



June 19, 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

San Juan 28-6 Unit 114M
Rio Arriba County, New Mexico
Hilcorp Energy Company
NMOCD Incident No: nAPP2317839684

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), has prepared this *Remediation Report and Closure Request* associated with a produced water release at the San Juan 28-6 Unit 114M natural gas production well (Site). The Site is located on surface managed by the Bureau of Land Management (BLM) in Unit J of Section 25, Township 28 North, Range 6 West, in Rio Arriba County, New Mexico (Figure 1).

SITE BACKGROUND

On June 26, 2023, during a routine well-site inspection of the production well (API #: 30-039-26649), located at latitude 36.63046 North and longitude 107.41571 West, a 35 barrel (bbl) produced water release was discovered due to corrosion at the bottom of the production tank. Upon discovery, corrective action was taken to stop the leak and the remaining fluids within the tank were removed. The tank was repaired, coated, and underwent an integrity inspection prior to reentering service. In accordance with Title 19, Chapter 15, Part 29 of the New Mexico Administrative Code (NMAC) Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) and the BLM within 24 hours of discovery and submitted a *Form C-141* to the NMOCD and an *Undesirable Event Form* to the BLM on July 11, 2023. The Site has been assigned NMOCD Incident Number nAPP2317839684.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

An assessment of potential nearby receptors was conducted through desktop reviews of topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, United States Geological Survey (USGS) GIS maps, New Mexico Office of the State Engineer (NMOSE) database, and aerial photographs, as well as Site-specific observations.

GEOLOGY AND HYDROGEOLOGY

The Site is located in Tertiary (Eocene) age San Jose Formation and is underlain by the Nacimiento Geologic Formation. In the report titled "*Hydrogeology and Water Resources of San Juan Basin, New Mexico*" (Stone, et. al., 1983), the San Jose Formation is composed of interbedded sandstones and mudstones and varies in thickness from less than 200 feet to about 2,700 feet. The hydrogeologic

properties of the San Jose Formation are largely untested. Where sufficient yield is present, the primary use of water from this Formation is for domestic and/or livestock supply.

The Site is at an elevation of approximately 6,605 feet above mean sea level (amsl). Depth to groundwater at the site is estimated to be greater than 100 feet below ground surface (bgs). This estimation is based on the data published on the NMOSE's iWaters Database website. The nearest groundwater well to the Site, SJ-04033-POD1, is located approximately 1.56 miles northwest of, and 55 feet lower than, the Site (Appendix A). Information presented on the NMOSE database indicates depth to groundwater in this well is approximately 234 feet below ground surface (bgs). The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any significant watercourse and/or wetland. The nearest wetland/watercourse is located approximately 715 feet east of the Site. Surface land use surrounding the Site consists primarily of oil and gas development and livestock grazing. No occupied permanent residence or structures, including schools, hospitals, institutions, and/or churches, are located within 300 feet of the Site. The Site is not within the area of a subsurface mine or unstable area and is not within the 100-year floodplain.

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)
- BTEX: 50 mg/kg
- TPH as a combination of 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

SOIL SAMPLING ACTIVITIES

On June 30, 2023, Hilcorp collected an initial sample, S-1, from the most concentrated point of the release (See Appendix B for pictures of sample location). Analytical results indicated detections of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and total petroleum hydrocarbons as gasoline range organics (TPH-GRO) constituents, but all were below the applicable NMOCD Closure Criteria. Results from this initial sample indicated that there were no impacts to the soil exceeding closure criteria. As such, Hilcorp submitted a request for closure; however, the request was rejected by the NMOCD on January 19, 2024. The NMOCD requested that Hilcorp perform additional vertical and lateral delineation sampling to further confirm that there were no impacts caused by this release.

Based on NMOCD's request, Hilcorp collected additional delineation samples on March 1, 2024, from the four cardinal directions surrounding the release point, S-1 (west), S-2 (north), S-3 (east), and S-4 (south), as shown in Figure 2. Notification to NMOCD was provided at least two business days prior to conducting remediation and sampling work, with correspondence attached in Appendix C. Samples were collected at depths of 0.5 feet bgs, 2 feet bgs, and 4 feet bgs from each sampling point and submitted to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico for analysis of TPH following United States Environmental Protection Agency (EPA) Method 8015M/D, BTEX following EPA Method 8021B, and chloride following EPA Method 300.0.

Laboratory results indicated soil impacts were not present at sample locations S-2, S-3, or S-4; however, soil impacts above the NMOCD Closure Criteria were observed at S-1. Specifically, concentrations of BTEX, TPH, and GRO+DRO were detected in all samples from location S-1. BTEX and GRO+DRO concentrations were above the applicable Closure Criteria in all samples from location S-1. A summary of laboratory analytical results is presented in Table 1, with complete laboratory analytical reports attached as Appendix D.

EXCAVATION AND SOIL SAMPLING ACTIVITIES

Based on the delineation sampling activities described above, Hilcorp excavated soil from the Site to remove impacts resulting from the release and indicated by S-1 sample results. Hilcorp retained Ensolum to perform excavation oversight on May 29, 2024, and included field screening and closure soil sampling activities. The NMOCD and BLM were notified at least two business days prior to commencing on-Site activities (Appendix C). During excavation activities, an Ensolum geologist field screened soil for total volatile organic compounds (VOCs) using a calibrated photoionization detector (PID) and inspected the soil for petroleum hydrocarbon staining and odors to guide excavation and closure sampling.

Once field screening indicated impacted soil had been removed, five-point composite soil samples were collected from the floor (FW-01 and FW-02) and sidewalls (SW-01 through SW-04) of the excavation at a frequency not exceeding 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. The soil samples were placed into laboratory provided containers and transported under proper chain of custody procedures to Eurofins for analysis of TPH, BTEX, and chloride by the same methods described above. Sample locations are shown in Figure 2.

Analytical results from the excavation indicated concentrations of all COCs were compliant with NMOCD Table I Closure Criteria, as well as the reclamation requirement in all confirmation samples. In total, approximately 96 cubic yards of soil were excavated. Soil sample results are summarized in Table 1, with complete laboratory analytical reports attached as Appendix D. Photographs taken during field activities are attached as Appendix B.

CLOSURE REQUEST

Excavation and sampling activities were conducted at the Site to address the release of produced water discovered on June 26, 2023. Laboratory analytical results for the excavation confirmation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and the reclamation requirement. As such, no further remediation is required. Excavation of impacted soil has mitigated impacts at this Site and these remedial actions have been protective of human health, the environment, and groundwater. Hilcorp respectfully requests closure for Incident Number nAPP2317839684.

Hilcorp Energy Company
Remediation Report and Closure Request
San Juan 28-6 Unit 114M

Page 4

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

Sincerely,
Ensolum, LLC



Sidney Mahanay
Project Geologist
(979) 877-8887
smahanay@ensolum.com



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

Attachments:

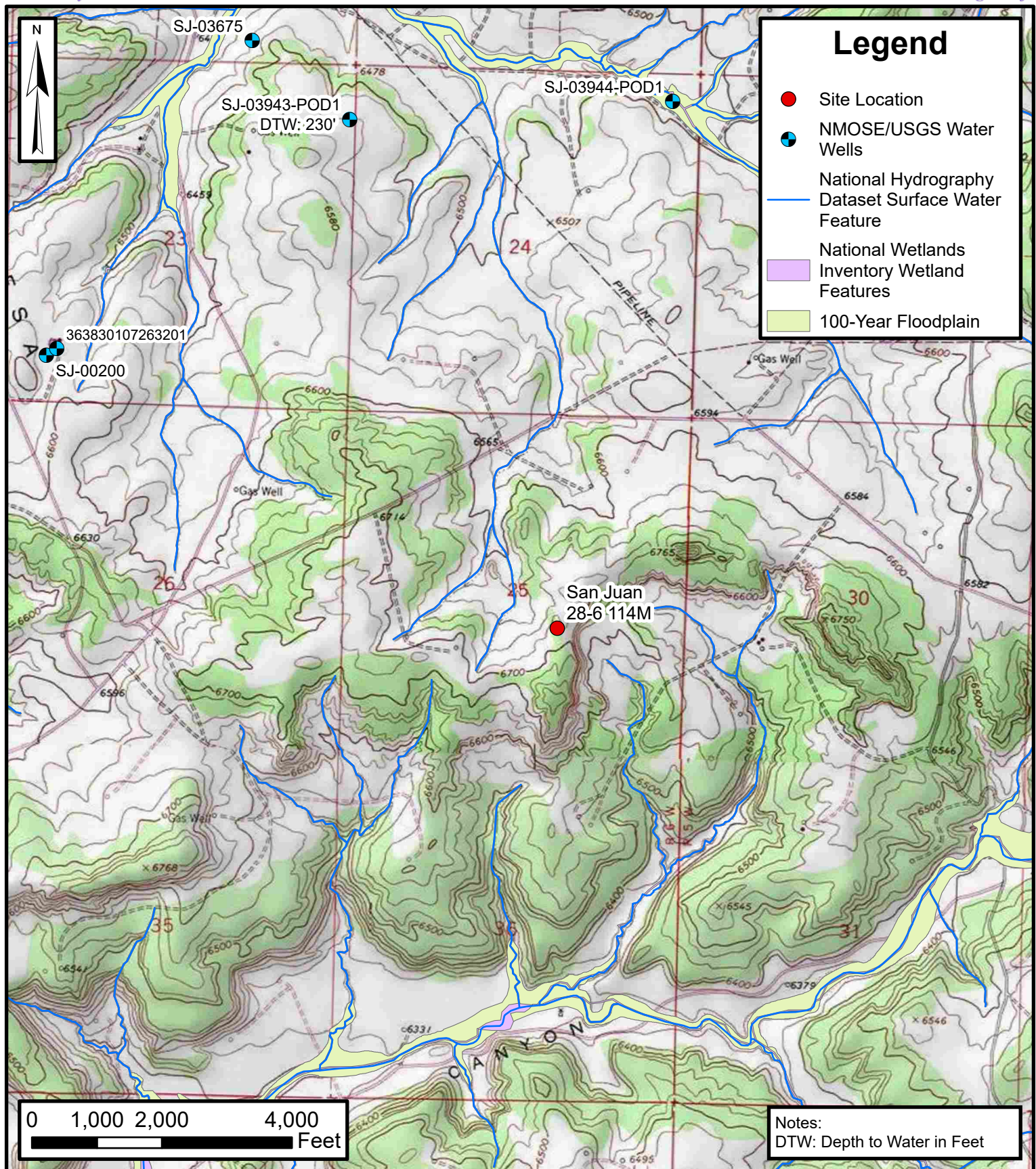
Figure 1 Site Location Map
Figure 2 Excavation Soil Sample Locations

Table 1 Soil Sample Analytical Results

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



FIGURES



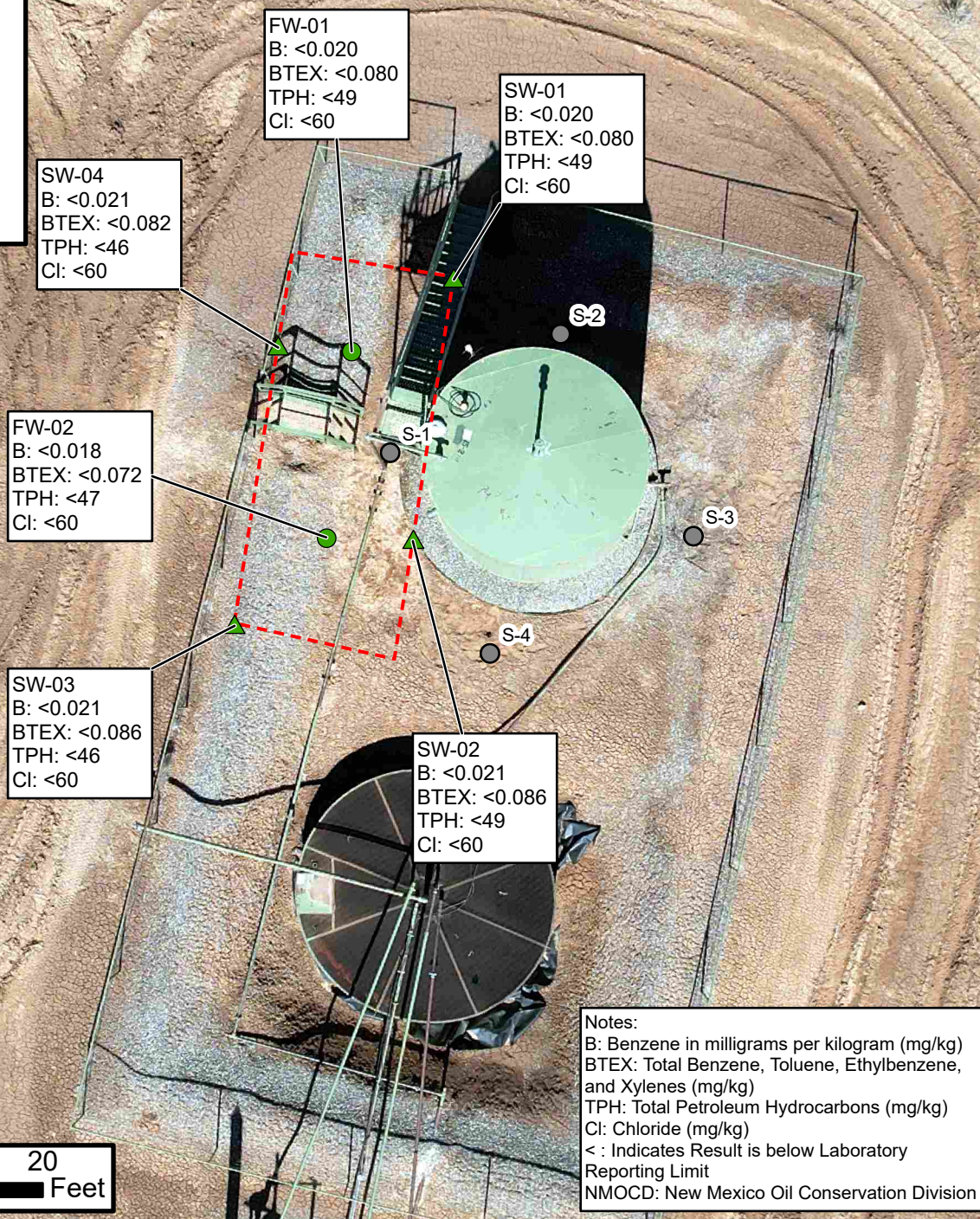
Site Location Map

San Juan 28-6 Unit 114M
Hilcorp Energy Company
Unit J of Section 25, T28N, R6W
36.63046, -107.41571
Rio Arriba County, New Mexico

FIGURE
1

Legend

- March 1, 2024
Delineation Sample
Locations
- May 29, 2024
Excavation Floor
Sample in Compliance
with NMOCD Closure
Criteria
- ▲ May 29, 2024
Excavation Sidewall
Sample in Compliance
with NMOCD Closure
Criteria
- Excavation Extent



Excavation Soil Sample Locations

San Juan 28-6 Unit 114M
Hilcorp Energy Company
Unit J of Section 25, T28N, R6W
36.63046, -107.41571
Rio Arriba County, New Mexico

FIGURE
2





TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 San Juan 28-6 Unit 114M
 Hilcorp Energy Company
 Rio Arriba County, New Mexico

Sample Identification	Date	Depth (feet bgs)	PID (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	DRO + GRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			NE	10	NE	NE	NE	50	NE	NE	1,000	NE	2,500	20,000
June 2023 Initial Sampling														
S-1	6/30/2023	0 - 0.5	-	0.19	0.82	0.096	1.0	2.106	14	< 8.9	14	< 44	14	< 60
March 2024 Delineation Samples														
S-1	3/1/2024	0 - 0.5	-	1.3	30	8.5	170	209.8	1,700	1,700	3,400	410	3,810	< 60
S-1	3/1/2024	2	-	2.8	77	20	280	379.8	2,900	1,200	4,100	200	4,300	< 60
S-1	3/1/2024	4	-	1.6	31	5.7	160	198.3	1,800	440	2,240	71	2,311	< 60
S-2	3/1/2024	0 - 0.5	-	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	< 4.9	< 9.3	< 9.3	< 46	< 46	< 60
S-2	3/1/2024	2	-	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	< 4.8	< 8.9	< 8.9	< 45	< 45	65
S-2	3/1/2024	4	-	< 0.024	< 0.047	< 0.047	< 0.094	< 0.094	< 4.7	< 9.2	< 9.2	< 46	< 46	< 60
S-3	3/1/2024	0 - 0.5	-	< 0.023	< 0.046	< 0.046	< 0.091	< 0.091	< 4.6	< 9.6	< 9.6	< 48	< 48	< 60
S-3	3/1/2024	2	-	< 0.024	< 0.049	< 0.049	< 0.097	< 0.097	< 4.9	160	160	68	228	< 60
S-3	3/1/2024	4	-	< 0.024	< 0.048	< 0.048	< 0.095	< 0.095	< 4.8	< 9.0	< 9.0	< 45	< 45	< 60
S-4	3/1/2024	0 - 0.5	-	< 0.023	< 0.046	< 0.046	< 0.091	< 0.091	< 4.6	< 9.2	< 9.2	< 46	< 46	< 60
S-4	3/1/2024	2	-	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	< 4.8	< 9.5	< 9.5	< 48	< 48	< 60
S-4	3/1/2024	4	-	< 0.023	< 0.046	< 0.046	< 0.092	< 0.092	< 4.6	< 9.5	< 9.5	< 47	< 47	< 60
May 2024 Excavation Confirmation Samples														
SW-01	5/29/2024	0 - 11	96	< 0.020	< 0.040	< 0.040	< 0.080	< 0.080	< 4.0	< 9.8	< 9.8	< 49	< 49	< 60
SW-02	5/29/2024	0 - 11	12	< 0.021	< 0.043	< 0.043	< 0.086	< 0.086	< 4.3	< 9.9	< 9.9	< 49	< 49	< 60
SW-03	5/29/2024	0 - 11	58	< 0.021	< 0.043	< 0.043	< 0.086	< 0.086	< 4.3	< 9.2	< 9.2	< 46	< 46	< 60
SW-04	5/29/2024	0 - 11	63	< 0.021	< 0.041	< 0.041	< 0.082	< 0.082	< 4.1	< 9.1	< 9.1	< 46	< 46	< 60
FW-01	5/29/2024	11	36	< 0.020	< 0.040	< 0.040	< 0.080	< 0.080	< 4.0	< 9.9	< 9.9	< 49	< 49	< 60
FW-02	5/29/2024	11	27	< 0.018	< 0.036	< 0.036	< 0.072	< 0.072	< 3.6	< 9.4	< 9.4	< 47	< 47	< 60

Notes:

bgs: Below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

mg/kg: Milligrams per kilogram

NE: Not Established

NMOCD: New Mexico Oil Conservation Division

PID: Photoionization detector

ppm: Parts per million

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

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



APPENDIX A

NMOSE Point of Diversion Summary



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER)				OSE FILE NUMBER(S) SJ-4033			
	WELL OWNER NAME(S) Don Schreiber				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 9610 HWY 64				CITY Blanco		STATE NM	ZIP 87412
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 36	MINUTES 38	SECONDS 18.60 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 107	26	56.80 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS								
2. OPTIONAL	(2.5 ACRE) 1/4	(10 ACRE) 1/4	(40 ACRE) 1/4	(160 ACRE) 1/4	SECTION	TOWNSHIP <input type="checkbox"/> NORTH <input type="checkbox"/> SOUTH	RANGE <input type="checkbox"/> EAST <input type="checkbox"/> WEST	
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY					MAP NUMBER	TRACT NUMBER	
3. DRILLING INFORMATION	LICENSE NUMBER WD 717		NAME OF LICENSED DRILLER Terry Hood			NAME OF WELL DRILLING COMPANY Western Water Wells		
	DRILLING STARTED 6/25/13		DRILLING ENDED 7/3/13		DEPTH OF COMPLETED WELL (FT) 430	BORE HOLE DEPTH (FT) 430	DEPTH WATER FIRST ENCOUNTERED (FT) 179	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 179		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (FT)		BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
	FROM	TO						
	0	316	8	SDR 21 PVC	Spline	5		
	316	430	8	SDR 21 PVC		5		.060
4. WATER BEARING STRATA	DEPTH (FT)		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)			YIELD (GPM)	
	FROM	TO						
	140	180	40	Blue Sandstone			.1	
	225	285	60	Sandstone			1	
	360	430	70	Blue Sandstone			9	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA					TOTAL ESTIMATED WELL YIELD (GPM) 10.1			

FOR OSE INTERNAL USE

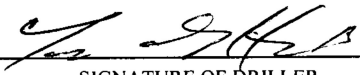
WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	SJ-4033 POD 1	POD NUMBER	1	TRN NUMBER	532273
LOCATION	28N. 06W. 27. 221				PAGE 1 OF 2

5. SEAL AND PUMP	TYPE OF PUMP: <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> JET <input type="checkbox"/> NO PUMP – WELL NOT EQUIPPED <input type="checkbox"/> TURBINE <input type="checkbox"/> CYLINDER <input type="checkbox"/> OTHER – SPECIFY:						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		4	20				

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
	FROM	TO			
	0	9	9	Clay	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	9	20	11	White Sandstone	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	20	60	40	Sand Shale	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	60	80	20	Brown Sandstone	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	80	100	20	Sandy Shale	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	100	140	40	Sandstone	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	140	180	40	Blue Sandstone	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	180	225	45	Blue Sandy Shale	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	225	285	60	Sandstone	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	285	335	50	Sandy Shale	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	335	360	25	Red Shale	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	360	430	70	Blue Sandstone	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL					

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input checked="" type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER – SPECIFY:	
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.	
	ADDITIONAL STATEMENTS OR EXPLANATIONS:		

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRILLER	7/9/13 DATE

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	SJ-4033 POD1	POD NUMBER	1	TRN NUMBER	
LOCATION	28N. OLW. 21.221				PAGE 2 OF 2



APPENDIX B

Photographic Log



Photographic Log
Hilcorp Energy Company
San Juan 28-6 114M
Rio Arriba County, New Mexico



Photograph: 1 Date: 6/26/2023
Description: Initial S-1 sample location (most concentrated point of release)
View: Bottom of BGT, East



Photograph: 2 Date: 6/26/2023
Description: Initial S-1 sample location (most concentrated point of release)
View: Bottom of BGT, East



Photograph: 3 Date: 5/29/2024
Description: Excavation relative to infrastructure
View: Southwest



Photograph: 4 Date: 5/29/2024
Description: Excavation depth
View: South



Photograph: 5
Description: Adjacent Tank
View: Southwest

Date: 5/29/2024



Photograph: 6
Description: East sidewall
View: West

Date: 5/29/2024



Photograph: 7
Description: Excavation activities
View: West

Date: 5/29/2024



Photograph: 8
Description: Excavation activities and stockpile
View: Northwest

Date: 5/29/2024



APPENDIX C

Agency Correspondence

From: OCDOnline@state.nm.us
To: [Samantha Grabert](#)
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 317463
Date: Monday, February 26, 2024 1:01:40 PM

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

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#) nAPP2317839684.

The sampling event is expected to take place:

When: 03/01/2024 @ 10:00

Where: J-25-28N-06W 1975 FSL 1975 FEL (36.6303978,-107.416214)

Additional Information: Brandon Sinclair: 505-386-8996

Additional Instructions: Lat: 36.63046, Long: -107.41571

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: 347739
Date: Friday, May 24, 2024 10:25:37 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#) nAPP2317839684.

The sampling event is expected to take place:

When: 05/29/2024 @ 09:00

Where: J-25-28N-06W 1975 FSL 1975 FEL (36.6303978,-107.416214)

Additional Information: Contact PM: Sidney Mahanay - 979-877-8887

Additional Instructions: Hilcorp San Juan 28-6 Unit 114M Well Pad, Site Coordinates 36.63046 , -107.41571

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: [Samantha Grabert](#)
Subject: Re: [EXTERNAL] nAPP2317839684 -San Juan 28-6 Unit 114M Reporting Extension Request
Date: Thursday, April 18, 2024 9:12:41 AM
Attachments: [Outlook-jsitkl2.png](#)

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Good morning Samantha,

Your 45-day time extension request is approved. Remediation Due date has been updated to June 3, 2024.

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

Regards,

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



From: Samantha Grabert <Samantha.Grabert@hilcorp.com>
Sent: Wednesday, April 17, 2024 9:41 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: [EXTERNAL] nAPP2317839684 -San Juan 28-6 Unit 114M Reporting Extension Request

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

Good Morning Nelson,

As requested & previously discussed, we collected additional samples at the San Juan 28-6 Unit 114M site (Incident # nAPP2317839684); however, one of the sample locations came back elevated. As such, we are in the process of delineating vertically and excavating impacted material. Weather and road conditions caused a delay in this work, but we anticipate wrapping it up soon. As such, I would like to request a 45-day extension to the reporting deadline to complete this effort. Please let me know if you have any questions or require additional information and thank you again for your assistance with this matter.

Thanks,

Samantha Grabert



713-757-7116 (Office)

337-781-9630 (Mobile)

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

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

From: [Velez, Nelson, EMNRD](#)
To: [Stuart Hyde](#)
Cc: [Samantha Grabert](#); [Sidney Mahanay](#)
Subject: Re: [EXTERNAL] NAPP2317839684 SAN JUAN 28-6 UNIT 114M - Reporting Extension Request
Date: Friday, May 31, 2024 2:22:34 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[Outlook-kbuvbzrm.png](#)

[**EXTERNAL EMAIL**]

Stuart,

Your 30-day time extension request is approved. Remediation Due date has been updated to July 3, 2024.

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

Regards,

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



From: Stuart Hyde <shyde@ensolum.com>
Sent: Friday, May 31, 2024 1:30 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Samantha Grabert <Samantha.Grabert@hilcorp.com>; Sidney Mahanay <smahanay@ensolum.com>
Subject: [EXTERNAL] NAPP2317839684 SAN JUAN 28-6 UNIT 114M - Reporting Extension Request

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

Nelson,

On behalf of Hilcorp Energy Company, Ensolum is requesting an extension to the June 3, 2024

reporting deadline for the San Juan 28-6 Unit 114M site located in Rio Arriba County (coordinates 36.63046 , -107.41571). At this time, Hilcorp has completed the excavation and we just received analytical results indicating that the sidewalls and floor are all clean and ready to close. We are requesting a 30-day extension in order to complete the closure report for the site. If approved, the new deadline would be Wednesday July 3, 2024. Please reach out with any questions or comments. Thanks and have a great weekend.



Stuart Hyde, PG

(Licensed in WA/TX)

Senior Managing Geologist

970-903-1607

[Ensolum, LLC](#)

in f X

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



APPENDIX D

Laboratory Analytical Reports



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 10, 2023

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

RE: SJ 28 6 114M

OrderNo.: 2307003

Dear Samantha Grabert:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/1/2023 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 don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

CLIENT: HILCORP ENERGY

Client Sample ID: S-1

Project: SJ 28 6 114M

Collection Date: 6/30/2023 2:20:00 PM

Lab ID: 2307003-001

Matrix: SOIL

Received Date: 7/1/2023 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	7/5/2023 5:49:10 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/5/2023 5:49:10 PM
Surr: DNOP	86.8	69-147		%Rec	1	7/5/2023 5:49:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	14	4.9		mg/Kg	1	7/5/2023 6:49:00 PM
Surr: BFB	176	15-244		%Rec	1	7/5/2023 6:49:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	0.19	0.024		mg/Kg	1	7/5/2023 6:49:00 PM
Toluene	0.82	0.049		mg/Kg	1	7/5/2023 6:49:00 PM
Ethylbenzene	0.096	0.049		mg/Kg	1	7/5/2023 6:49:00 PM
Xylenes, Total	1.0	0.098		mg/Kg	1	7/5/2023 6:49:00 PM
Surr: 4-Bromofluorobenzene	108	39.1-146		%Rec	1	7/5/2023 6:49:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/7/2023 2:00:27 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 Quantitative 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#: 2307003
10-Jul-23

Client: HILCORP ENERGY
Project: SJ 28 6 114M

Sample ID: MB-76052		SampType: MBLK		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 76052		RunNo: 98004						
Prep Date: 7/7/2023		Analysis Date: 7/7/2023		SeqNo: 3566373		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-76052		SampType: LCS		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 76052		RunNo: 98004						
Prep Date: 7/7/2023		Analysis Date: 7/7/2023		SeqNo: 3566374		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative 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

Page 2 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307003

10-Jul-23

Client: HILCORP ENERGY

Project: SJ 28 6 114M

Sample ID: LCS-75974	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75974		RunNo: 97944							
Prep Date: 7/3/2023	Analysis Date: 7/5/2023		SeqNo: 3563566		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.2	61.9	130			
Surr: DNOP	4.8		5.000		95.0	69	147			

Sample ID: MB-75974	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75974		RunNo: 97944							
Prep Date: 7/3/2023	Analysis Date: 7/5/2023		SeqNo: 3563568		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	9.2		10.00		91.6	69	147			

Sample ID: 2307003-001AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: S-1	Batch ID: 75974		RunNo: 97944							
Prep Date: 7/3/2023	Analysis Date: 7/5/2023		SeqNo: 3563600		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	8.4	42.19	0	78.0	54.2	135			
Surr: DNOP	3.3		4.219		79.3	69	147			

Sample ID: 2307003-001AMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: S-1	Batch ID: 75974		RunNo: 97944							
Prep Date: 7/3/2023	Analysis Date: 7/5/2023		SeqNo: 3563601		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.5	47.66	0	94.5	54.2	135	31.2	29.2	R
Surr: DNOP	4.4		4.766		92.2	69	147	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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

Page 3 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307003

10-Jul-23

Client: HILCORP ENERGY

Project: SJ 28 6 114M

Sample ID: mb-75968	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 75968	RunNo: 97913								
Prep Date: 7/3/2023	Analysis Date: 7/5/2023	SeqNo: 3563344	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.2	15	244			

Sample ID: lcs-75968	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 75968	RunNo: 97913								
Prep Date: 7/3/2023	Analysis Date: 7/5/2023	SeqNo: 3563500	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.4	70	130			
Surr: BFB	2000		1000		202	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 Quantitative 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#: 2307003

10-Jul-23

Client: HILCORP ENERGY

Project: SJ 28 6 114M

Sample ID: mb-75968	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 75968	RunNo: 97913								
Prep Date: 7/3/2023	Analysis Date: 7/5/2023	SeqNo: 3563412	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	0.93		1.000		92.8	39.1	146			

Sample ID: lcs-75968	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 75968	RunNo: 97913								
Prep Date: 7/3/2023	Analysis Date: 7/5/2023	SeqNo: 3563501	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.2	70	130			
Toluene	0.86	0.050	1.000	0	86.0	70	130			
Ethylbenzene	0.87	0.050	1.000	0	87.2	70	130			
Xylenes, Total	2.6	0.10	3.000	0	86.9	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.5	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 Quantitative 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



Hall Environmental Analysis Laboratory
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: 2307003

RcptNo: 1

Received By: Cheyenne Cason

7/1/2023 8:10:00 AM

Chad

Completed By: Cheyenne Cason

7/1/2023 8:31:48 AM

Chad

Reviewed By: *Jan 4/3/23*

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? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by *Chad* 7/1/23

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.4	Good	Yes	Morty		

Chain-of-Custody Record

Client: Hilcorp

Mailing Address:

Phone #:

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

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Project #:

Project Manager:

Sampler: Brandon Sinclair

On Ice: ☒ Yes ☐ No *M...*

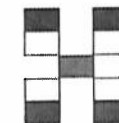
of Coolers: (

Cooler Temp (including CF): $5.4 - 0 = 5.4$ ($^{\circ}\text{C}$)

Container Type and #	Preservative Type
-------------------------	----------------------

HEAL No.

001



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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, NO₃, NO₂, PO₄, SO₄~~

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Date:	Time:	Relinquished by:
-------	-------	------------------

6-30 11.55 42 d

Date:	Time:	Relinquished by:
-------	-------	------------------

Received by:	Via:
--------------	------

Received by: Via:

Date	Time
------	------

Date	Time
------	------

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.



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

March 13, 2024

Samantha Grabert

HILCORP ENERGY

PO Box 4700

Farmington, NM 87499

TEL: (505) 564-0733

FAX

RE: SJ 28 6 Unit 114M

OrderNo.: 2403057

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 12 sample(s) on 3/2/2024 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-1 0-6"

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 10:30:00 AM

Lab ID: 2403057-001

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	1700	19		mg/Kg	2	3/6/2024 2:05:58 PM
Motor Oil Range Organics (MRO)	410	94		mg/Kg	2	3/6/2024 2:05:58 PM
Surr: DNOP	98.2	61.2-134		%Rec	2	3/6/2024 2:05:58 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	1700	240		mg/Kg	50	3/5/2024 6:57:09 PM
Surr: BFB	210	15-244		%Rec	50	3/5/2024 6:57:09 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	1.3	1.2		mg/Kg	50	3/5/2024 6:57:09 PM
Toluene	30	2.4		mg/Kg	50	3/5/2024 6:57:09 PM
Ethylbenzene	8.5	2.4		mg/Kg	50	3/5/2024 6:57:09 PM
Xylenes, Total	170	4.7		mg/Kg	50	3/5/2024 6:57:09 PM
Surr: 4-Bromofluorobenzene	102	39.1-146		%Rec	50	3/5/2024 6:57:09 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	3/6/2024 4:34:02 AM

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-1 2'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 10:40:00 AM

Lab ID: 2403057-002

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	1200	18		mg/Kg	2	3/6/2024 3:17:16 PM
Motor Oil Range Organics (MRO)	200	92		mg/Kg	2	3/6/2024 3:17:16 PM
Surr: DNOP	101	61.2-134		%Rec	2	3/6/2024 3:17:16 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	2900	250		mg/Kg	50	3/5/2024 7:20:47 PM
Surr: BFB	265	15-244	S	%Rec	50	3/5/2024 7:20:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	2.8	1.2		mg/Kg	50	3/5/2024 7:20:47 PM
Toluene	77	2.5		mg/Kg	50	3/5/2024 7:20:47 PM
Ethylbenzene	20	2.5		mg/Kg	50	3/5/2024 7:20:47 PM
Xylenes, Total	280	5.0		mg/Kg	50	3/5/2024 7:20:47 PM
Surr: 4-Bromofluorobenzene	106	39.1-146		%Rec	50	3/5/2024 7:20:47 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	3/6/2024 5:11:03 AM

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-1 4'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 10:55:00 AM

Lab ID: 2403057-003

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	440	9.0		mg/Kg	1	3/6/2024 3:41:02 PM
Motor Oil Range Organics (MRO)	71	45		mg/Kg	1	3/6/2024 3:41:02 PM
Surr: DNOP	111	61.2-134		%Rec	1	3/6/2024 3:41:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	1800	240		mg/Kg	50	3/5/2024 7:44:19 PM
Surr: BFB	227	15-244		%Rec	50	3/5/2024 7:44:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	1.6	1.2		mg/Kg	50	3/5/2024 7:44:19 PM
Toluene	31	2.4		mg/Kg	50	3/5/2024 7:44:19 PM
Ethylbenzene	5.7	2.4		mg/Kg	50	3/5/2024 7:44:19 PM
Xylenes, Total	160	4.8		mg/Kg	50	3/5/2024 7:44:19 PM
Surr: 4-Bromofluorobenzene	102	39.1-146		%Rec	50	3/5/2024 7:44:19 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	3/6/2024 5:23:24 AM

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-2 0-6"

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 11:05:00 AM

Lab ID: 2403057-004

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/6/2024 4:04:51 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/6/2024 4:04:51 PM
Surr: DNOP	95.6	61.2-134		%Rec	1	3/6/2024 4:04:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2024 8:07:53 PM
Surr: BFB	100	15-244		%Rec	1	3/5/2024 8:07:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/5/2024 8:07:53 PM
Toluene	ND	0.049		mg/Kg	1	3/5/2024 8:07:53 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2024 8:07:53 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2024 8:07:53 PM
Surr: 4-Bromofluorobenzene	91.7	39.1-146		%Rec	1	3/5/2024 8:07:53 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 2:23:01 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-2 2'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 11:15:00 AM

Lab ID: 2403057-005

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	3/5/2024 7:44:06 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/5/2024 7:44:06 PM
Surr: DNOP	132	61.2-134		%Rec	1	3/5/2024 7:44:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2024 9:19:07 PM
Surr: BFB	101	15-244		%Rec	1	3/5/2024 9:19:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/5/2024 9:19:07 PM
Toluene	ND	0.048		mg/Kg	1	3/5/2024 9:19:07 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2024 9:19:07 PM
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2024 9:19:07 PM
Surr: 4-Bromofluorobenzene	94.2	39.1-146		%Rec	1	3/5/2024 9:19:07 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	65	60		mg/Kg	20	3/7/2024 3:00:03 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-2 4'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 11:30:00 AM

Lab ID: 2403057-006

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/5/2024 8:08:41 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/5/2024 8:08:41 PM
Surr: DNOP	104	61.2-134		%Rec	1	3/5/2024 8:08:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2024 10:06:45 PM
Surr: BFB	101	15-244		%Rec	1	3/5/2024 10:06:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/5/2024 10:06:45 PM
Toluene	ND	0.047		mg/Kg	1	3/5/2024 10:06:45 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2024 10:06:45 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/5/2024 10:06:45 PM
Surr: 4-Bromofluorobenzene	95.3	39.1-146		%Rec	1	3/5/2024 10:06:45 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 3:12:23 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-3 0-6"

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 11:40:00 AM

Lab ID: 2403057-007

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/5/2024 8:21:05 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/5/2024 8:21:05 PM
Surr: DNOP	94.8	61.2-134		%Rec	1	3/5/2024 8:21:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/5/2024 10:30:31 PM
Surr: BFB	101	15-244		%Rec	1	3/5/2024 10:30:31 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	3/5/2024 10:30:31 PM
Toluene	ND	0.046		mg/Kg	1	3/5/2024 10:30:31 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/5/2024 10:30:31 PM
Xylenes, Total	ND	0.091		mg/Kg	1	3/5/2024 10:30:31 PM
Surr: 4-Bromofluorobenzene	95.0	39.1-146		%Rec	1	3/5/2024 10:30:31 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 3:24:45 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 Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-3 2'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 11:50:00 AM

Lab ID: 2403057-008

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	160	9.5		mg/Kg	1	3/5/2024 8:33:21 PM
Motor Oil Range Organics (MRO)	68	47		mg/Kg	1	3/5/2024 8:33:21 PM
Surr: DNOP	110	61.2-134		%Rec	1	3/5/2024 8:33:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2024 11:18:03 PM
Surr: BFB	105	15-244		%Rec	1	3/5/2024 11:18:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/5/2024 11:18:03 PM
Toluene	ND	0.049		mg/Kg	1	3/5/2024 11:18:03 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2024 11:18:03 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/5/2024 11:18:03 PM
Surr: 4-Bromofluorobenzene	99.9	39.1-146		%Rec	1	3/5/2024 11:18:03 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 4:01:46 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-3 4'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 12:10:00 PM

Lab ID: 2403057-009

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	3/5/2024 8:45:44 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/5/2024 8:45:44 PM
Surr: DNOP	97.0	61.2-134		%Rec	1	3/5/2024 8:45:44 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2024 11:41:48 PM
Surr: BFB	100	15-244		%Rec	1	3/5/2024 11:41:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/5/2024 11:41:48 PM
Toluene	ND	0.048		mg/Kg	1	3/5/2024 11:41:48 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2024 11:41:48 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/5/2024 11:41:48 PM
Surr: 4-Bromofluorobenzene	93.8	39.1-146		%Rec	1	3/5/2024 11:41:48 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 4:14:07 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-4 0-6"

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 12:15:00 PM

Lab ID: 2403057-010

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/5/2024 8:58:00 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/5/2024 8:58:00 PM
Surr: DNOP	101	61.2-134		%Rec	1	3/5/2024 8:58:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/6/2024 12:05:30 AM
Surr: BFB	97.4	15-244		%Rec	1	3/6/2024 12:05:30 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	3/6/2024 12:05:30 AM
Toluene	ND	0.046		mg/Kg	1	3/6/2024 12:05:30 AM
Ethylbenzene	ND	0.046		mg/Kg	1	3/6/2024 12:05:30 AM
Xylenes, Total	ND	0.091		mg/Kg	1	3/6/2024 12:05:30 AM
Surr: 4-Bromofluorobenzene	92.1	39.1-146		%Rec	1	3/6/2024 12:05:30 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 4:26:27 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-4 2'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 12:25:00 PM

Lab ID: 2403057-011

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 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	3/5/2024 9:10:14 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/5/2024 9:10:14 PM
Surr: DNOP	103	61.2-134		%Rec	1	3/5/2024 9:10:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/6/2024 12:29:12 AM
Surr: BFB	99.0	15-244		%Rec	1	3/6/2024 12:29:12 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	3/6/2024 12:29:12 AM
Toluene	ND	0.048		mg/Kg	1	3/6/2024 12:29:12 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/6/2024 12:29:12 AM
Xylenes, Total	ND	0.096		mg/Kg	1	3/6/2024 12:29:12 AM
Surr: 4-Bromofluorobenzene	93.7	39.1-146		%Rec	1	3/6/2024 12:29:12 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 4:38:47 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 Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2403057**

Date Reported: **3/13/2024**

CLIENT: HILCORP ENERGY

Client Sample ID: S-4 4'

Project: SJ 28 6 Unit 114M

Collection Date: 3/1/2024 12:40:00 PM

Lab ID: 2403057-012

Matrix: SOIL

Received Date: 3/2/2024 8:00:00 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	3/5/2024 9:22:31 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/5/2024 9:22:31 PM
Surr: DNOP	110	61.2-134		%Rec	1	3/5/2024 9:22:31 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/6/2024 12:52:51 AM
Surr: BFB	98.5	15-244		%Rec	1	3/6/2024 12:52:51 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	3/6/2024 12:52:51 AM
Toluene	ND	0.046		mg/Kg	1	3/6/2024 12:52:51 AM
Ethylbenzene	ND	0.046		mg/Kg	1	3/6/2024 12:52:51 AM
Xylenes, Total	ND	0.092		mg/Kg	1	3/6/2024 12:52:51 AM
Surr: 4-Bromofluorobenzene	92.7	39.1-146		%Rec	1	3/6/2024 12:52:51 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/7/2024 4:51:07 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 Quantitative 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#: 2403057

13-Mar-24

Client: HILCORP ENERGY

Project: SJ 28 6 Unit 114M

Sample ID: MB-80797	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 80797		RunNo: 103524							
Prep Date: 3/5/2024	Analysis Date: 3/5/2024		SeqNo: 3831345		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80797	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 80797		RunNo: 103524							
Prep Date: 3/5/2024	Analysis Date: 3/5/2024		SeqNo: 3831347		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.9	90	110			

Sample ID: MB-80821	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 80821		RunNo: 103588							
Prep Date: 3/6/2024	Analysis Date: 3/7/2024		SeqNo: 3833988		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80821	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 80821		RunNo: 103588							
Prep Date: 3/6/2024	Analysis Date: 3/7/2024		SeqNo: 3833989		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.7	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 Quantitative 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#: 2403057

13-Mar-24

Client: HILCORP ENERGY

Project: SJ 28 6 Unit 114M

Sample ID: MB-80779	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 80779		RunNo: 103530							
Prep Date: 3/4/2024	Analysis Date: 3/5/2024		SeqNo: 3831738		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	61.2	134			

Sample ID: LCS-80779	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 80779		RunNo: 103530							
Prep Date: 3/4/2024	Analysis Date: 3/5/2024		SeqNo: 3831739		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		104	61.2	134			

Sample ID: MB-80788	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 80788		RunNo: 103530							
Prep Date: 3/5/2024	Analysis Date: 3/5/2024		SeqNo: 3831773		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		111	61.2	134			

Sample ID: LCS-80788	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 80788		RunNo: 103530							
Prep Date: 3/5/2024	Analysis Date: 3/5/2024		SeqNo: 3831774		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	90.6	59.7	135			
Surr: DNOP	5.4		5.000		108	61.2	134			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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#: 2403057

13-Mar-24

Client: HILCORP ENERGY

Project: SJ 28 6 Unit 114M

Sample ID: lcs-80774	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 80774			RunNo: 103517						
Prep Date: 3/4/2024	Analysis Date: 3/5/2024			SeqNo: 3831419		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	70	130			
Surr: BFB	2200		1000		217	15	244			

Sample ID: mb-80774	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 80774			RunNo: 103517						
Prep Date: 3/4/2024	Analysis Date: 3/5/2024			SeqNo: 3831421		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	15	244			

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 Quantitative 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#: 2403057

13-Mar-24

Client: HILCORP ENERGY

Project: SJ 28 6 Unit 114M

Sample ID: LCS-80774	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 80774		RunNo: 103517							
Prep Date: 3/4/2024	Analysis Date: 3/5/2024		SeqNo: 3831458		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.025	1.000	0	71.8	70	130			
Toluene	0.76	0.050	1.000	0	75.6	70	130			
Ethylbenzene	0.78	0.050	1.000	0	78.2	70	130			
Xylenes, Total	2.4	0.10	3.000	0	78.8	70	130			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.0	39.1	146			

Sample ID: mb-80774	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 80774		RunNo: 103517							
Prep Date: 3/4/2024	Analysis Date: 3/5/2024		SeqNo: 3831460		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	0.98		1.000		98.1	39.1	146			

Sample ID: 2403057-004ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: S-2 0-6"	Batch ID: 80774		RunNo: 103517							
Prep Date: 3/4/2024	Analysis Date: 3/5/2024		SeqNo: 3831500		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9794	0	83.7	70	130			
Toluene	0.87	0.049	0.9794	0	89.0	70	130			
Ethylbenzene	0.92	0.049	0.9794	0	93.5	70	130			
Xylenes, Total	2.8	0.098	2.938	0.02074	93.2	70	130			
Surr: 4-Bromofluorobenzene	0.98		0.9794		100	39.1	146			

Sample ID: 2403057-004amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: S-2 0-6"	Batch ID: 80774		RunNo: 103517							
Prep Date: 3/4/2024	Analysis Date: 3/5/2024		SeqNo: 3831501		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.025	0.9804	0	80.7	70	130	3.56	20	
Toluene	0.85	0.049	0.9804	0	87.1	70	130	2.11	20	
Ethylbenzene	0.90	0.049	0.9804	0	92.1	70	130	1.42	20	
Xylenes, Total	2.7	0.098	2.941	0.02074	92.7	70	130	0.411	20	
Surr: 4-Bromofluorobenzene	0.90		0.9804		91.9	39.1	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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

Sample Log-In Check List

Client Name: **HILCORP ENERGY**

Work Order Number: **2403057**

RcptNo: **1**

Received By: **Cheyenne Cason**

3/2/2024 8:00:00 AM

Chad

Completed By: **Cheyenne Cason**

3/2/2024 8:35:55 AM

Chad

Reviewed By: **DAD 3/2/24**

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 $>0^{\circ}\text{C}$ 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: *one 3/2/24*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good	Yes	Yogi		
2	4.8	Good	Yes	Yogi		



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/4/2024 3:23:52 PM

JOB DESCRIPTION

SJ 28-6 114M

JOB NUMBER

885-5276-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization



Generated
6/4/2024 3:23:52 PM

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

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Laboratory Job ID: 885-5276-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	12
QC Association Summary	16
Lab Chronicle	18
Certification Summary	20
Chain of Custody	21
Receipt Checklists	22



Definitions/Glossary

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

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

Case Narrative

Client: Hilcorp Energy
Project: SJ 28-6 114M

Job ID: 885-5276-1

Job ID: 885-5276-1Eurofins Albuquerque

Job Narrative
885-5276-1

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 5/30/2024 6:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°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: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: SW-01

Lab Sample ID: 885-5276-1

Date Collected: 05/29/24 12:00

Matrix: Solid

Date Received: 05/30/24 06:55

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		4.0	mg/Kg		05/30/24 09:15	05/30/24 23:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		35 - 166			05/30/24 09:15	05/30/24 23:08	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.020	mg/Kg		05/30/24 09:15	05/30/24 23:08	1	
Ethylbenzene	ND		0.040	mg/Kg		05/30/24 09:15	05/30/24 23:08	1	
Toluene	ND		0.040	mg/Kg		05/30/24 09:15	05/30/24 23:08	1	
Xylenes, Total	ND		0.080	mg/Kg		05/30/24 09:15	05/30/24 23:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		48 - 145			05/30/24 09:15	05/30/24 23:08	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		05/30/24 10:37	05/30/24 13:54	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 10:37	05/30/24 13:54	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	86		62 - 134			05/30/24 10:37	05/30/24 13:54	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		05/30/24 12:07	05/30/24 20:20	20	

Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: SW-02

Lab Sample ID: 885-5276-2

Date Collected: 05/29/24 12:05

Matrix: Solid

Date Received: 05/30/24 06:55

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		4.3	mg/Kg		05/30/24 09:15	05/31/24 00:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		35 - 166			05/30/24 09:15	05/31/24 00:19	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.021	mg/Kg		05/30/24 09:15	05/31/24 00:19	1	
Ethylbenzene	ND		0.043	mg/Kg		05/30/24 09:15	05/31/24 00:19	1	
Toluene	ND		0.043	mg/Kg		05/30/24 09:15	05/31/24 00:19	1	
Xylenes, Total	ND		0.086	mg/Kg		05/30/24 09:15	05/31/24 00:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		48 - 145			05/30/24 09:15	05/31/24 00:19	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		9.9	mg/Kg		05/30/24 10:37	05/30/24 14:05	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 10:37	05/30/24 14:05	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	85		62 - 134			05/30/24 10:37	05/30/24 14:05	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		05/30/24 12:07	05/30/24 20:32	20	

Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: SW-03

Lab Sample ID: 885-5276-3

Date Collected: 05/29/24 12:10

Matrix: Solid

Date Received: 05/30/24 06:55

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		4.3	mg/Kg		05/30/24 09:15	05/31/24 01:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			05/30/24 09:15	05/31/24 01:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.021	mg/Kg		05/30/24 09:15	05/31/24 01:29	1
Ethylbenzene	ND		0.043	mg/Kg		05/30/24 09:15	05/31/24 01:29	1
Toluene	ND		0.043	mg/Kg		05/30/24 09:15	05/31/24 01:29	1
Xylenes, Total	ND		0.086	mg/Kg		05/30/24 09:15	05/31/24 01:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		48 - 145			05/30/24 09:15	05/31/24 01:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		05/30/24 10:37	05/30/24 14:15	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/30/24 10:37	05/30/24 14:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			05/30/24 10:37	05/30/24 14:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/30/24 12:07	05/30/24 21:09	20

Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: SW-04
Date Collected: 05/29/24 12:15
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-4
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		4.1	mg/Kg		05/30/24 09:15	05/31/24 01:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		35 - 166			05/30/24 09:15	05/31/24 01:52	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.021	mg/Kg		05/30/24 09:15	05/31/24 01:52	1	
Ethylbenzene	ND		0.041	mg/Kg		05/30/24 09:15	05/31/24 01:52	1	
Toluene	ND		0.041	mg/Kg		05/30/24 09:15	05/31/24 01:52	1	
Xylenes, Total	ND		0.082	mg/Kg		05/30/24 09:15	05/31/24 01:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 09:15	05/31/24 01:52	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		05/30/24 10:37	05/30/24 14:26	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/30/24 10:37	05/30/24 14:26	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	89		62 - 134			05/30/24 10:37	05/30/24 14:26	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		05/30/24 12:07	05/30/24 21:22	20	

Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: FW-01

Lab Sample ID: 885-5276-5

Date Collected: 05/29/24 12:20

Matrix: Solid

Date Received: 05/30/24 06:55

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		4.0	mg/Kg		05/30/24 09:15	05/31/24 02:16		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		35 - 166			05/30/24 09:15	05/31/24 02:16		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.020	mg/Kg		05/30/24 09:15	05/31/24 02:16		1
Ethylbenzene	ND		0.040	mg/Kg		05/30/24 09:15	05/31/24 02:16		1
Toluene	ND		0.040	mg/Kg		05/30/24 09:15	05/31/24 02:16		1
Xylenes, Total	ND		0.080	mg/Kg		05/30/24 09:15	05/31/24 02:16		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		48 - 145			05/30/24 09:15	05/31/24 02:16		1
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		05/30/24 10:37	05/30/24 14:37		1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 10:37	05/30/24 14:37		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	90		62 - 134			05/30/24 10:37	05/30/24 14:37		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		05/30/24 12:07	05/30/24 21:34		20

Client Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: FW-02

Lab Sample ID: 885-5276-6

Date Collected: 05/29/24 12:25

Matrix: Solid

Date Received: 05/30/24 06:55

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		3.6	mg/Kg		05/30/24 09:15	05/31/24 02:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 09:15	05/31/24 02:39	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.018	mg/Kg		05/30/24 09:15	05/31/24 02:39	1	
Ethylbenzene	ND		0.036	mg/Kg		05/30/24 09:15	05/31/24 02:39	1	
Toluene	ND		0.036	mg/Kg		05/30/24 09:15	05/31/24 02:39	1	
Xylenes, Total	ND		0.072	mg/Kg		05/30/24 09:15	05/31/24 02:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 09:15	05/31/24 02:39	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/30/24 10:37	05/30/24 14:48	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/30/24 10:37	05/30/24 14:48	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	90		62 - 134			05/30/24 10:37	05/30/24 14:48	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		60	mg/Kg		05/30/24 12:07	05/30/24 21:46	20	

QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

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

Lab Sample ID: MB 885-5850/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5929						Prep Batch: 5850			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/30/24 09:15	05/30/24 22:45	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 09:15	05/30/24 22:45	1	

Lab Sample ID: LCS 885-5850/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5929						Prep Batch: 5850			
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)	201	S1+	35 - 166						

Lab Sample ID: 885-5276-1 MS						Client Sample ID: SW-01			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5929						Prep Batch: 5850			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		20.0	20.6		mg/Kg		103	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	209	S1+	35 - 166						

Lab Sample ID: 885-5276-1 MSD								Client Sample ID: SW-01			
Matrix: Solid								Prep Type: Total/NA			
Analysis Batch: 5929								Prep Batch: 5850			
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		20.0	20.4		mg/Kg		102	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	208	S1+	35 - 166								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-5850/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5930						Prep Batch: 5850			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		05/30/24 09:15	05/30/24 22:45	1	
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 09:15	05/30/24 22:45	1	
Toluene	ND		0.050	mg/Kg		05/30/24 09:15	05/30/24 22:45	1	

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

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

Lab Sample ID: MB 885-5850/1-A

Matrix: Solid

Analysis Batch: 5930

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5850

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		05/30/24 09:15	05/30/24 22:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 09:15	05/30/24 22:45	1

Lab Sample ID: LCS 885-5850/3-A

Matrix: Solid

Analysis Batch: 5930

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.954		mg/Kg		95	70 - 130
Ethylbenzene	1.00	0.893		mg/Kg		89	70 - 130
m&p-Xylene	2.00	1.79		mg/Kg		90	70 - 130
o-Xylene	1.00	0.874		mg/Kg		87	70 - 130
Toluene	1.00	0.890		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	96		48 - 145				

Lab Sample ID: 885-5276-2 MS

Matrix: Solid

Analysis Batch: 5930

Client Sample ID: SW-02

Prep Type: Total/NA

Prep Batch: 5850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.856	0.791		mg/Kg		92	70 - 130
Ethylbenzene	ND		0.856	0.746		mg/Kg		87	70 - 130
m&p-Xylene	ND		1.71	1.50		mg/Kg		86	70 - 130
o-Xylene	ND		0.856	0.735		mg/Kg		86	70 - 130
Toluene	ND		0.856	0.745		mg/Kg		86	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	93		48 - 145						

Lab Sample ID: 885-5276-2 MSD

Matrix: Solid

Analysis Batch: 5930

Client Sample ID: SW-02

Prep Type: Total/NA

Prep Batch: 5850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.856	0.786		mg/Kg		92	70 - 130	1	20
Ethylbenzene	ND		0.856	0.750		mg/Kg		88	70 - 130	1	20
m&p-Xylene	ND		1.71	1.53		mg/Kg		88	70 - 130	2	20
o-Xylene	ND		0.856	0.750		mg/Kg		88	70 - 130	2	20
Toluene	ND		0.856	0.734		mg/Kg		84	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	98		48 - 145								

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

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

Lab Sample ID: MB 885-5868/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5939						Prep Batch: 5868			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/30/24 10:37	05/30/24 13:32	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/30/24 10:37	05/30/24 13:32	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	78		62 - 134			05/30/24 10:37	05/30/24 13:32	1	

Lab Sample ID: LCS 885-5868/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5939						Prep Batch: 5868			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]			50.0	45.9		mg/Kg		92	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	74		62 - 134						

Lab Sample ID: 885-5276-6 MS						Client Sample ID: FW-02			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5939						Prep Batch: 5868			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		49.9	50.7		mg/Kg		102	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	85		62 - 134						

Lab Sample ID: 885-5276-6 MSD								Client Sample ID: FW-02			
Matrix: Solid								Prep Type: Total/NA			
Analysis Batch: 5939								Prep Batch: 5868			
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Diesel Range Organics [C10-C28]	ND		46.0	44.5		mg/Kg		97	44 - 136	13	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	83		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-5848/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 5918						Prep Batch: 5848			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		1.5	mg/Kg		05/30/24 09:08	05/30/24 16:13	1	

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-5848/2-A				Client Sample ID: Lab Control Sample			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 5918				Prep Batch: 5848			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.0		mg/Kg		94	90 - 110

QC Association Summary

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

GC VOA

Prep Batch: 5850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5276-1	SW-01	Total/NA	Solid	5035	
885-5276-2	SW-02	Total/NA	Solid	5035	
885-5276-3	SW-03	Total/NA	Solid	5035	
885-5276-4	SW-04	Total/NA	Solid	5035	
885-5276-5	FW-01	Total/NA	Solid	5035	
885-5276-6	FW-02	Total/NA	Solid	5035	
MB 885-5850/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-5850/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-5850/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-5276-1 MS	SW-01	Total/NA	Solid	5035	
885-5276-1 MSD	SW-01	Total/NA	Solid	5035	
885-5276-2 MS	SW-02	Total/NA	Solid	5035	
885-5276-2 MSD	SW-02	Total/NA	Solid	5035	

Analysis Batch: 5929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5276-1	SW-01	Total/NA	Solid	8015M/D	5850
885-5276-2	SW-02	Total/NA	Solid	8015M/D	5850
885-5276-3	SW-03	Total/NA	Solid	8015M/D	5850
885-5276-4	SW-04	Total/NA	Solid	8015M/D	5850
885-5276-5	FW-01	Total/NA	Solid	8015M/D	5850
885-5276-6	FW-02	Total/NA	Solid	8015M/D	5850
MB 885-5850/1-A	Method Blank	Total/NA	Solid	8015M/D	5850
LCS 885-5850/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5850
885-5276-1 MS	SW-01	Total/NA	Solid	8015M/D	5850
885-5276-1 MSD	SW-01	Total/NA	Solid	8015M/D	5850

Analysis Batch: 5930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5276-1	SW-01	Total/NA	Solid	8021B	5850
885-5276-2	SW-02	Total/NA	Solid	8021B	5850
885-5276-3	SW-03	Total/NA	Solid	8021B	5850
885-5276-4	SW-04	Total/NA	Solid	8021B	5850
885-5276-5	FW-01	Total/NA	Solid	8021B	5850
885-5276-6	FW-02	Total/NA	Solid	8021B	5850
MB 885-5850/1-A	Method Blank	Total/NA	Solid	8021B	5850
LCS 885-5850/3-A	Lab Control Sample	Total/NA	Solid	8021B	5850
885-5276-2 MS	SW-02	Total/NA	Solid	8021B	5850
885-5276-2 MSD	SW-02	Total/NA	Solid	8021B	5850

GC Semi VOA

Prep Batch: 5868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5276-1	SW-01	Total/NA	Solid	SHAKE	
885-5276-2	SW-02	Total/NA	Solid	SHAKE	
885-5276-3	SW-03	Total/NA	Solid	SHAKE	
885-5276-4	SW-04	Total/NA	Solid	SHAKE	
885-5276-5	FW-01	Total/NA	Solid	SHAKE	
885-5276-6	FW-02	Total/NA	Solid	SHAKE	
MB 885-5868/1-A	Method Blank	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

GC Semi VOA (Continued)

Prep Batch: 5868 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-5868/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-5276-6 MS	FW-02	Total/NA	Solid	SHAKE	
885-5276-6 MSD	FW-02	Total/NA	Solid	SHAKE	

Analysis Batch: 5939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5276-1	SW-01	Total/NA	Solid	8015M/D	5868
885-5276-2	SW-02	Total/NA	Solid	8015M/D	5868
885-5276-3	SW-03	Total/NA	Solid	8015M/D	5868
885-5276-4	SW-04	Total/NA	Solid	8015M/D	5868
885-5276-5	FW-01	Total/NA	Solid	8015M/D	5868
885-5276-6	FW-02	Total/NA	Solid	8015M/D	5868
MB 885-5868/1-A	Method Blank	Total/NA	Solid	8015M/D	5868
LCS 885-5868/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5868
885-5276-6 MS	FW-02	Total/NA	Solid	8015M/D	5868
885-5276-6 MSD	FW-02	Total/NA	Solid	8015M/D	5868

HPLC/IC

Prep Batch: 5848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5276-1	SW-01	Total/NA	Solid	300_Prep	
885-5276-2	SW-02	Total/NA	Solid	300_Prep	
885-5276-3	SW-03	Total/NA	Solid	300_Prep	
885-5276-4	SW-04	Total/NA	Solid	300_Prep	
885-5276-5	FW-01	Total/NA	Solid	300_Prep	
885-5276-6	FW-02	Total/NA	Solid	300_Prep	
MB 885-5848/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-5848/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 5918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5276-1	SW-01	Total/NA	Solid	300.0	5848
885-5276-2	SW-02	Total/NA	Solid	300.0	5848
885-5276-3	SW-03	Total/NA	Solid	300.0	5848
885-5276-4	SW-04	Total/NA	Solid	300.0	5848
885-5276-5	FW-01	Total/NA	Solid	300.0	5848
885-5276-6	FW-02	Total/NA	Solid	300.0	5848
MB 885-5848/1-A	Method Blank	Total/NA	Solid	300.0	5848
LCS 885-5848/2-A	Lab Control Sample	Total/NA	Solid	300.0	5848

Lab Chronicle

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: SW-01
Date Collected: 05/29/24 12:00
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8015M/D		1	5929	JP	EET ALB	05/30/24 23:08
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8021B		1	5930	JP	EET ALB	05/30/24 23:08
Total/NA	Prep	SHAKE			5868	DH	EET ALB	05/30/24 10:37
Total/NA	Analysis	8015M/D		1	5939	JU	EET ALB	05/30/24 13:54
Total/NA	Prep	300_Prep			5848	RC	EET ALB	05/30/24 12:07
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 20:20

Client Sample ID: SW-02
Date Collected: 05/29/24 12:05
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8015M/D		1	5929	JP	EET ALB	05/31/24 00:19
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8021B		1	5930	JP	EET ALB	05/31/24 00:19
Total/NA	Prep	SHAKE			5868	DH	EET ALB	05/30/24 10:37
Total/NA	Analysis	8015M/D		1	5939	JU	EET ALB	05/30/24 14:05
Total/NA	Prep	300_Prep			5848	RC	EET ALB	05/30/24 12:07
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 20:32

Client Sample ID: SW-03
Date Collected: 05/29/24 12:10
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8015M/D		1	5929	JP	EET ALB	05/31/24 01:29
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8021B		1	5930	JP	EET ALB	05/31/24 01:29
Total/NA	Prep	SHAKE			5868	DH	EET ALB	05/30/24 10:37
Total/NA	Analysis	8015M/D		1	5939	JU	EET ALB	05/30/24 14:15
Total/NA	Prep	300_Prep			5848	RC	EET ALB	05/30/24 12:07
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 21:09

Client Sample ID: SW-04
Date Collected: 05/29/24 12:15
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8015M/D		1	5929	JP	EET ALB	05/31/24 01:52

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

Client Sample ID: SW-04
Date Collected: 05/29/24 12:15
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8021B		1	5930	JP	EET ALB	05/31/24 01:52
Total/NA	Prep	SHAKE			5868	DH	EET ALB	05/30/24 10:37
Total/NA	Analysis	8015M/D		1	5939	JU	EET ALB	05/30/24 14:26
Total/NA	Prep	300_Prep			5848	RC	EET ALB	05/30/24 12:07
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 21:22

Client Sample ID: FW-01
Date Collected: 05/29/24 12:20
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8015M/D		1	5929	JP	EET ALB	05/31/24 02:16
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8021B		1	5930	JP	EET ALB	05/31/24 02:16
Total/NA	Prep	SHAKE			5868	DH	EET ALB	05/30/24 10:37
Total/NA	Analysis	8015M/D		1	5939	JU	EET ALB	05/30/24 14:37
Total/NA	Prep	300_Prep			5848	RC	EET ALB	05/30/24 12:07
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 21:34

Client Sample ID: FW-02
Date Collected: 05/29/24 12:25
Date Received: 05/30/24 06:55

Lab Sample ID: 885-5276-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8015M/D		1	5929	JP	EET ALB	05/31/24 02:39
Total/NA	Prep	5035			5850	AT	EET ALB	05/30/24 09:15
Total/NA	Analysis	8021B		1	5930	JP	EET ALB	05/31/24 02:39
Total/NA	Prep	SHAKE			5868	DH	EET ALB	05/30/24 10:37
Total/NA	Analysis	8015M/D		1	5939	JU	EET ALB	05/30/24 14:48
Total/NA	Prep	300_Prep			5848	RC	EET ALB	05/30/24 12:07
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 21:46

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: SJ 28-6 114M

Job ID: 885-5276-1

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

Age Group	Number of People
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11

Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-5276-1

Login Number: 5276

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	

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 356007

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 356007
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2317839684
Incident Name	NAPP2317839684 SAN JUAN 28-6 UNIT 114M @ 30-039-26649
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-039-26649] SAN JUAN 28 6 UNIT #114M

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SAN JUAN 28-6 UNIT 114M
Date Release Discovered	06/26/2023
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Production Tank Produced Water Released: 35 BBL Recovered: 0 BBL Lost: 35 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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, Page 2

Action 356007

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	356007
	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	Not answered.

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: 06/19/2024
--	--

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, Page 3

Action 356007

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:
	372171
	Action Number:
	356007
	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)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 500 and 1000 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	65
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	4300
GRO+DRO	(EPA SW-846 Method 8015M)	4100
BTEX	(EPA SW-846 Method 8021B or 8260B)	379.8
Benzene	(EPA SW-846 Method 8021B or 8260B)	2.8

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	06/26/2023
On what date will (or did) the final sampling or liner inspection occur	05/29/2024
On what date will (or was) the remediation complete(d)	05/29/2024
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	956
What is the estimated volume (in cubic yards) that will be remediated	96

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.

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, Page 4
Action 356007

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 356007
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	ENVIROTECH LANDFARM #2 [FEEM0112336756]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 06/19/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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, Page 5

Action 356007

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	356007
	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

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, Page 6

Action 356007

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:
	372171
	Action Number:
	356007
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	347739
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/29/2024
What was the (estimated) number of samples that were to be gathered	10
What was the sampling surface area in square feet	500

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	956
What was the total volume (cubic yards) remediated	96
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)	NA

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: 06/19/2024
--	--

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, Page 7

Action 356007

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 356007
	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

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

Action 356007

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 356007
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation closure approved.	8/9/2024
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.	8/9/2024
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.	8/9/2024