ENSOLUM

February 23, 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 29-6 Unit 61M
Rio Arriba County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: nAPP2333159777

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Report and Closure Request* associated with a release discovered at the San Juan 29-6 Unit 61M well site (Site). The Site is located on private land in Unit K, Section 19, Township 29 North, Range 6 West in Rio Arriba County, New Mexico (Figure 1).

SITE BACKGROUND

On November 27, 2023, Hilcorp personnel discovered 83.5 barrels (bbls) of condensate and 8.9 bbls of produced water was released at the Site due to a frozen water drain valve on the 286 bbl aboveground condensate tank. No fluids were recovered, however, all released fluids remained within the secondary containment footprint. The spill volumes were determined based on Hilcorp's tank gauging data. A 24-hour release notification was submitted to the New Mexico Oil Conservation Division (NMOCD) on November 27, 2023, and was assigned NMOCD Incident Number nAPP2333159777.

SITE CHARACTERIZATION

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

GEOLOGY AND HYDROGEOLOGY

The Site is located in Tertiary (Eocene) age San Jose Formation and is underlain by the Nacimiento Geologic Formation. In the report titled "*Hydrogeology and Water Resources of San Juan Basin, New Mexico*" (Stone, et. al., 1983), the San Jose Formation is composed of interbedded sandstones and mudstones and varies in thickness from less than 200 feet to about 2,700 feet. The hydrologic properties of the San Jose Formation are largely untested. Where sufficient yield is present, the primary use of water from this Formation is for domestic and/or livestock supply.

POTENTIAL SENSITIVE RECEPTORS

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

The nearest surface water feature is a dry stock pond 450 feet to the northeast of the Site (Figure 2). Of note, a dashed blue line is present on the USGS 7.5-minute quadrangle maps for this area (solid blue line indicated on Figures 1 and 3). Ensolum personnel performed a Site walk during field activities to assess for the presence of a water feature or dry wash with a defined bed and bank within 300 feet of the Site that may be considered a "significant watercourse" (as defined in 19.15.17.7 NMAC). Photographs 1 through 3 (presented in Appendix A) were taken along the pathway of the USGS identified water feature and show that a watercourse with a defined bed and bank is not present within 300 feet of the Site. Based on the Site reconnaissance, the nearest significant watercourse as identified by a defined bed and bank is in Gobernador Canyon, located approximately 1,000 feet north of the Site.

The closest water well is located approximately 3,280 feet west northwest of the Site (NMOSE well permit SJ-03573); however, depth to water information is not provided in the NMOSE database. The closest water well to the Site with depth to water information is NMOSE well SJ-03809-POD1 (Appendix B), located approximately 3,400 feet northwest of the Site. This well indicates the groundwater is approximately 260 feet below ground surface (bgs). The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake, and greater than 300 feet from a wetland. No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile from the Site. The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area not designated as high potential karst by the Bureau of Land Management). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. A Site receptor map is shown on Figure 1.

SITE CLOSURE CRITERIA

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

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

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

On December 12, 2023, Ensolum personnel visited the Site to assess the significant watercourse feature and delineate the depth of impacted soil using a backhoe. A pothole was excavated to a total depth of 8 feet bgs. Soil was field screened for volatile organic compounds (VOCs) at 1-foot intervals using a calibrated photoionization detector (PID). One sample (SS01) was collected from the terminus of the pothole at 8 feet bgs, where field screening indicated soil was no longer impacted based on PID readings and visual/olfactory observations. The sample was submitted to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico and analyzed for TPH following Environmental Protection Agency (EPA) Method 8015M/D, BTEX following EPA Method 8021B, and chloride following EPA Method 300.0.

Between January 25, 2024, and February 1, 2024, Ensolum personnel conducted excavation oversight and sampling activities at the Site. Notification to NMOCD was provided at least two business days prior to conducting remediation and sampling work, with correspondence attached in Appendix C. To direct excavation activities during excavation, Ensolum personnel field screened soil for VOCs using a calibrated PID. Once field screening indicated impacted soil had been removed, five-point composite soil samples were collected from the floor (FS01 through FS14) and sidewalls (WS01/WS01A through WS05/WS05A) of the excavation at a frequency of one sample per 200 square feet. Sidewall samples WS01 through WS05 were collected from the ground surface to depths of 4 feet bgs. Sidewall samples WS01A through WS05A were collected from depths below 4 feet bgs up to depths of 8.5 feet bgs. Sample locations are presented on Figure 4.

The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The soil samples were transported under proper chain of custody procedures to Eurofins and submitted for analyses of BTEX, TPH and chloride following the EPA Methods listed above. Analytical results from the excavation indicated concentrations of all COCs were compliant with NMOCD Table I Closure Criteria and the reclamation requirement in all of the collected confirmation samples. In total, approximately 1,000 cubic yards of impacted soil was removed and transported to the Envirotech, Inc. landfarm located in San Juan County, New Mexico. Soil sample results are summarized in Table 1, with complete laboratory analytical reports attached as Appendix D. Photographs taken by Ensolum during the excavation work are included in Appendix A.

CLOSURE REQUEST

Site excavation and sampling activities were conducted at the Site to address the release of condensate and produced water discovered on November 27, 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 no further remediation is required. Excavation of impacted soil has mitigated impacts at this Site and these remedial actions have been protective of human health, the environment, and groundwater. As such, Hilcorp respectfully requests closure for Incident Number nAPP2333159777.

REFERENCES

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

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

Sincerely,
Ensolum, LLC

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

Daniel R. Moir, PG
Senior Managing Geologist
(303) 887-2946
dmoir@ensolum.com

Attachments:

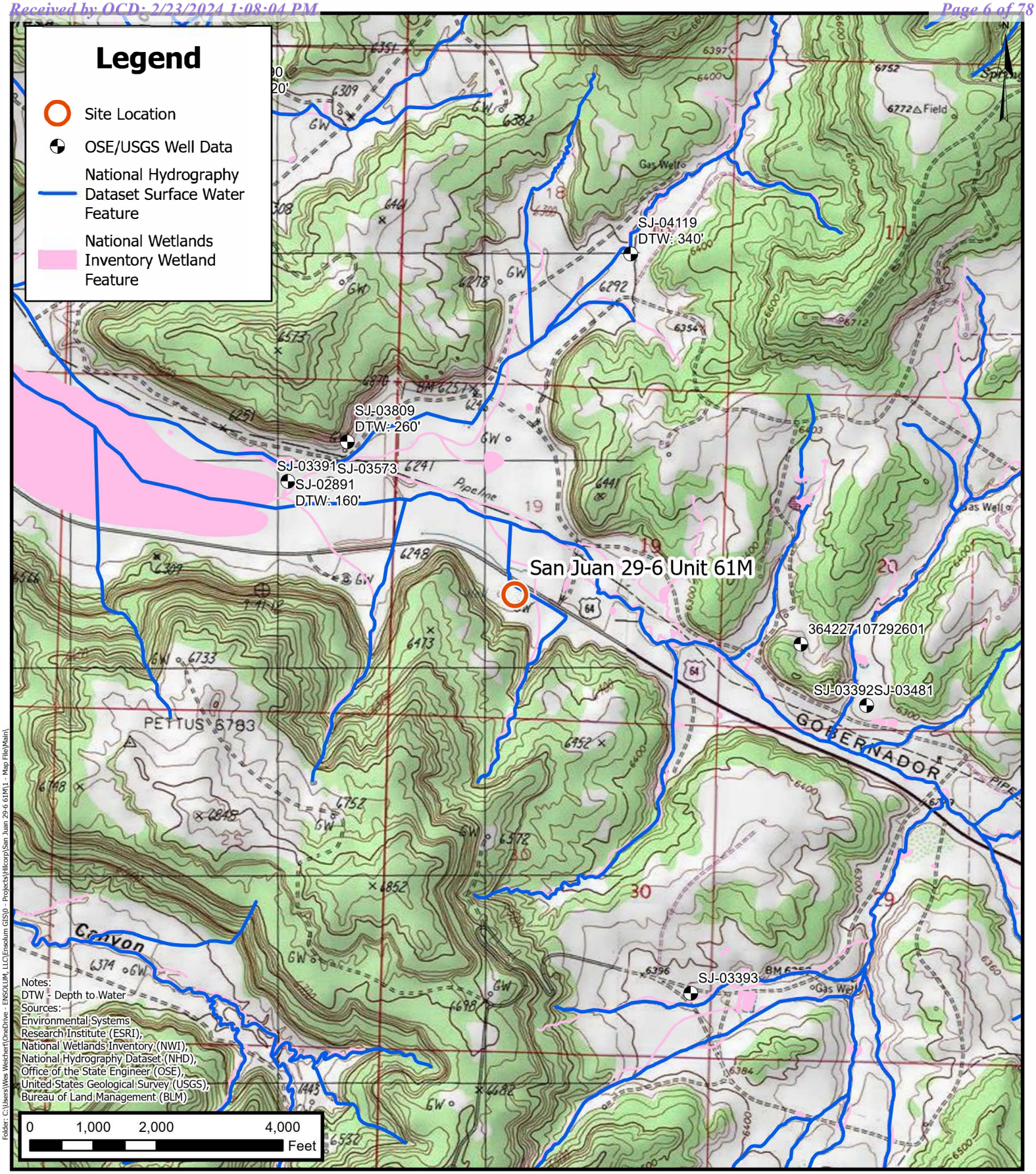
Figure 1: Site Receptor Map
Figure 2: Field Verified Site Receptors
Figure 3: Photograph Locations
Figure 4: Excavation Soil Sample Results

Table 1: Excavation Soil Sample Analytical Results

Appendix A: Photographic Log
Appendix B: NMOSE Well Record & Log – SJ-03809
Appendix C: Agency Sampling Notifications
Appendix D: Laboratory Analytical Reports

ENSOLUM

FIGURES



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Hilcorp Energy Company
San Juan 29-6 Unit 61M
Incident Number: nAPP2333159777
Unit K, Sec 19, T29N, R06W
Rio Arriba County, New Mexico, United States

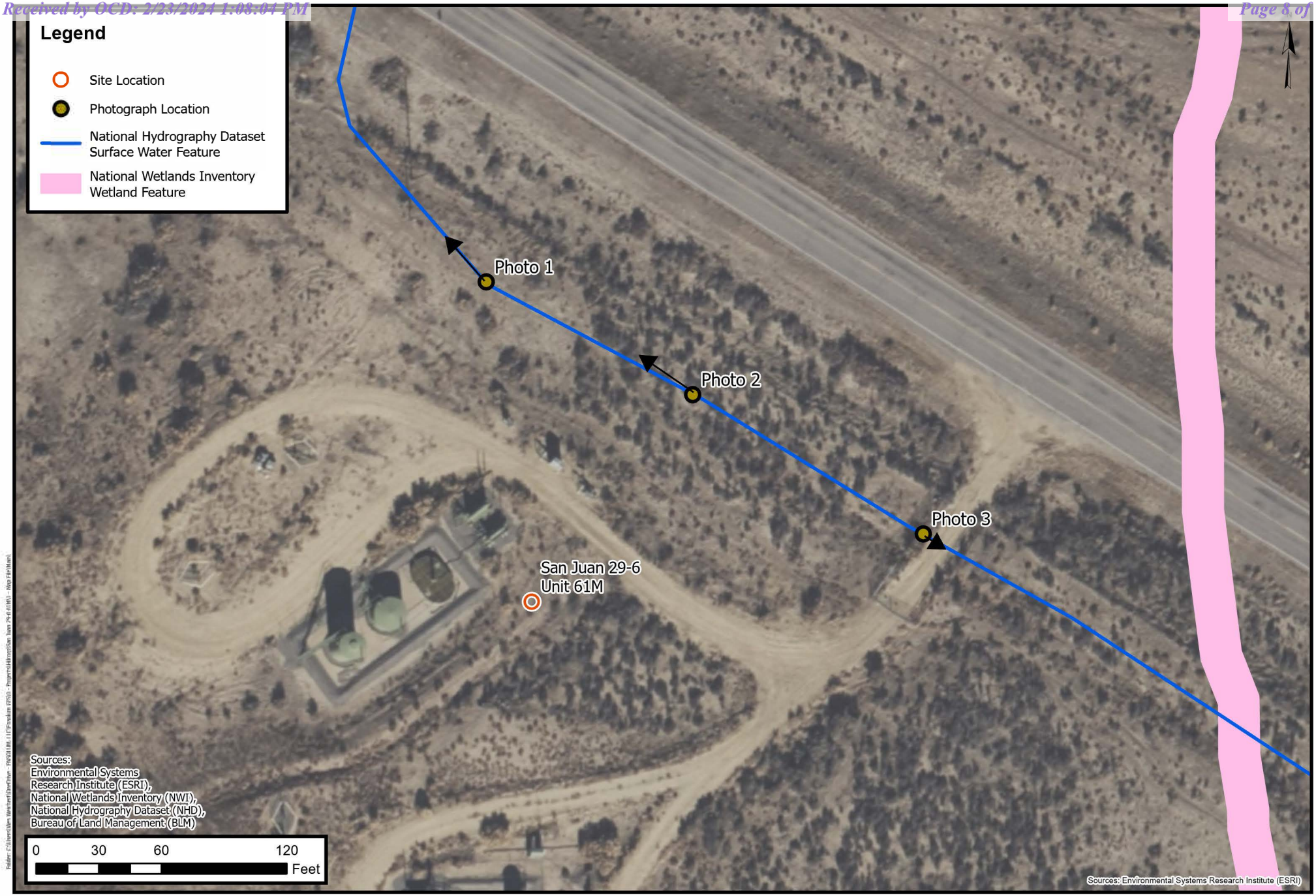
FIGURE 1

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Field Verified Site Receptors

Hilcorp Energy Company
San Juan 29-6 Unit 61M
Incident Number: nAPP2333159777
Unit K, Sec 19, T29N, R06W
Rio Arriba County, New Mexico, United States

FIGURE 2

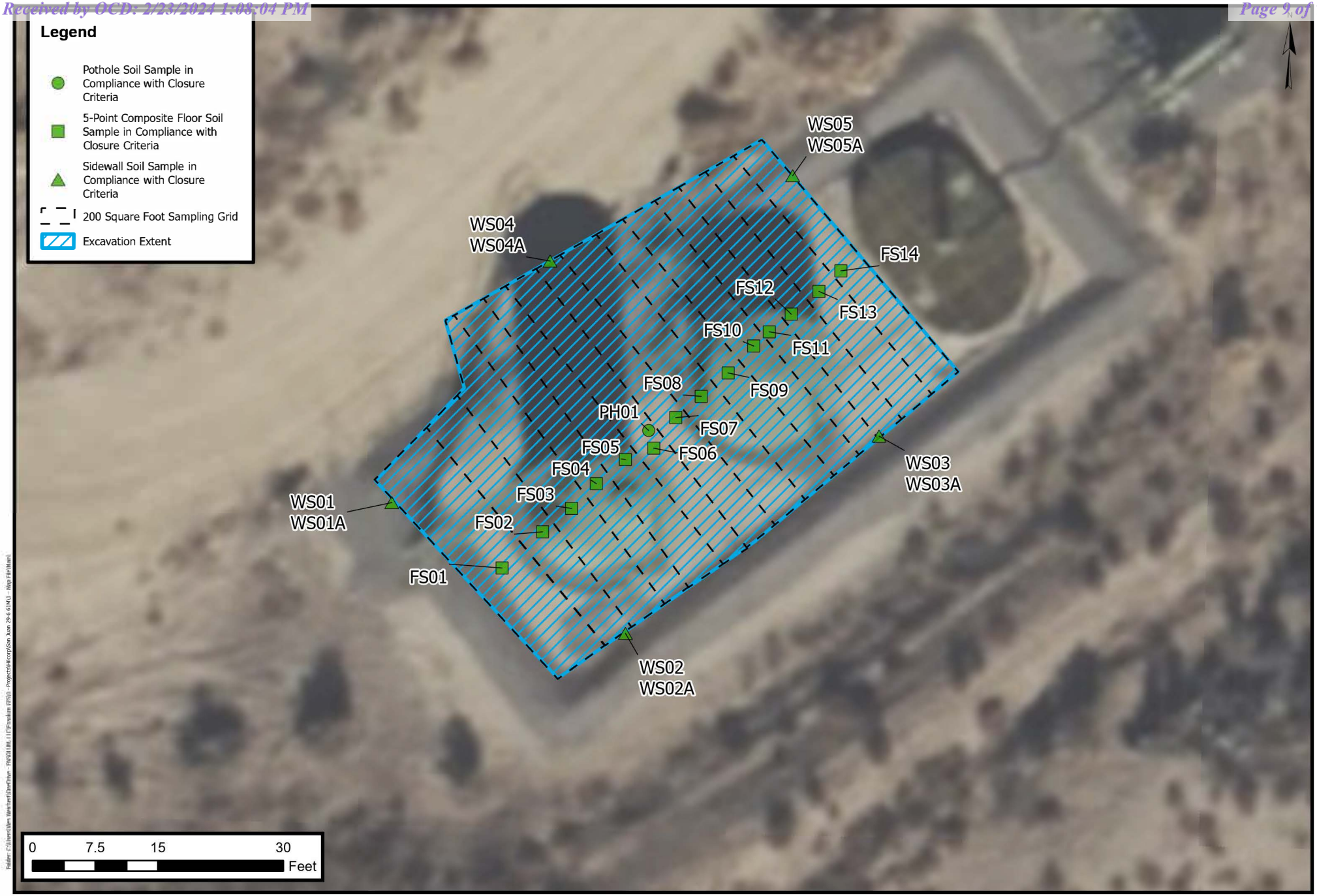


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Photograph Locations

Hilcorp Energy Company
San Juan 29-6 Unit 61M
Incident Number: nAPP2333159777
Unit K, Sec 19, T29N, R06W
Rio Arriba County, New Mexico, United States

FIGURE 3



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Results

Hilcorp Energy Company
San Juan 29-6 Unit 61M
Incident Number: nAPP2333159777
Unit K, Sec 19, T29N, R06W
Rio Arriba County, New Mexico, United States

FIGURE 4

ENSOLUM

TABLES

ENSOLUM

TABLE 1
EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS
San Juan 29-6 Unit 61M
Hilcorp Energy Company
Rio Arriba County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	TPH GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Delineation Soil Samples													
SS01	12/12/2023	8.0	<0.021	<0.042	<0.042	<0.084	<0.084	<4.2	<8.9	<45	<8.9	<45	<60
Excavation Floor Composite Soil Samples													
FS01	1/30/2024	8.0	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.5	<48	<9.5	<48	200
FS02	1/30/2024	8.0	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.8	<49	<9.8	<49	270
FS03	1/30/2024	8.0	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.3	<46	<9.3	<46	330
FS04	1/30/2024	8.0	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.1	<46	<9.1	<46	340
FS05	1/30/2024	8.0	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.4	<47	<9.4	<47	530
FS06	1/30/2024	8.0	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.4	<47	<9.4	<47	370
FS07	2/1/2024	8.0	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.6	<48	<9.6	<48	180
FS08	2/1/2024	8.0	0.091	0.43	<0.049	0.39	0.911	<4.9	<9.0	<45	<9.0	<45	150
FS09	2/1/2024	8.0	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.1	<46	<9.1	<46	140
FS10	2/1/2024	8.0	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.1	<45	<9.1	<45	170
FS11	2/1/2024	8.0	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<8.9	<45	<8.9	<45	270
FS12	2/1/2024	8.5	0.047	0.24	<0.048	0.39	0.677	<4.8	<9.4	<47	<9.4	<47	100
FS13	2/1/2024	8.5	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.1	<46	<9.1	<46	210
FS14	2/1/2024	8.5	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.1	<46	<9.1	<46	190
Excavation Sidewall Composite Soil Samples													
WS01	1/30/2024	0 - 4	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.6	<48	<9.6	<48	<60
WS01A	1/30/2024	4 - 8	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.5	<47	<9.5	<47	<60
WS02	1/30/2024	0 - 4	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<9.8	<49	<60
WS02A	1/30/2024	4 - 8	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.5	<47	<9.5	<47	<60
WS03	1/30/2024	0 - 4	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.8	<49	<9.8	<49	<60
WS03A	1/30/2024	4 - 8	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.5	<47	<9.5	<47	<60
WS04	1/30/2024	0 - 4	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.3	<47	<9.3	<47	<60
WS04A	1/30/2024	4 - 8	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.4	<47	<9.4	<47	<60
WS05	2/1/2024	0 - 4	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<9.6	<48	<60
WS05A	2/1/2024	4 - 8.5	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<8.7	<44	<8.7	<44	<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
DRO: Diesel Range Organics
GRO: Gasoline Range Organics
MRO: Motor Oil Range Organics
TPH: Total Petroleum Hydrocarbon
< : indicates result less than the stated laboratory reporting limit (RL)

ENSOLUM

APPENDIX A

Photographic Log

PROJECT PHOTOGRAPHS
San Juan 29-6 Unit 61M
Rio Arriba County, New Mexico
Hilcorp Energy Company

Photograph 1 USGS “Blue Line” northwest of the well pad, looking northwest.	
Photograph 2 USGS “Blue Line” north of the well pad, looking northwest.	

PROJECT PHOTOGRAPHS
San Juan 29-6 Unit 61M
Rio Arriba County, New Mexico
Hilcorp Energy Company

Photograph 3 USGS “Blue Line” northeast of the well pad near the access road, looking southeast.	
Photograph 4 Final excavation extent, looking south.	

PROJECT PHOTOGRAPHS
San Juan 29-6 Unit 61M
Rio Arriba County, New Mexico
Hilcorp Energy Company

Photograph 5 Final excavation extent, looking north.	
Photograph 6 Final excavation extent, looking northwest.	

ENSOLUM

APPENDIX B

NMOSE Well Record & Log – SJ-03809

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

POD NUMBER (WELL NUMBER): 1	OSE FILE NUMBER(S): SJ-3809
WELL OWNER NAME(S): Richard Hodgson	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 9355 Highway 64	CITY: Blanco / STATE: N.M. / ZIP: 87412

WELL LOCATION (FROM GPS)

	DEGREES	MINUTES	SECONDS	
LATITUDE	36	42	58.40	N
LONGITUDE	107	30	55.40	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS: Gobanador

2. OPTIONAL

(2.5 ACRE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION	TOWNSHIP	RANGE
¼	SW ¼	NE ¼	NE ¼	24	29 ☑ NORTH ☐ SOUTH	07 ☐ EAST ☑ WEST

SUBDIVISION NAME	LOT NUMBER	BLOCK NUMBER	UNIT/TRACT
N/A			

HYDROGRAPHIC SURVEY	MAP NUMBER	TRACT NUMBER
N/A		

3. DRILLING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1508	Bill Hargis	Hargis Drilling

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
9/2/08	9/10/08	500	520	260

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT):

DRILLING FLUID: ☑ AIR ☐ MUD ☐ ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
0	22	8"	24# st&c steel	8rd	7.25	.25	none
0	500	6.75	pvc Sch 40	tight lock	4.75	.25	1/8

4. WATER BEARING STRATA

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	YIELD (GPM)
260	270	10	Blue shale	4
295	300	5	Yellow Sandstone	4
340	342	2	multi colored sand	2

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: Circulated out with air compressor

TOTAL ESTIMATED WELL YIELD (GPM): 10

FOR OSE INTERNAL USE — WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER: SJ-3809	POD NUMBER	TRN NUMBER
LOCATION: 29N.07W.24.223		PAGE 1 OF 2

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2008 DEC -5 PM 3:07

2008 AUG 27 PM 3:09 REVISED STATE ENGINEER OFFICE AZTEC, NEW MEXICO

2008 AUG 22 PM 3:08 STATE ENGINEER OFFICE AZTEC, NEW MEXICO

5. SEAL AND PUMP

TYPE OF PUMP: ☑ SUBMERSIBLE ☐ JET ☐ NO PUMP – WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER – SPECIFY:

ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	200	500	6.75	pea gravel	6	shouvel

6. GEOLOGIC LOG OF WELL

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
0	60	60	Sand & Grey Clay overbrden	☐ YES ☑ NO
60	110	50	Yellow Sandstone	☐ YES ☑ NO
110	180	70	Blue Shale & Sands	☐ YES ☑ NO
180	260	80	Sand & silt	☑ YES ☐ NO
260	270	10	Blue Shale & Multi colored Sand	☑ YES ☐ NO
270	295	25	Yellow Sandstone	☐ YES ☐ NO
295	300	5	Blue Shale & Sand	☑ YES ☐ NO
300	340	40	Gray Clay	☐ YES ☑ NO
340	342	2	Multi Colored Sand	☑ YES ☐ NO
342	500	158	Sand & Gray Shale	☐ YES ☑ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO

WELL TEST: METHOD: ☑ BAILER ☐ PUMP ☐ AIR LIFT ☐ 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:

Bill Hargis — SIGNATURE OF DRILLER

9/22/08 — DATE

FOR OSE INTERNAL USE — WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	SJ-3809	POD NUMBER	TRN NUMBER
LOCATION	29N.07W.24.223		PAGE 2 OF 2

STATE ENGINEER OFFICE ALBUQUERQUE NM 2008 DEC -5 PM 3:07

STATE ENGINEER OFFICE AZTEC, NEW MEXICO REVISED 2008 AUG 27 PM 3:09

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2008 AUG 22 PM 3:08

ENSOLUM

APPENDIX C

Agency Sampling Notifications

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 292826
Date: Friday, December 8, 2023 3:06:21 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2333159777.

The sampling event is expected to take place:

When: 12/12/2023 @ 10:00
Where: K-19-29N-06W 1975 FSL 1790 FWL (36.7093582,-107.5072098)

Additional Information: Ensolum will be sampling at the Site, Contact is Reece Hanson, 970-210-9803.

Additional Instructions: Site coordinates: 36.709348, -107.506598

Sampling is being performed for delineation purposes. The stated sampling area is the total approximate area that we will be investigating and does not constitute the area of soil impacts. Approximately 2 samples will be collected for laboratory analysis from each pothole advanced during delineation.

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: 307853
Date: Thursday, January 25, 2024 12:16:57 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2333159777.

The sampling event is expected to take place:

When: 01/30/2024 @ 08:00
Where: K-19-29N-06W 1975 FSL 1790 FWL (36.7093582,-107.5072098)

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

Additional Instructions: Site coordinates: 36.709348, -107.506598

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: 309653
Date: Tuesday, January 30, 2024 3:38:49 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2333159777.

The sampling event is expected to take place:

When: 02/01/2024 @ 09:00
Where: K-19-29N-06W 1975 FSL 1790 FWL (36.7093582,-107.5072098)

Additional Information: Contact Project Manager Stuart Hyde, 970-903-1607.

The remedial excavation is currently ongoing at the site. Excavation will be continuing on February 1, 2024 in order to remove the
remaining impacted soil and collect confirmation samples. We are requesting a variance of the 2 business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to collect confirmation samples on Thursday February 1, 2024 beginning at 9 AM.

Additional Instructions: Site coordinates: 36.709348, -107.506598

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

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

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

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

From: Velez, Nelson, EMNRD
To: Stuart Hyde
Cc: Samantha Grabert
Subject: Re: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 309653
Date: Wednesday, January 31, 2024 7:19:47 AM
Attachments: image001.png
image002.png
image003.png
image004.png
Outlook-fp00qwf0.png

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

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

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

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

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: Tuesday, January 30, 2024 3:39 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Samantha Grabert <Samantha.Grabert@hilcorp.com>
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has accepted the application,

Application ID: 309653

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

Nelson,

The remedial excavation at the Hilcorp San Juan 29-6 #61M site is currently has not yet been completed. We will be extending excavation work into Thursday February 1, 2024 in order to remove the remaining impacted soil and collect confirmation samples. We are requesting a variance of the 2-business day sampling notification requirement set forth in 19.15.29.12.D.(1).(a) in order to collect confirmation samples on February 1, 2024 beginning at 9 AM.

Please reach out with any questions. Thanks and have a good evening.

Stuart Hyde, PG
Senior Geologist
970-903-1607
Ensolum, LLC

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, January 30, 2024 3:38 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 309653

[**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#) nAPP2333159777.

The sampling event is expected to take place:

When: 02/01/2024 @ 09:00
Where: K-19-29N-06W 1975 FSL 1790 FWL (36.7093582,-107.5072098)

Additional Information: Contact Project Manager Stuart Hyde, 970-903-1607.

The remedial excavation is currently ongoing at the site. Excavation will be continuing on February 1, 2024 in order to remove the
remaining impacted soil and collect confirmation samples. We are requesting a variance of the 2 business day sampling notification requirement set forth in 19.15.29.12(D)(1)(a) in order to collect confirmation samples on Thursday February 1, 2024 beginning at 9 AM.

Additional Instructions: Site coordinates: 36.709348, -107.506598

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

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

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

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

ENSOLUM

APPENDIX D

Laboratory Analytical Reports

eurofins | Environment Testing

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

December 21, 2023

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

RE: SJ 29 6 61M OrderNo.: 2312722

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 1 sample(s) on 12/13/2023 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 do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2312722**
Date Reported: **12/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** SS01
Project: SJ 29 6 61M **Collection Date:** 12/12/2023 11:00:00 AM
Lab ID: 2312722-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/13/2023 6:30:00 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	12/13/2023 11:13:51 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/13/2023 11:13:51 AM
Surr: DNOP	86.5	69-147		%Rec	1	12/13/2023 11:13:51 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	12/13/2023 11:18:54 AM
Surr: BFB	95.2	15-244		%Rec	1	12/13/2023 11:18:54 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.021		mg/Kg	1	12/13/2023 11:18:54 AM
Toluene	ND	0.042		mg/Kg	1	12/13/2023 11:18:54 AM
Ethylbenzene	ND	0.042		mg/Kg	1	12/13/2023 11:18:54 AM
Xylenes, Total	ND	0.084		mg/Kg	1	12/13/2023 11:18:54 AM
Surr: 4-Bromofluorobenzene	97.5	39.1-146		%Rec	1	12/13/2023 11:18:54 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	12/13/2023 12:01:12 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312722**

21-Dec-23

Client: HILCORP ENERGY

Project: SJ 29 6 61M

Sample ID: **MB-79348**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **79348**	RunNo: **101805**							
Prep Date: **12/13/2023**	Analysis Date: **12/13/2023**	SeqNo: **3754365**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-79348**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **79348**	RunNo: **101805**							
Prep Date: **12/13/2023**	Analysis Date: **12/13/2023**	SeqNo: **3754366**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312722**

21-Dec-23

Client: HILCORP ENERGY

Project: SJ 29 6 61M

Sample ID: **2312722-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SS01**	Batch ID: **79345**	RunNo: **101807**
Prep Date: **12/13/2023**	Analysis Date: **12/13/2023**	SeqNo: **3752753** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	8.8	43.82	0	96.9	54.2	135			
Surr: DNOP	4.1		4.382		94.7	69	147			

Sample ID: **2312722-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SS01**	Batch ID: **79345**	RunNo: **101807**
Prep Date: **12/13/2023**	Analysis Date: **12/13/2023**	SeqNo: **3752754** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.7	48.59	0	93.1	54.2	135	6.36	29.2	
Surr: DNOP	4.6		4.859		95.2	69	147	0	0	

Sample ID: **LCS-79345**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **79345**	RunNo: **101807**
Prep Date: **12/13/2023**	Analysis Date: **12/13/2023**	SeqNo: **3752755** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.0	61.9	130			
Surr: DNOP	4.2		5.000		83.8	69	147			

Sample ID: **MB-79345**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **79345**	RunNo: **101807**
Prep Date: **12/13/2023**	Analysis Date: **12/13/2023**	SeqNo: **3752756** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		82.0	69	147			

Sample ID: **MB-79261**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **79261**	RunNo: **101833**
Prep Date: **12/8/2023**	Analysis Date: **12/13/2023**	SeqNo: **3754503** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		109	69	147			

Sample ID: **LCS-79261**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **79261**	RunNo: **101833**
Prep Date: **12/8/2023**	Analysis Date: **12/13/2023**	SeqNo: **3754504** Units: **%Rec**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312722**

21-Dec-23

Client: HILCORP ENERGY

Project: SJ 29 6 61M

Sample ID: **LCS-79261**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **79261**	RunNo: **101833**
Prep Date: **12/8/2023**	Analysis Date: **12/13/2023**	SeqNo: **3754504** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		106	69	147			

Sample ID: **MB-79326**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **79326**	RunNo: **101809**
Prep Date: **12/12/2023**	Analysis Date: **12/13/2023**	SeqNo: **3754791** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.2		10.00		82.3	69	147			

Sample ID: **LCS-79326**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **79326**	RunNo: **101809**
Prep Date: **12/12/2023**	Analysis Date: **12/13/2023**	SeqNo: **3754792** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.7		5.000		73.1	69	147			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312722**

21-Dec-23

Client: HILCORP ENERGY

Project: SJ 29 6 61M

Sample ID: **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS101798**	RunNo: **101798**
Prep Date:	Analysis Date: **12/13/2023**	SeqNo: **3752235** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.1	70	130			
Surr: BFB	2100		1000		209	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **GS101798**	RunNo: **101798**
Prep Date:	Analysis Date: **12/13/2023**	SeqNo: **3752237** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		98.8	15	244			

Sample ID: **2312722-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SS01**	Batch ID: **GS101798**	RunNo: **101798**
Prep Date:	Analysis Date: **12/14/2023**	SeqNo: **3753440** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.2	20.92	0	86.2	70	130			
Surr: BFB	1700		836.8		204	15	244			

Sample ID: **2312722-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SS01**	Batch ID: **GS101798**	RunNo: **101798**
Prep Date:	Analysis Date: **12/14/2023**	SeqNo: **3753441** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.2	20.92	0	85.5	70	130	0.839	20	
Surr: BFB	1700		836.8		203	15	244	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312722**

21-Dec-23

Client: HILCORP ENERGY

Project: SJ 29 6 61M

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS101798**	RunNo: **101798**
Prep Date:	Analysis Date: **12/13/2023**	SeqNo: **3752248** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.9	70	130			
Toluene	0.92	0.050	1.000	0	91.7	70	130			
Ethylbenzene	0.92	0.050	1.000	0	92.5	70	130			
Xylenes, Total	2.8	0.10	3.000	0	93.1	70	130			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS101798**	RunNo: **101798**
Prep Date:	Analysis Date: **12/13/2023**	SeqNo: **3752249** 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	1.0		1.000		101	39.1	146			

Qualifiers:

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

eurofins | Environment Testing

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

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2312722 RcptNo: 1

Received By: Tracy Casarrubias 12/13/2023 6:30:00 AM

Completed By: Tracy Casarrubias 12/13/2023 6:41:30 AM

Reviewed By: JN 12/13/23

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: TMC 12/13/23

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: Mailing address and phone number are missing on COC- TMC 12/13/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good	Yes	~~Morty~~ TMC 12/13/23 409		

Chain-of-Custody Record

Client: Hilcorp

Samantha Grabert

Mailing Address:

Phone #:

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

QA/QC Package:

☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush Same Day 12/13

Project Name: SJ 29-6 #61M

Project #:

Project Manager: Stuart Hyde - Ensolum

Sampler: E. Carroll

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.8+0.1=0.9 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2312722	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
12-12	11:00	Soil	SS01	1 4oz	cool	001	X	X									X

Relinquished by:	Received by:	Via:	Date	Time
Date: 12-12 Time: 1341				
Date: 12/12/23 Time: 1720		courier	12/13/23	6:30

Remarks: cc: eCarroll@ensolum.com

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

eurofins | Environment Testing

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

February 15, 2024

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

RE: SJ 29 6 61 M OrderNo.: 2402084

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 24 sample(s) on 2/2/2024 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS01
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 1:30:00 PM
Lab ID: 2402084-001 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/5/2024 5:38:47 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/5/2024 5:38:47 PM
Surr: DNOP	89.8	61.2-134		%Rec	1	2/5/2024 5:38:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/7/2024 5:53:00 AM
Surr: BFB	107	15-244		%Rec	1	2/7/2024 5:53:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 5:53:00 AM
Toluene	ND	0.048		mg/Kg	1	2/7/2024 5:53:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/7/2024 5:53:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	2/7/2024 5:53:00 AM
Surr: 4-Bromofluorobenzene	96.4	39.1-146		%Rec	1	2/7/2024 5:53:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	200	30		mg/Kg	20	2/12/2024 11:54:02 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS02
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 1:35:00 PM
Lab ID: 2402084-002 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JKU**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/5/2024 5:50:45 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/5/2024 5:50:45 PM
Surr: DNOP	88.1	61.2-134		%Rec	1	2/5/2024 5:50:45 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 6:15:00 AM
Surr: BFB	108	15-244		%Rec	1	2/7/2024 6:15:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 6:15:00 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 6:15:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 6:15:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/7/2024 6:15:00 AM
Surr: 4-Bromofluorobenzene	98.0	39.1-146		%Rec	1	2/7/2024 6:15:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	270	60		mg/Kg	20	2/12/2024 4:16:41 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS03
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 1:40:00 PM
Lab ID: 2402084-003 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 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	2/5/2024 6:02:37 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/5/2024 6:02:37 PM
Surr: DNOP	90.2	61.2-134		%Rec	1	2/5/2024 6:02:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 6:37:00 AM
Surr: BFB	105	15-244		%Rec	1	2/7/2024 6:37:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 6:37:00 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 6:37:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 6:37:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/7/2024 6:37:00 AM
Surr: 4-Bromofluorobenzene	97.0	39.1-146		%Rec	1	2/7/2024 6:37:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	330	60		mg/Kg	20	2/12/2024 4:29:02 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS04
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 1:45:00 PM
Lab ID: 2402084-004 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/6/2024 5:00:44 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/6/2024 5:00:44 PM
Surr: DNOP	101	61.2-134		%Rec	1	2/6/2024 5:00:44 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/6/2024 9:22:59 PM
Surr: BFB	108	15-244		%Rec	1	2/6/2024 9:22:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/6/2024 9:22:59 PM
Toluene	ND	0.050		mg/Kg	1	2/6/2024 9:22:59 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/6/2024 9:22:59 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/6/2024 9:22:59 PM
Surr: 4-Bromofluorobenzene	92.8	39.1-146		%Rec	1	2/6/2024 9:22:59 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	340	60		mg/Kg	20	2/12/2024 4:41:22 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS05
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 1:50:00 PM
Lab ID: 2402084-005 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/6/2024 6:11:44 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/6/2024 6:11:44 PM
Surr: DNOP	102	61.2-134		%Rec	1	2/6/2024 6:11:44 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/6/2024 10:34:31 PM
Surr: BFB	109	15-244		%Rec	1	2/6/2024 10:34:31 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/6/2024 10:34:31 PM
Toluene	ND	0.050		mg/Kg	1	2/6/2024 10:34:31 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/6/2024 10:34:31 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/6/2024 10:34:31 PM
Surr: 4-Bromofluorobenzene	93.0	39.1-146		%Rec	1	2/6/2024 10:34:31 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	530	60		mg/Kg	20	2/12/2024 5:18:25 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS06
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 1:55:00 PM
Lab ID: 2402084-006 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/6/2024 6:35:20 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/6/2024 6:35:20 PM
Surr: DNOP	97.6	61.2-134		%Rec	1	2/6/2024 6:35:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/6/2024 11:45:46 PM
Surr: BFB	106	15-244		%Rec	1	2/6/2024 11:45:46 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/6/2024 11:45:46 PM
Toluene	ND	0.049		mg/Kg	1	2/6/2024 11:45:46 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/6/2024 11:45:46 PM
Xylenes, Total	ND	0.099		mg/Kg	1	2/6/2024 11:45:46 PM
Surr: 4-Bromofluorobenzene	89.5	39.1-146		%Rec	1	2/6/2024 11:45:46 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	370	60		mg/Kg	20	2/12/2024 5:55:27 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS07
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:00:00 AM
Lab ID: 2402084-007 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/6/2024 6:58:58 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/6/2024 6:58:58 PM
Surr: DNOP	104	61.2-134		%Rec	1	2/6/2024 6:58:58 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/7/2024 12:09:38 AM
Surr: BFB	107	15-244		%Rec	1	2/7/2024 12:09:38 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 12:09:38 AM
Toluene	ND	0.047		mg/Kg	1	2/7/2024 12:09:38 AM
Ethylbenzene	ND	0.047		mg/Kg	1	2/7/2024 12:09:38 AM
Xylenes, Total	ND	0.095		mg/Kg	1	2/7/2024 12:09:38 AM
Surr: 4-Bromofluorobenzene	91.1	39.1-146		%Rec	1	2/7/2024 12:09:38 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	180	60		mg/Kg	20	2/12/2024 6:07:47 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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS08
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:05:00 AM
Lab ID: 2402084-008 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	2/6/2024 7:22:36 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/6/2024 7:22:36 PM
Surr: DNOP	103	61.2-134		%Rec	1	2/6/2024 7:22:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 12:33:25 AM
Surr: BFB	114	15-244		%Rec	1	2/7/2024 12:33:25 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	0.091	0.024		mg/Kg	1	2/7/2024 12:33:25 AM
Toluene	0.43	0.049		mg/Kg	1	2/7/2024 12:33:25 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 12:33:25 AM
Xylenes, Total	0.39	0.097		mg/Kg	1	2/7/2024 12:33:25 AM
Surr: 4-Bromofluorobenzene	94.1	39.1-146		%Rec	1	2/7/2024 12:33:25 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	150	60		mg/Kg	20	2/12/2024 6:20:08 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS09
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:10:00 AM
Lab ID: 2402084-009 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/6/2024 7:46:13 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/6/2024 7:46:13 PM
Surr: DNOP	107	61.2-134		%Rec	1	2/6/2024 7:46:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/7/2024 12:57:15 AM
Surr: BFB	113	15-244		%Rec	1	2/7/2024 12:57:15 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 12:57:15 AM
Toluene	ND	0.050		mg/Kg	1	2/7/2024 12:57:15 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/7/2024 12:57:15 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/7/2024 12:57:15 AM
Surr: 4-Bromofluorobenzene	93.2	39.1-146		%Rec	1	2/7/2024 12:57:15 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	140	60		mg/Kg	20	2/12/2024 6:32:28 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS10
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:15:00 AM
Lab ID: 2402084-010 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/6/2024 8:09:51 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/6/2024 8:09:51 PM
Surr: DNOP	107	61.2-134		%Rec	1	2/6/2024 8:09:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/7/2024 1:20:57 AM
Surr: BFB	109	15-244		%Rec	1	2/7/2024 1:20:57 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 1:20:57 AM
Toluene	ND	0.048		mg/Kg	1	2/7/2024 1:20:57 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/7/2024 1:20:57 AM
Xylenes, Total	ND	0.096		mg/Kg	1	2/7/2024 1:20:57 AM
Surr: 4-Bromofluorobenzene	92.7	39.1-146		%Rec	1	2/7/2024 1:20:57 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	170	61		mg/Kg	20	2/12/2024 6:44:48 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS11
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:20:00 AM
Lab ID: 2402084-011 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 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	2/6/2024 8:57:05 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/6/2024 8:57:05 PM
Surr: DNOP	104	61.2-134		%Rec	1	2/6/2024 8:57:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 1:44:39 AM
Surr: BFB	105	15-244		%Rec	1	2/7/2024 1:44:39 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 1:44:39 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 1:44:39 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 1:44:39 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/7/2024 1:44:39 AM
Surr: 4-Bromofluorobenzene	89.7	39.1-146		%Rec	1	2/7/2024 1:44:39 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	270	60		mg/Kg	20	2/12/2024 6:57:09 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS12
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:25:00 AM
Lab ID: 2402084-012 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/6/2024 9:20:40 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/6/2024 9:20:40 PM
Surr: DNOP	110	61.2-134		%Rec	1	2/6/2024 9:20:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/7/2024 2:08:21 AM
Surr: BFB	114	15-244		%Rec	1	2/7/2024 2:08:21 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	0.047	0.024		mg/Kg	1	2/7/2024 2:08:21 AM
Toluene	0.24	0.048		mg/Kg	1	2/7/2024 2:08:21 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/7/2024 2:08:21 AM
Xylenes, Total	0.39	0.096		mg/Kg	1	2/7/2024 2:08:21 AM
Surr: 4-Bromofluorobenzene	93.1	39.1-146		%Rec	1	2/7/2024 2:08:21 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	100	60		mg/Kg	20	2/12/2024 7:09:29 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS13
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:30:00 AM
Lab ID: 2402084-013 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/6/2024 9:44:18 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/6/2024 9:44:18 PM
Surr: DNOP	110	61.2-134		%Rec	1	2/6/2024 9:44:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/7/2024 2:32:04 AM
Surr: BFB	107	15-244		%Rec	1	2/7/2024 2:32:04 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 2:32:04 AM
Toluene	ND	0.050		mg/Kg	1	2/7/2024 2:32:04 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/7/2024 2:32:04 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/7/2024 2:32:04 AM
Surr: 4-Bromofluorobenzene	91.4	39.1-146		%Rec	1	2/7/2024 2:32:04 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	210	60		mg/Kg	20	2/13/2024 10:07:44 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: FS14
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 11:35:00 AM
Lab ID: 2402084-014 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/6/2024 10:07:51 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/6/2024 10:07:51 PM
Surr: DNOP	94.7	61.2-134		%Rec	1	2/6/2024 10:07:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/7/2024 3:19:22 AM
Surr: BFB	107	15-244		%Rec	1	2/7/2024 3:19:22 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 3:19:22 AM
Toluene	ND	0.050		mg/Kg	1	2/7/2024 3:19:22 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/7/2024 3:19:22 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/7/2024 3:19:22 AM
Surr: 4-Bromofluorobenzene	90.0	39.1-146		%Rec	1	2/7/2024 3:19:22 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	190	60		mg/Kg	20	2/13/2024 10:20:36 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS01
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:00:00 PM
Lab ID: 2402084-015 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/6/2024 10:31:26 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/6/2024 10:31:26 PM
Surr: DNOP	95.3	61.2-134		%Rec	1	2/6/2024 10:31:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/7/2024 3:43:00 AM
Surr: BFB	104	15-244		%Rec	1	2/7/2024 3:43:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 3:43:00 AM
Toluene	ND	0.050		mg/Kg	1	2/7/2024 3:43:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/7/2024 3:43:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/7/2024 3:43:00 AM
Surr: 4-Bromofluorobenzene	88.6	39.1-146		%Rec	1	2/7/2024 3:43:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 10:33:28 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS01A
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:05:00 PM
Lab ID: 2402084-016 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/6/2024 10:55:01 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/6/2024 10:55:01 PM
Surr: DNOP	98.4	61.2-134		%Rec	1	2/6/2024 10:55:01 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 4:06:38 AM
Surr: BFB	107	15-244		%Rec	1	2/7/2024 4:06:38 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 4:06:38 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 4:06:38 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 4:06:38 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/7/2024 4:06:38 AM
Surr: 4-Bromofluorobenzene	91.8	39.1-146		%Rec	1	2/7/2024 4:06:38 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 10:46:20 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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS02
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:10:00 PM
Lab ID: 2402084-017 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/6/2024 11:18:37 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/6/2024 11:18:37 PM
Surr: DNOP	96.9	61.2-134		%Rec	1	2/6/2024 11:18:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 4:30:17 AM
Surr: BFB	105	15-244		%Rec	1	2/7/2024 4:30:17 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 4:30:17 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 4:30:17 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 4:30:17 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/7/2024 4:30:17 AM
Surr: 4-Bromofluorobenzene	88.5	39.1-146		%Rec	1	2/7/2024 4:30:17 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 10:59:12 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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS02A
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:15:00 PM
Lab ID: 2402084-018 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/6/2024 11:42:11 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/6/2024 11:42:11 PM
Surr: DNOP	84.7	61.2-134		%Rec	1	2/6/2024 11:42:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 4:53:56 AM
Surr: BFB	107	15-244		%Rec	1	2/7/2024 4:53:56 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 4:53:56 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 4:53:56 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 4:53:56 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/7/2024 4:53:56 AM
Surr: 4-Bromofluorobenzene	91.8	39.1-146		%Rec	1	2/7/2024 4:53:56 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	2/12/2024 8:23:35 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS03
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:20:00 PM
Lab ID: 2402084-019 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/7/2024 12:05:42 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/7/2024 12:05:42 AM
Surr: DNOP	99.4	61.2-134		%Rec	1	2/7/2024 12:05:42 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/7/2024 5:17:36 AM
Surr: BFB	106	15-244		%Rec	1	2/7/2024 5:17:36 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 5:17:36 AM
Toluene	ND	0.048		mg/Kg	1	2/7/2024 5:17:36 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/7/2024 5:17:36 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/7/2024 5:17:36 AM
Surr: 4-Bromofluorobenzene	91.5	39.1-146		%Rec	1	2/7/2024 5:17:36 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 11:24:57 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS03A
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:25:00 PM
Lab ID: 2402084-020 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/7/2024 12:29:16 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/7/2024 12:29:16 AM
Surr: DNOP	98.6	61.2-134		%Rec	1	2/7/2024 12:29:16 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/7/2024 5:41:21 AM
Surr: BFB	105	15-244		%Rec	1	2/7/2024 5:41:21 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	2/7/2024 5:41:21 AM
Toluene	ND	0.050		mg/Kg	1	2/7/2024 5:41:21 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/7/2024 5:41:21 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/7/2024 5:41:21 AM
Surr: 4-Bromofluorobenzene	91.0	39.1-146		%Rec	1	2/7/2024 5:41:21 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 11:37:49 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS04
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:30:00 PM
Lab ID: 2402084-021 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	2/7/2024 12:52:47 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/7/2024 12:52:47 AM
Surr: DNOP	96.9	61.2-134		%Rec	1	2/7/2024 12:52:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/7/2024 6:05:03 AM
Surr: BFB	106	15-244		%Rec	1	2/7/2024 6:05:03 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 6:05:03 AM
Toluene	ND	0.048		mg/Kg	1	2/7/2024 6:05:03 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/7/2024 6:05:03 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/7/2024 6:05:03 AM
Surr: 4-Bromofluorobenzene	89.8	39.1-146		%Rec	1	2/7/2024 6:05:03 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 11:18:34 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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS04A
Project: SJ 29 6 61 M
Collection Date: 1/30/2024 12:35:00 PM
Lab ID: 2402084-022 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/7/2024 1:16:17 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/7/2024 1:16:17 AM
Surr: DNOP	99.7	61.2-134		%Rec	1	2/7/2024 1:16:17 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 6:28:46 AM
Surr: BFB	104	15-244		%Rec	1	2/7/2024 6:28:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 6:28:46 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 6:28:46 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 6:28:46 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/7/2024 6:28:46 AM
Surr: 4-Bromofluorobenzene	89.9	39.1-146		%Rec	1	2/7/2024 6:28:46 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 12:04:01 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS05
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 1:30:00 PM
Lab ID: 2402084-023 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/7/2024 1:39:49 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/7/2024 1:39:49 AM
Surr: DNOP	97.0	61.2-134		%Rec	1	2/7/2024 1:39:49 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2024 6:52:24 AM
Surr: BFB	111	15-244		%Rec	1	2/7/2024 6:52:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	2/7/2024 6:52:24 AM
Toluene	ND	0.049		mg/Kg	1	2/7/2024 6:52:24 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2024 6:52:24 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/7/2024 6:52:24 AM
Surr: 4-Bromofluorobenzene	92.2	39.1-146		%Rec	1	2/7/2024 6:52:24 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 12:49:30 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2402084**
Date Reported: **2/15/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: WS05A
Project: SJ 29 6 61 M
Collection Date: 2/1/2024 1:35:00 PM
Lab ID: 2402084-024 **Matrix:** SOIL **Received Date:** 2/2/2024 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	2/5/2024 6:05:52 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/5/2024 6:05:52 PM
Surr: DNOP	106	61.2-134		%Rec	1	2/5/2024 6:05:52 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/7/2024 12:06:38 PM
Surr: BFB	118	15-244		%Rec	1	2/7/2024 12:06:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	2/7/2024 12:06:38 PM
Toluene	ND	0.047		mg/Kg	1	2/7/2024 12:06:38 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/7/2024 12:06:38 PM
Xylenes, Total	ND	0.094		mg/Kg	1	2/7/2024 12:06:38 PM
Surr: 4-Bromofluorobenzene	89.7	39.1-146		%Rec	1	2/7/2024 12:06:38 PM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	ND	60		mg/Kg	20	2/13/2024 1:04:38 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402084**

15-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 61 M

Sample ID: **MB-80397**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **80397**	RunNo: **103044**							
Prep Date: **2/12/2024**	Analysis Date: **2/12/2024**	SeqNo: **3808985**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-80397**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **80397**	RunNo: **103044**							
Prep Date: **2/12/2024**	Analysis Date: **2/12/2024**	SeqNo: **3808986**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Sample ID: **MB-80404**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **80404**	RunNo: **103075**							
Prep Date: **2/12/2024**	Analysis Date: **2/13/2024**	SeqNo: **3810718**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-80404**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **80404**	RunNo: **103075**							
Prep Date: **2/12/2024**	Analysis Date: **2/13/2024**	SeqNo: **3810719**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402084**

15-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 61 M

Sample ID: **LCS-80234**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80234**	RunNo: **102868**
Prep Date: **2/2/2024**	Analysis Date: **2/5/2024**	SeqNo: **3800879** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.6	59.7	135			
Surr: DNOP	4.3		5.000		86.3	61.2	134			

Sample ID: **MB-80234**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80234**	RunNo: **102868**
Prep Date: **2/2/2024**	Analysis Date: **2/5/2024**	SeqNo: **3801344** 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	9.4		10.00		93.7	61.2	134			

Sample ID: **MB-80265**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80265**	RunNo: **102881**
Prep Date: **2/5/2024**	Analysis Date: **2/5/2024**	SeqNo: **3801657** 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	10		10.00		104	61.2	134			

Sample ID: **LCS-80265**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80265**	RunNo: **102881**
Prep Date: **2/5/2024**	Analysis Date: **2/5/2024**	SeqNo: **3801658** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	103	59.7	135			
Surr: DNOP	4.9		5.000		97.7	61.2	134			

Sample ID: **MB-80285**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **80285**	RunNo: **102923**
Prep Date: **2/6/2024**	Analysis Date: **2/6/2024**	SeqNo: **3803645** 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	10		10.00		101	61.2	134			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402084**

15-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 61 M

Sample ID: **LCS-80285**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **80285**	RunNo: **102923**
Prep Date: **2/6/2024**	Analysis Date: **2/6/2024**	SeqNo: **3803646** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	59.7	135			
Surr: DNOP	4.7		5.000		93.1	61.2	134			

Sample ID: **2402084-004AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **FS04**	Batch ID: **80285**	RunNo: **102923**
Prep Date: **2/6/2024**	Analysis Date: **2/6/2024**	SeqNo: **3803648** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.6	48.22	0	108	43.7	136			
Surr: DNOP	4.6		4.822		96.2	61.2	134			

Sample ID: **2402084-004AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **FS04**	Batch ID: **80285**	RunNo: **102923**
Prep Date: **2/6/2024**	Analysis Date: **2/6/2024**	SeqNo: **3803649** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.0	45.21	0	111	43.7	136	3.76	31.3	
Surr: DNOP	4.4		4.521		98.4	61.2	134	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402084**

15-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 61 M

Sample ID: **lcs-80264**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802321** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	106	70	130			
Surr: BFB	2200		1000		216	15	244			

Sample ID: **mb-80264**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802322** 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		104	15	244			

Sample ID: **lcs-80229**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **80229**	RunNo: **102909**
Prep Date: **2/2/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802679** 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	97.2	70	130			
Surr: BFB	2200		1000		215	15	244			

Sample ID: **mb-80229**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **80229**	RunNo: **102909**
Prep Date: **2/2/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802680** 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	1100		1000		105	15	244			

Sample ID: **2402084-004ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FS04**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802952** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	5.0	24.88	0	123	70	130			
Surr: BFB	2400		995.0		241	15	244			

Sample ID: **2402084-004amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FS04**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802953** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402084**

15-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 61 M

Sample ID: **2402084-004amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **FS04**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802953** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	24.85	0	114	70	130	7.49	20	
Surr: BFB	2300		994.0		230	15	244	0	0	

Sample ID: **lcs-80257**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **80257**	RunNo: **102936**
Prep Date: **2/5/2024**	Analysis Date: **2/7/2024**	SeqNo: **3803969** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	70	130			
Surr: BFB	2200		1000		216	15	244			

Sample ID: **mb-80257**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **80257**	RunNo: **102936**
Prep Date: **2/5/2024**	Analysis Date: **2/7/2024**	SeqNo: **3803970** 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	1100		1000		107	15	244			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402084**

15-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 61 M

Sample ID: **LCS-80264**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802323** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	81.9	70	130			
Toluene	0.83	0.050	1.000	0	82.9	70	130			
Ethylbenzene	0.84	0.050	1.000	0	83.5	70	130			
Xylenes, Total	2.5	0.10	3.000	0	84.5	70	130			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.7	39.1	146			

Sample ID: **mb-80264**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802324** 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	0.90		1.000		89.8	39.1	146			

Sample ID: **2402084-005ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FS05**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802981** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	0.9891	0	97.9	70	130			
Toluene	1.0	0.049	0.9891	0	101	70	130			
Ethylbenzene	1.0	0.049	0.9891	0	104	70	130			
Xylenes, Total	3.1	0.099	2.967	0	104	70	130			
Surr: 4-Bromofluorobenzene	0.92		0.9891		93.5	39.1	146			

Sample ID: **2402084-005amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **FS05**	Batch ID: **80264**	RunNo: **102890**
Prep Date: **2/5/2024**	Analysis Date: **2/6/2024**	SeqNo: **3802982** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	0.9970	0	88.3	70	130	9.58	20	
Toluene	0.91	0.050	0.9970	0	91.1	70	130	9.97	20	
Ethylbenzene	0.94	0.050	0.9970	0	94.2	70	130	9.27	20	
Xylenes, Total	2.8	0.10	2.991	0	94.4	70	130	9.28	20	
Surr: 4-Bromofluorobenzene	0.92		0.9970		91.8	39.1	146	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2402084**

15-Feb-24

Client: HILCORP ENERGY

Project: SJ 29 6 61 M

Sample ID: **lcs-80229**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80229**	RunNo: **102909**
Prep Date: **2/2/2024**	Analysis Date: **2/6/2024**	SeqNo: **3803025** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.6	70	130			
Toluene	0.90	0.050	1.000	0	89.9	70	130			
Ethylbenzene	0.91	0.050	1.000	0	91.4	70	130			
Xylenes, Total	2.8	0.10	3.000	0	91.9	70	130			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.6	39.1	146			

Sample ID: **mb-80229**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80229**	RunNo: **102909**
Prep Date: **2/2/2024**	Analysis Date: **2/6/2024**	SeqNo: **3803026** 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	0.96		1.000		95.8	39.1	146			

Sample ID: **LCS-80257**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **80257**	RunNo: **102936**
Prep Date: **2/5/2024**	Analysis Date: **2/7/2024**	SeqNo: **3803972** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.0	70	130			
Toluene	0.88	0.050	1.000	0	88.3	70	130			
Ethylbenzene	0.90	0.050	1.000	0	89.8	70	130			
Xylenes, Total	2.7	0.10	3.000	0	90.7	70	130			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.0	39.1	146			

Sample ID: **mb-80257**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **80257**	RunNo: **102936**
Prep Date: **2/5/2024**	Analysis Date: **2/7/2024**	SeqNo: **3803973** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.2	39.1	146			

Qualifiers:

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

eurofins | Environment Testing

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

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2402084 RcptNo: 1

Received By: Tracy Casarrubias 2/2/2024 6:30:00 AM

Completed By: Tracy Casarrubias 2/2/2024 7:56:25 AM

Reviewed By: JM 2/2/24 Extra Samples Checked by JM 2.2.24

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° 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 ☑ TMC 2/2/24	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: M 2/2/24

Extra samples JM 2/2/24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order?	Yes ☑	No ☐	NA ☑ TMC 2/2/24

Person Notified: Christine W. Date: 2/2/24

By Whom: Tracy Casarrubias Via: ☐ eMail ☑ Phone ☐ Fax ☐ In Person

Regarding: Extra Volume

Client Instructions: Added Extra samples to COC per client - TMC 2/2/24

16. Additional remarks:

Mailing address and phone number are missing on COC- TMC 2/2/24

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes	Morty		

Chain-of-Custody Record

Client: Hilcorp

Samantha Grabert

Mailing Address:

Phone #:

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

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☒ EDD (Type) xls

Turn-Around Time: 5day

☒ Standard ☐ Rush

Project Name: SJ 29-6 61M

Project #:

Project Manager: Stuart Hyde - Ensolum

Sampler: E. Carroll

On Ice: ☒ Yes ☐ No morty

# of Coolers: 1

Cooler Temp(Including CF): 1.7 +0 = 1.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2402084	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1-30	1330	Soil	FS01	1402	Cool	001	X	X								
	1335		FS02			002										
	1340		FS03			003										
	1345		FS04			004										
	1350		FS05			005										
	1355		FS06			006										
2-1	1100		FS07			007										
	1105		FS08			008										
	1110		FS09			009										
	1115		FS10			010										
	1120		FS11			011										
	1125		FS12			012										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
2-1	1533		Cha Wall		2/1/24	1533
2/1/24	1719	Stuart Walls		courier	2/2/24	6:30

Remarks: cc: shyde@ensolum.com
ecarroll@ensolum.com

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

Chain-of-Custody Record

Client: Hilcorp

Samantha Grobert

Mailing Address:

Phone #:

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

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☒ EDD (Type) xls

Turn-Around Time: 5 day

☒ Standard ☐ Rush

Project Name: SJ 29-6 61M

Project #:

Project Manager: Stuart Hyde - Ensolum

Sampler: E. Carroll

On Ice: ☒ Yes ☐ No marty

# of Coolers: 1

Cooler Temp(Including CF): 1.7±0=1.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2402084	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
2-1	1130	Soil	FS13	1 4oz	cool	013	X	X								
2-1	1135		FS14			014										
1-30	1200		WS01			015										
	1205		WS01A			016										
	1210		WS02			017										
	1215		WS02A			018										
	1220		WS03			019										
	1225		WS03A			020										
	1230		WS04			021										
↓	1235		WS04A			022										
2-1	13:30		WS05			023										
2-1	13:35	↓	WS05-A	↓	↓	024	↓	↓								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2-1	1533				2/1/24	1533
2/1/24	179			courier	2/2/24	6:30

Remarks:

cc: shyde@ensolum.com

ecarroll@ensolum.com

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

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 317036

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 317036
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2333159777**
Incident Name	**NAPP2333159777 SAN JUAN 29-6 UNIT 61M @ 30-039-30985**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-039-30985] SAN JUAN 29 6 UNIT #061M**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	San Juan 29-6 Unit 61M
Date Release Discovered	11/27/2023
Surface Owner	Private

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Equipment Failure | Valve | Crude Oil | Released: 84 BBL | Recovered: 0 BBL | Lost: 84 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure | Valve | Produced Water | Released: 9 BBL | Recovered: 0 BBL | Lost: 9 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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 317036
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	N/A
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 02/23/2024

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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 317036
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 300 and 500 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Between ½ and 1 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 300 and 500 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 1 and 100 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	530
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0.9
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	01/25/2024
On what date will (or did) the final sampling or liner inspection occur	02/01/2024
On what date will (or was) the remediation complete(d)	02/01/2024
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	2315
What is the estimated volume (in cubic yards) that will be remediated	1000
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 317036
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	ENVIROTECH LANDFARM #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.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 02/23/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 317036
	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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 317036
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**309653**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**02/01/2024**
What was the (estimated) number of samples that were to be gathered	**24**
What was the sampling surface area in square feet	**1000**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	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	2315
What was the total volume (cubic yards) remediated	1000
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	None

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: 02/23/2024

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 (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 317036
	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

Operator:	OGRID:
HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	372171
	Action Number: 317036
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	5/2/2024