/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Corrosion | Production Tank | Produced Water | Released: 8 BBL | Recovered: 0 BBL | Lost: 8 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Corrosion | Production Tank | Condensate | Released: 47 BBL | Recovered: 0 BBL | Lost: 47 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)	46.76 bbl condensate & 8.35 bbl produced water released

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 367453
	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: 07/25/2024

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 367453
	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 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (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 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

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)	92
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	21400
GRO+DRO (EPA SW-846 Method 8015M)	20400
BTEX (EPA SW-846 Method 8021B or 8260B)	1580
Benzene (EPA SW-846 Method 8021B or 8260B)	49
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	01/29/2024
On what date will (or did) the final sampling or liner inspection occur	06/17/2024
On what date will (or was) the remediation complete(d)	06/17/2024
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	2800
What is the estimated volume (in cubic yards) that will be remediated	1000
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)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 367453
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	ENVIROTECH LANDFARM #1 [fEEM0112334691]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(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: 07/25/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 367453
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 367453
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**354331**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**06/17/2024**
What was the (estimated) number of samples that were to be gathered	**15**
What was the sampling surface area in square feet	**2000**

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	2800
What was the total volume (cubic yards) remediated	1000
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 for the excavation confirmation soil samples, collected from the final excavation extent, confirmed that all COC concentrations are compliant with the Site Closure Criteria, indicating no further remediation is necessary.

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

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 07/25/2024

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 367453
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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

CONDITIONS

Action 367453

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	372171
	Action Number: 367453
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation closure approved.	7/30/2024
amaxwell	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	7/30/2024
amaxwell	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	7/30/2024