



April 26, 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 Work Plan

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

To Whom it May Concern:

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

SITE BACKGROUND

On January 29, 2024, Hilcorp discovered a release of 41.58 barrels (bbls) of condensate due to corrosion at the bottom of the on-Site above ground storage tank (AST). Fluids stayed within the secondary containment berm but none were recovered. Upon discovery, the leak was stopped and the remaining contents of the tank were drained to the nearby pit. The release volume was determined based on the operator's tank gauging data. Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) via email and submitted a Notification of Release on January 30, 2024. Hilcorp submitted the initial Form C-141 on February 12, 2024, and the release was assigned NMOCD Incident Number nAPP2403034973.

SITE CHARACTERIZATION

The Site is located on public 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 significant watercourse to the Site is an unnamed intermittent stream located approximately 385 feet south of the Site. The nearest data point for depth to groundwater to the Site is a water well (SJ-04033-POD1) located approximately 7,010 feet northwest of the Site (Appendix A). This well indicates the shallowest groundwater is approximately 179 feet below ground surface (bgs) in this area.

The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland. Wellhead protection areas, springs, or domestic/stock wells are not 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 BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. A Site receptor map is shown on Figure 1.

SITE CLOSURE CRITERIA

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

HAND AUGER AND POTHOLE DELINEATION ACTIVITIES

Ensolum advanced an initial hand auger boring at the Site on January 30, 2024, following the discovery of the release. Based on initial field screening and preliminary analytical results (presented on Table 1), additional vertical and lateral delineation was required to further delineate soil impacts. A backhoe was used to advance potholes at the Site and continue delineation efforts on February 6, 2024. Potholes PH01 through PH06 were advanced at the locations indicated on Figure 2. During delineation activities, an Ensolum geologist noted the soil composition and inspected the soil for petroleum hydrocarbon staining and odors. Soils were generally described using the Unified Soil Classification System (USCS), as specified in American Society for Testing and Materials (ASTM) method D2488. The soil composition was homogenous across the Site and was comprised of Clay overlying soft silt that graded to sandstone that became indurated with depth. Soil samples were also field screened for the presence of volatile organic compounds

(VOCs) using a calibrated photoionization detector (PID). The NMOCD was notified at least 48 hours in advance of potholing activities performed at the Site. Notifications and correspondence with the NMOCD are attached in Appendix B.

Two soil samples were collected from each pothole to assess subsurface impacts, with one sample collected from the interval corresponding to the highest PID reading and one sample collected from the terminus of the pothole. Soil samples were collected directly into laboratory-provided jars and immediately placed on ice. Samples were submitted to Eurofins Environment Testing (Eurofins) for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-MRO following EPA Method 8015M/D, and chloride following EPA Method 300.0.

DELINEATION RESULTS AND CONCLUSIONS

In general, unconsolidated clay and silt overlie soft, silty sandstone that grades to hard sandstone at depths of approximately 10 to 12 bgs. Refusal with the backhoe was encountered at depths between 10 to 14 feet bgs. Field indications of petroleum hydrocarbons, including staining, odors, and/or elevated PID readings, were noted in potholes PH01 and PH03. Groundwater was not encountered in any of the potholes.

Concentrations of total BTEX and total TPH exceeding the NMOCD Table I Closure Criteria were detected in samples collected from borings/potholes HA01, PH01, and PH03. Containment of Concern (COC) concentrations were compliant with the NMOCD Table I Closure Criteria in all other analyzed samples. A summary of the January and February 2024 analytical results is presented on Table 1 and is depicted on Figure 2. Complete laboratory reports are attached in Appendix C. Photographs collected during Site work are included in Appendix D.

Based on the depths at which COC concentrations exceeded the applicable Closure Criteria (near the interface of the unconsolidated clay and silty sandstone), it appears the released fluids predominantly migrated vertically below the center of the secondary containment and then travelled along the bedrock contact. Based on the soil analytical data collected at the Site, petroleum hydrocarbon impacted soil is present between the ground surface up to a depth of approximately 10 feet bgs. Based on this data, it is estimated 600 cubic yards of soil have been impacted by the Site release.

REMEDIATION WORK PLAN

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

Once treated, 5-point composite samples will be collected for analysis from each 100 cubic yard stockpile. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Samples will be submitted to Eurofins using the handling procedures described above and will be analyzed for TPH and BTEX constituents. Based on the delineation results described above, chloride will not be analyzed during confirmation soil sampling. Assuming soil is compliant with the NMOCD Table I Closure Criteria, the soil will be ultimately used to backfill the open

excavation. Any stockpiles exceeding the applicable Closure Criteria will be allowed to process for a longer period of time and/or be retreated until Closure Criteria are met.

In addition, as soil is removed from the excavation, the excavation sidewalls and floors will be field screened using a PID. Once field screening indicates impacted soil has been removed, 5-point composite samples will be collected from the sidewalls and floor of the excavation at a frequency of one sample per 200 square feet. The 5-point composite samples will be collected in the same manner described above. Samples will also be collected and submitted to Eurofins using the techniques described above and will again be analyzed for TPH and BTEX constituents.

SCHEDULE

Within 90 days of NMOCD and BLM approval of this *Remediation Work Plan*, pending contractor availability, Hilcorp will complete the remediation work as described above. Hilcorp will notify the NMOCD and BLM of any delays in this schedule.

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

Sincerely,
Ensolum, LLC



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



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

Attachments:

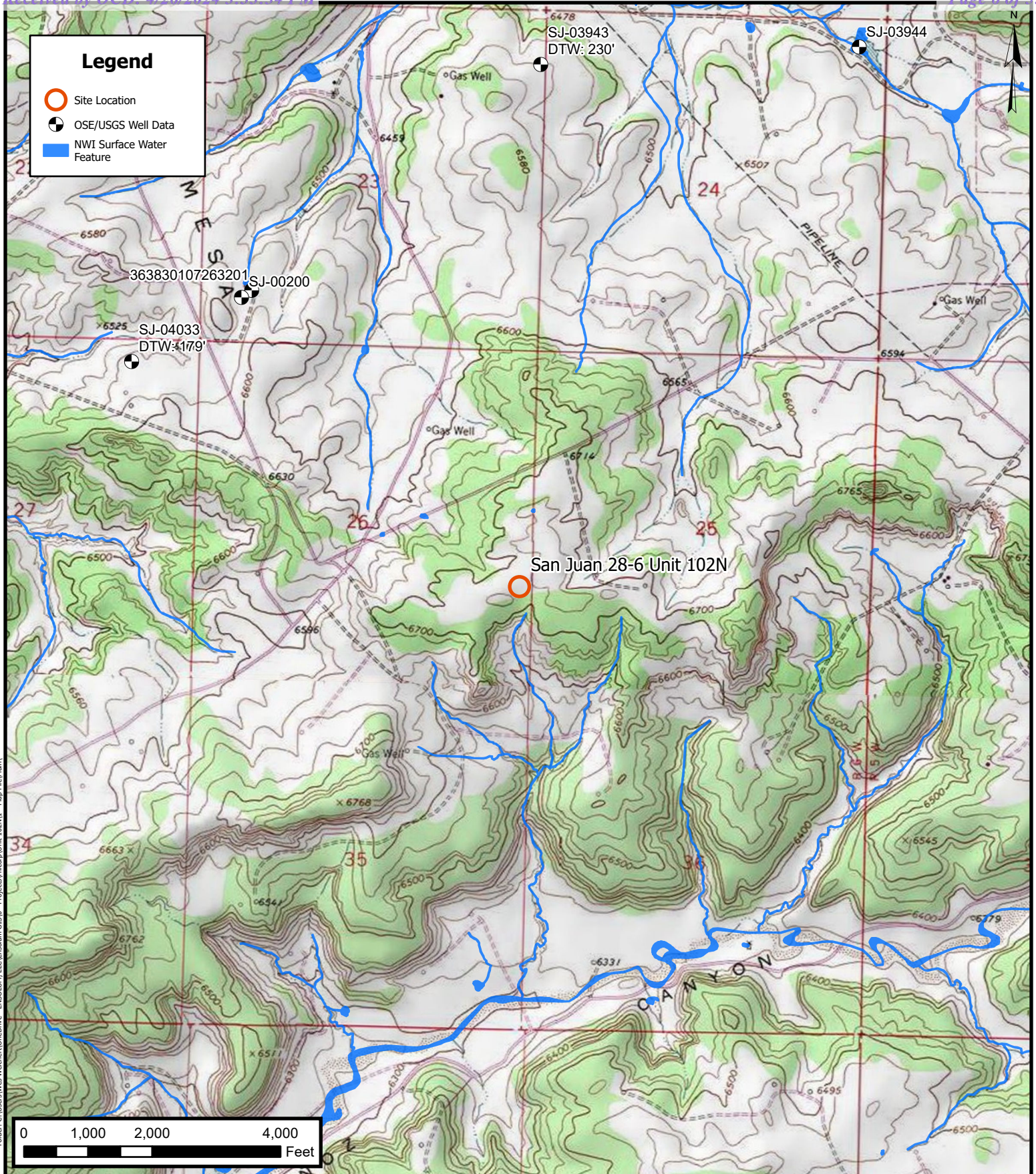
- Figure 1: Site Receptor Map
- Figure 2: Delineation Soil Sample Locations

- Table 1: Soil Sample Analytical Results

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



FIGURES



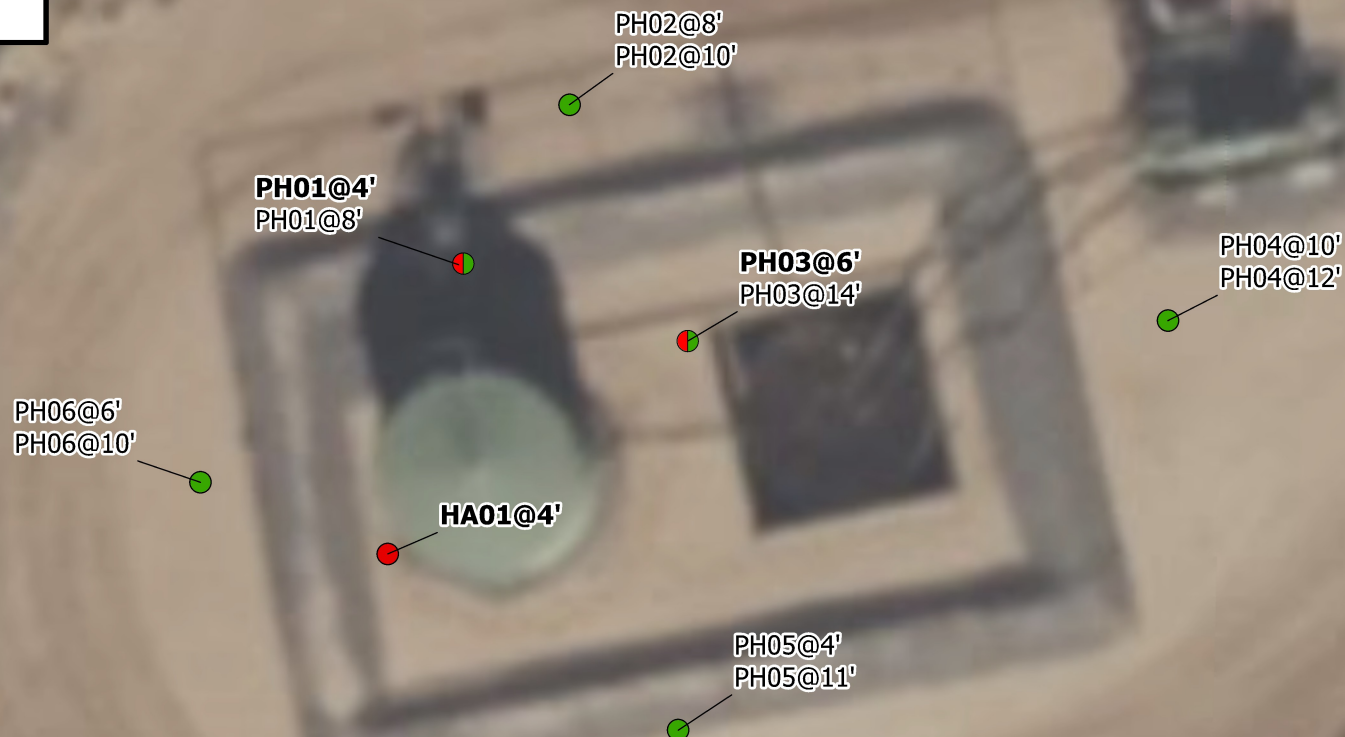
ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

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

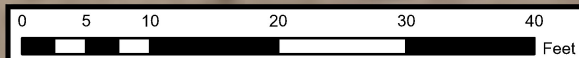
FIGURE
1

Legend

- Delineation Soil Samples
Compliant with Closure Criteria
- Delineation Soil Samples with
Concentrations Exceeding
Closure Criteria
- Delineation Soil Samples with
Initial Concentrations
Exceeding Closure Criteria.
Terminal Samples Compliant
with Closure Criteria



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable
 Closure Criteria.



Sources: Bing Maps; Environmental Systems Research Institute (ESRI)



Delineation Soil Sample Locations

Hilcorp Energy Company

San Juan 28-6 Unit 102N

Incident Number: nAPP2403034973

Unit I, Sec. 26, T028N, R006W

Rio Arriba County, New Mexico, United States

FIGURE

2



TABLES



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS San Juan 28-6 Unit 102N Hilcorp Energy Company Rio Arriba County, New Mexico													
Sample Identification	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	GRO + DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000
HA01@4'	1/30/2024	4	1.8	100	46	640	787.8	6,000	3,100	<470	9,100	9,100	<60
PH01@4'	2/6/2024	4	4.6	110	33	450	597.6	4,400	1,600	<480	6,000	6,000	<60
PH01@8'	2/6/2024	8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.1	<45	<9.1	<45	<60
PH02@8'	2/6/2024	8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.2	<46	<9.2	<46	<60
PH02@10'	2/6/2024	10	<0.024	<0.048	<0.048	0.23	0.23	9.9	<9.4	<47	9.9	9.9	<60
PH03@6'	2/6/2024	6	3.3	83	26	350	462.3	3,500	1,400	<480	4,900	4,900	<60
PH03@14'	2/6/2024	14	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.5	<48	<9.5	<48	<60
PH04@10'	2/6/2024	10	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.3	<47	<9.3	<47	<60
PH04@12'	2/6/2024	12	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.0	<45	<9.0	<45	<59
PH05@4'	2/6/2024	4	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.5	<47	<9.5	<47	<60
PH05@11'	2/6/2024	11	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.4	<47	<9.4	<47	<60
PH06@6'	2/6/2024	6	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.7	<49	<9.7	<49	<60
PH06@10'	2/6/2024	10	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.1	<46	<9.1	<46	<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
' : feet

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
MRO: Motor Oil Range Organics
TPH: Total Petroleum Hydrocarbon
< : indicates result less than the stated laboratory reporting limit (RL)
Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table I Closure Criteria for Soils Impacted by a Release




APPENDIX A

NMOSE Point of Diversion Summary



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)				(NAD83 UTM in meters)		
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y			
	SJ 04033 POD1	1	2	2	27	28N	06W	281041	4057564			
x												
Driller License:		717		Driller Company:			WESTERN WATER WELLS					
Driller Name:		TERRY HOOD										
Drill Start Date:		06/25/2013		Drill Finish Date:			07/03/2013		Plug Date:			
Log File Date:		07/09/2013		PCW Rcv Date:						Source: Shallow		
Pump Type:					Pipe Discharge Size:						Estimated Yield: 10 GPM	
Casing Size:		5.00		Depth Well:			430 feet		Depth Water:		179 feet	
x												
Water Bearing Stratifications:					Top	Bottom	Description					
					140	180	Sandstone/Gravel/Conglomerate					
					225	285	Sandstone/Gravel/Conglomerate					
					360	430	Sandstone/Gravel/Conglomerate					
x												
Casing Perforations:					Top	Bottom						
					316	430						
x												

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



APPENDIX B

Agency Notifications

From: OCDOnline@state.nm.us
To: [Stuart Hyde](#)
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 310133
Date: Wednesday, January 31, 2024 3:28:17 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#) nAPP2403034973.

The sampling event is expected to take place:

When: 02/05/2024 @ 08:30

Where: I-26-28N-06W 1590 FSL 195 FEL (36.6293411,-107.428154)

Additional Information: Stuart Hyde (970) 903-1607

Delineation sampling, number of samples and sampling surface area may be less.

Additional Instructions: 36.6293411,-107.428154

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

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

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

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

From: OCDOnline@state.nm.us
To: [Stuart Hyde](#)
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 311202
Date: Monday, February 5, 2024 10:15:22 AM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2403034973.

The sampling event is expected to take place:

When: 02/06/2024 @ 08:00

Where: I-26-28N-06W 1590 FSL 195 FEL (36.6293411,-107.428154)

Additional Information: Stuart Hyde
970-903-1607

Due to weather and road conditions to the site, sampling work may be delayed from 2/5/2024 to 2/6/2024. As such, 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 Tuesday February 6, 2024 beginning at 8 AM.

Additional Instructions: 36.6294, -107.42764

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

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

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

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

From: [Velez, Nelson, EMNRD](#)
To: [Stuart Hyde](#)
Cc: [Wes Weichert](#); [Samantha Grabert](#)
Subject: Re: [EXTERNAL] nAPP2403034973 - San Juan 28-6 Unit 102N Sampling Notification Variance Request
Date: Monday, February 5, 2024 1:30:28 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[Outlook-cq4nztv.png](#)

[**EXTERNAL EMAIL**]

Good afternoon 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: Monday, February 5, 2024 12:03 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Wes Weichert <wweichert@ensolum.com>; Samantha Grabert <Samantha.Grabert@hilcorp.com>

Subject: [EXTERNAL] nAPP2403034973 - San Juan 28-6 Unit 102N Sampling Notification Variance Request

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

Nelson,

Due to weather and road conditions to the site, sampling work at the Hilcorp Energy Company San Juan 28-6 Unit 102N site be delayed from 2/5/2024 to 2/6/2024. As such, 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 Tuesday February 6, 2024 beginning at 8 AM.

Please reach out with any questions. Thanks.



Stuart Hyde, PG

Senior Geologist

970-903-1607

Ensolum, LLC

in f 

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>

Sent: Monday, February 5, 2024 10:15 AM

To: Stuart Hyde <shyde@ensolum.com>

Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 311202

[**EXTERNAL EMAIL]**

To whom it may concern (c/o Stuart Hyde for HILCORP ENERGY COMPANY),
The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N),
for incident ID (n#) nAPP2403034973.

The sampling event is expected to take place:

When: 02/06/2024 @ 08:00

Where: I-26-28N-06W 1590 FSL 195 FEL (36.6293411,-107.428154)

Additional Information: Stuart Hyde

970-903-1607

Due to weather and road conditions to the site, sampling work may be delayed from 2/5/2024 to 2/6/2024. As such, 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 Tuesday February 6, 2024 beginning at 8 AM.

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

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

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



APPENDIX C

Laboratory Analytical Reports



Environment Testing

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

February 13, 2024

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

RE: SJ 28 6 102N

OrderNo.: 2401B91

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 1 sample(s) on 1/31/2024 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401B91

Date Reported: 2/13/2024

CLIENT: HILCORP ENERGY

Client Sample ID: HA01@4'

Project: SJ 28 6 102N

Collection Date: 1/30/2024 1:14:00 PM

Lab ID: 2401B91-001

Matrix: SOIL

Received Date: 1/31/2024 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	3100	93		mg/Kg	10	2/5/2024 11:39:55 AM
Motor Oil Range Organics (MRO)	ND	470	D	mg/Kg	10	2/5/2024 11:39:55 AM
Surr: DNOP	0	61.2-134	S	%Rec	10	2/5/2024 11:39:55 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	6000	99		mg/Kg	20	2/3/2024 3:20:14 AM
Surr: BFB	1190	15-244	S	%Rec	20	2/3/2024 3:20:14 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	1.8	0.50		mg/Kg	20	2/3/2024 3:20:14 AM
Toluene	100	9.9		mg/Kg	200	2/5/2024 2:36:57 PM
Ethylbenzene	46	0.99		mg/Kg	20	2/3/2024 3:20:14 AM
Xylenes, Total	640	20		mg/Kg	200	2/5/2024 2:36:57 PM
Surr: 4-Bromofluorobenzene	137	39.1-146		%Rec	20	2/3/2024 3:20:14 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	2/3/2024 11:47:08 AM

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B91

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 28 6 102N

Sample ID: MB-80236	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 80236	RunNo: 102858
Prep Date: 2/2/2024	Analysis Date: 2/3/2024	SeqNo: 3800520 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-80236	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 80236	RunNo: 102858
Prep Date: 2/2/2024	Analysis Date: 2/3/2024	SeqNo: 3800521 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.3 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B91

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 28 6 102N

Sample ID: MB-80224	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80224	RunNo: 102843								
Prep Date: 2/1/2024	Analysis Date: 2/2/2024	SeqNo: 3800103			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		123	61.2	134			

Sample ID: LCS-80224	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80224	RunNo: 102843								
Prep Date: 2/1/2024	Analysis Date: 2/2/2024	SeqNo: 3800104			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.4		5.000		127	69	147			

Sample ID: MB-80223	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80223	RunNo: 102856								
Prep Date: 2/1/2024	Analysis Date: 2/2/2024	SeqNo: 3800484			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		107	61.2	134			

Sample ID: LCS-80223	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80223	RunNo: 102856								
Prep Date: 2/1/2024	Analysis Date: 2/2/2024	SeqNo: 3800485			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.3	59.7	135			
Surr: DNOP	5.1		5.000		102	61.2	134			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B91

13-Feb-24

Client: HILCORP ENERGY
Project: SJ 28 6 102N

Sample ID: ics-80192	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 80192	RunNo: 102837								
Prep Date: 1/31/2024	Analysis Date: 2/2/2024	SeqNo: 3799767		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	70	130			
Surr: BFB	2200		1000		222	15	244			

Sample ID: mb-80192	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 80192	RunNo: 102837								
Prep Date: 1/31/2024	Analysis Date: 2/2/2024	SeqNo: 3799768		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	15	244			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of standard limits. If undiluted results may be estimated.
- B

Analyte detected in the associated Method Blank
- E

Above Quantitation Range/Estimated Value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B91

13-Feb-24

Client: HILCORP ENERGY

Project: SJ 28 6 102N

Sample ID: LCS-80192	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 80192		RunNo: 102837							
Prep Date: 1/31/2024	Analysis Date: 2/2/2024		SeqNo: 3799772		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.0	70	130			
Toluene	0.89	0.050	1.000	0	88.8	70	130			
Ethylbenzene	0.89	0.050	1.000	0	88.8	70	130			
Xylenes, Total	2.7	0.10	3.000	0	89.2	70	130			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.6	39.1	146			

Sample ID: mb-80192	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 80192		RunNo: 102837							
Prep Date: 1/31/2024	Analysis Date: 2/2/2024		SeqNo: 3799773		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.0	39.1	146			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 5 of 5



Environment Testin

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: 2401B91

RcptNo: 1

Received By: Tracy Casarrubias

1/31/2024 7:00:00 AM

Completed By: Tracy Casarrubias

1/31/2024 7:48:42 AM

Reviewed By: SCM 1/31/24

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐

5. Sample(s) in proper container(s)? Yes ☒ No ☐

6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐

7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐

8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐

9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒

10. Were any sample containers received broken? Yes ☐ No ☒

11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐

13. Is it clear what analyses were requested? Yes ☒ No ☐

14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: Jm 1/31/24

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

Mailing address is missing on COC- TMC 1/31/24

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.6	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Hilcorp Energy Company

Attn: Samantha Grabert

Mailing Address:

Phone #: 337-781-9630

email or Fax#: Samantha.gruber@philcorp.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SJ 28-6 #102N

Project #:

Project Manager:

S. Hyde

Sampler: Al Thomson

On Ice: ☒ Yes ☐ No

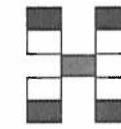
of Coolers:

Cooler Temp(Including CF): $4.7 - 0.1 = 4.6$ ($^{\circ}\text{C}$)Container
Type and #Preservative
Type

HEAL No.

7401B91

00



HALL ENVIRONMENTAL ANALYSIS LABORATORY


www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Date:	Time:	Relinquished by:
1-30	1500	Al Thomson 

Received by:	Via:	Date	Time
<i>[Signature]</i>		1/30/24	1500

Remarks: Please CC: shyde@ensolum.com
wweichert@ensolum.com

Date:	Time:	Relinquished by:
1/30/24	1728	Christopher Hayes

Received by: Via: *Cowner* Date 1/31/24 Time 7:00

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



Environment Testing

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

February 15, 2024

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

RE: San Juan 28 6 Unit 102 N

OrderNo.: 2402407

Dear Samantha Grabert:

Eurofins Environment Testing South Central, LLC received 12 sample(s) on 2/8/2024 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: PH01@4'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 10:50:00 AM

Lab ID: 2402407-001

Matrix: SOIL

Received Date: 2/8/2024 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)	1600	95		mg/Kg	10	2/9/2024 10:45:50 AM
Motor Oil Range Organics (MRO)	ND	480	D	mg/Kg	10	2/9/2024 10:45:50 AM
Surr: DNOP	0	61.2-134	S	%Rec	10	2/9/2024 10:45:50 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	4400	95		mg/Kg	20	2/9/2024 11:47:05 PM
Surr: BFB	745	15-244	S	%Rec	20	2/9/2024 11:47:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	4.6	0.48		mg/Kg	20	2/9/2024 11:47:05 PM
Toluene	110	9.5		mg/Kg	200	2/12/2024 5:05:51 PM
Ethylbenzene	33	0.95		mg/Kg	20	2/9/2024 11:47:05 PM
Xylenes, Total	450	19		mg/Kg	200	2/12/2024 5:05:51 PM
Surr: 4-Bromofluorobenzene	119	39.1-146		%Rec	20	2/9/2024 11:47:05 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/9/2024 2:01:52 PM

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

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

CLIENT: HILCORP ENERGY

Client Sample ID: PH01@8'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 11:11:00 AM

Lab ID: 2402407-002

Matrix: SOIL

Received Date: 2/8/2024 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	9.1		mg/Kg	1	2/8/2024 4:59:39 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/8/2024 4:59:39 PM
Surr: DNOP	84.7	61.2-134		%Rec	1	2/8/2024 4:59:39 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/10/2024 12:10:34 AM
Surr: BFB	111	15-244		%Rec	1	2/10/2024 12:10:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 12:10:34 AM
Toluene	ND	0.049		mg/Kg	1	2/10/2024 12:10:34 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/10/2024 12:10:34 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/10/2024 12:10:34 AM
Surr: 4-Bromofluorobenzene	83.5	39.1-146		%Rec	1	2/10/2024 12:10:34 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/9/2024 2:14:13 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

CLIENT: HILCORP ENERGY

Client Sample ID: PH02@8'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 3:40:00 PM

Lab ID: 2402407-003

Matrix: SOIL

Received Date: 2/8/2024 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	9.2		mg/Kg	1	2/8/2024 5:11:51 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/8/2024 5:11:51 PM
Surr: DNOP	85.8	61.2-134		%Rec	1	2/8/2024 5:11:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/10/2024 1:21:24 AM
Surr: BFB	95.7	15-244		%Rec	1	2/10/2024 1:21:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 1:21:24 AM
Toluene	ND	0.049		mg/Kg	1	2/10/2024 1:21:24 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/10/2024 1:21:24 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/10/2024 1:21:24 AM
Surr: 4-Bromofluorobenzene	82.7	39.1-146		%Rec	1	2/10/2024 1:21:24 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/9/2024 2:26:35 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

CLIENT: HILCORP ENERGY

Client Sample ID: PH02@10'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 3:50:00 PM

Lab ID: 2402407-004

Matrix: SOIL

Received Date: 2/8/2024 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	9.4		mg/Kg	1	2/8/2024 5:23:57 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/8/2024 5:23:57 PM
Surr: DNOP	83.7	61.2-134		%Rec	1	2/8/2024 5:23:57 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	9.9	4.8		mg/Kg	1	2/10/2024 2:31:47 AM
Surr: BFB	152	15-244		%Rec	1	2/10/2024 2:31:47 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 2:31:47 AM
Toluene	ND	0.048		mg/Kg	1	2/10/2024 2:31:47 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/10/2024 2:31:47 AM
Xylenes, Total	0.23	0.096		mg/Kg	1	2/10/2024 2:31:47 AM
Surr: 4-Bromofluorobenzene	86.9	39.1-146		%Rec	1	2/10/2024 2:31:47 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/9/2024 3:03:36 PM

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

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

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: PH03@6'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 1:00:00 PM

Lab ID: 2402407-005

Matrix: SOIL

Received Date: 2/8/2024 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)	1400	97		mg/Kg	10	2/9/2024 10:57:35 AM
Motor Oil Range Organics (MRO)	ND	480	D	mg/Kg	10	2/9/2024 10:57:35 AM
Surr: DNOP	0	61.2-134	S	%Rec	10	2/9/2024 10:57:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	3500	47		mg/Kg	10	2/10/2024 2:55:31 AM
Surr: BFB	1220	15-244	S	%Rec	10	2/10/2024 2:55:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	3.3	0.23		mg/Kg	10	2/10/2024 2:55:31 AM
Toluene	83	4.7		mg/Kg	100	2/12/2024 5:29:45 PM
Ethylbenzene	26	0.47		mg/Kg	10	2/10/2024 2:55:31 AM
Xylenes, Total	350	9.4		mg/Kg	100	2/12/2024 5:29:45 PM
Surr: 4-Bromofluorobenzene	140	39.1-146		%Rec	10	2/10/2024 2:55:31 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/9/2024 11:48:58 PM

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

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

CLIENT: HILCORP ENERGY

Client Sample ID: PH03@14'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 1:40:00 PM

Lab ID: 2402407-006

Matrix: SOIL

Received Date: 2/8/2024 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	2/8/2024 5:47:56 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/8/2024 5:47:56 PM
Surr: DNOP	83.8	61.2-134		%Rec	1	2/8/2024 5:47:56 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/12/2024 6:10:21 PM
Surr: BFB	118	15-244		%Rec	1	2/12/2024 6:10:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	2/10/2024 3:18:57 AM
Toluene	ND	0.049		mg/Kg	1	2/10/2024 3:18:57 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/10/2024 3:18:57 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/10/2024 3:18:57 AM
Surr: 4-Bromofluorobenzene	80.9	39.1-146		%Rec	1	2/10/2024 3:18:57 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/10/2024 12:01:18 AM

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

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

CLIENT: HILCORP ENERGY

Client Sample ID: PH04@10'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 2:15:00 PM

Lab ID: 2402407-007

Matrix: SOIL

Received Date: 2/8/2024 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	2/8/2024 5:59:49 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/8/2024 5:59:49 PM
Surr: DNOP	79.0	61.2-134		%Rec	1	2/8/2024 5:59:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/10/2024 3:42:47 AM
Surr: BFB	104	15-244		%Rec	1	2/10/2024 3:42:47 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	2/10/2024 3:42:47 AM
Toluene	ND	0.046		mg/Kg	1	2/10/2024 3:42:47 AM
Ethylbenzene	ND	0.046		mg/Kg	1	2/10/2024 3:42:47 AM
Xylenes, Total	ND	0.092		mg/Kg	1	2/10/2024 3:42:47 AM
Surr: 4-Bromofluorobenzene	82.3	39.1-146		%Rec	1	2/10/2024 3:42:47 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/10/2024 12:13:39 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

CLIENT: HILCORP ENERGY

Client Sample ID: PH04@12'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 2:20:00 PM

Lab ID: 2402407-008

Matrix: SOIL

Received Date: 2/8/2024 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	9.0		mg/Kg	1	2/8/2024 6:11:42 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/8/2024 6:11:42 PM
Surr: DNOP	86.5	61.2-134		%Rec	1	2/8/2024 6:11:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/10/2024 4:06:10 AM
Surr: BFB	101	15-244		%Rec	1	2/10/2024 4:06:10 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 4:06:10 AM
Toluene	ND	0.049		mg/Kg	1	2/10/2024 4:06:10 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/10/2024 4:06:10 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/10/2024 4:06:10 AM
Surr: 4-Bromofluorobenzene	84.1	39.1-146		%Rec	1	2/10/2024 4:06:10 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	59		mg/Kg	20	2/10/2024 12:26:00 AM

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

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

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: PH05@4'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 2:40:00 PM

Lab ID: 2402407-009

Matrix: SOIL

Received Date: 2/8/2024 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	2/8/2024 6:23:38 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/8/2024 6:23:38 PM
Surr: DNOP	84.4	61.2-134		%Rec	1	2/8/2024 6:23:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/10/2024 4:29:56 AM
Surr: BFB	97.1	15-244		%Rec	1	2/10/2024 4:29:56 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 4:29:56 AM
Toluene	ND	0.047		mg/Kg	1	2/10/2024 4:29:56 AM
Ethylbenzene	ND	0.047		mg/Kg	1	2/10/2024 4:29:56 AM
Xylenes, Total	ND	0.095		mg/Kg	1	2/10/2024 4:29:56 AM
Surr: 4-Bromofluorobenzene	81.4	39.1-146		%Rec	1	2/10/2024 4:29:56 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/10/2024 1:03:01 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

CLIENT: HILCORP ENERGY

Client Sample ID: PH05@11'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 3:00:00 PM

Lab ID: 2402407-010

Matrix: SOIL

Received Date: 2/8/2024 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	9.4		mg/Kg	1	2/8/2024 6:47:14 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/8/2024 6:47:14 PM
Surr: DNOP	87.4	61.2-134		%Rec	1	2/8/2024 6:47:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/10/2024 4:53:24 AM
Surr: BFB	97.9	15-244		%Rec	1	2/10/2024 4:53:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 4:53:24 AM
Toluene	ND	0.047		mg/Kg	1	2/10/2024 4:53:24 AM
Ethylbenzene	ND	0.047		mg/Kg	1	2/10/2024 4:53:24 AM
Xylenes, Total	ND	0.094		mg/Kg	1	2/10/2024 4:53:24 AM
Surr: 4-Bromofluorobenzene	82.9	39.1-146		%Rec	1	2/10/2024 4:53:24 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	2/10/2024 1:15:23 AM

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

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

CLIENT: HILCORP ENERGY
Project: San Juan 28 6 Unit 102 N
Lab ID: 2402407-011

Matrix: SOIL

Client Sample ID: PH06@6'
Collection Date: 2/6/2024 3:15:00 PM
Received Date: 2/8/2024 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	9.7		mg/Kg	1	2/8/2024 6:59:06 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/8/2024 6:59:06 PM
Surr: DNOP	83.5	61.2-134		%Rec	1	2/8/2024 6:59:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/10/2024 5:40:31 AM
Surr: BFB	98.4	15-244		%Rec	1	2/10/2024 5:40:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 5:40:31 AM
Toluene	ND	0.049		mg/Kg	1	2/10/2024 5:40:31 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/10/2024 5:40:31 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/10/2024 5:40:31 AM
Surr: 4-Bromofluorobenzene	83.7	39.1-146		%Rec	1	2/10/2024 5:40:31 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	2/12/2024 10:30:59 AM

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

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

Analytical Report

Lab Order 2402407

Date Reported: 2/15/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: PH06@10'

Project: San Juan 28 6 Unit 102 N

Collection Date: 2/6/2024 3:21:00 PM

Lab ID: 2402407-012

Matrix: SOIL

Received Date: 2/8/2024 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	9.1		mg/Kg	1	2/8/2024 7:10:54 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/8/2024 7:10:54 PM
Surr: DNOP	81.4	61.2-134		%Rec	1	2/8/2024 7:10:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/10/2024 6:04:20 AM
Surr: BFB	95.8	15-244		%Rec	1	2/10/2024 6:04:20 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	2/10/2024 6:04:20 AM
Toluene	ND	0.048		mg/Kg	1	2/10/2024 6:04:20 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/10/2024 6:04:20 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/10/2024 6:04:20 AM
Surr: 4-Bromofluorobenzene	81.9	39.1-146		%Rec	1	2/10/2024 6:04:20 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	2/12/2024 11:08:01 AM

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402407

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 28 6 Unit 102 N

Sample ID: MB-80358	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 80358	RunNo: 103010
Prep Date: 2/9/2024	Analysis Date: 2/9/2024	SeqNo: 3807709 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-80358	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 80358	RunNo: 103010
Prep Date: 2/9/2024	Analysis Date: 2/9/2024	SeqNo: 3807710 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

Sample ID: MB-80378	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 80378	RunNo: 103011
Prep Date: 2/9/2024	Analysis Date: 2/9/2024	SeqNo: 3807757 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-80378	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 80378	RunNo: 103011
Prep Date: 2/9/2024	Analysis Date: 2/9/2024	SeqNo: 3807758 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.0 90 110

Sample ID: MB-80392	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 80392	RunNo: 103039
Prep Date: 2/12/2024	Analysis Date: 2/12/2024	SeqNo: 3808663 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-80392	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 80392	RunNo: 103039
Prep Date: 2/12/2024	Analysis Date: 2/12/2024	SeqNo: 3808664 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 Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402407

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 28 6 Unit 102 N

Sample ID: 2402407-012AMS		SampType: MS		TestCode: EPA Method 300.0: Anions						
Client ID: PH06@10'		Batch ID: 80392		RunNo: 103039						
Prep Date: 2/12/2024		Analysis Date: 2/12/2024		SeqNo: 3808669		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	60	30.00	0	0	50	150			S

Sample ID: 2402407-012AMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions						
Client ID: PH06@10'		Batch ID: 80392		RunNo: 103039						
Prep Date: 2/12/2024		Analysis Date: 2/12/2024		SeqNo: 3808670		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	60	30.00	0	0	50	150	0	20	S

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402407

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 28 6 Unit 102 N

Sample ID: MB-80343	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80343	RunNo: 102974								
Prep Date: 2/8/2024	Analysis Date: 2/8/2024	SeqNo: 3805739		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		82.3	61.2	134			

Sample ID: LCS-80343	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80343	RunNo: 102974								
Prep Date: 2/8/2024	Analysis Date: 2/8/2024	SeqNo: 3805740		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	79.5	59.7	135			
Surr: DNOP	4.1		5.000		81.8	61.2	134			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402407

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 28 6 Unit 102 N

Sample ID: lcs-80341	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/9/2024		SeqNo: 3807563		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	105	70	130			
Surr: BFB	2100		1000		206	15	244			

Sample ID: mb-80341	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/9/2024		SeqNo: 3807565		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	950		1000		95.0	15	244			

Sample ID: 2402407-003ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PH02@8'	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/10/2024		SeqNo: 3807592		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	24.20	0	106	70	130			
Surr: BFB	2100		968.1		214	15	244			

Sample ID: 2402407-003amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PH02@8'	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/10/2024		SeqNo: 3807593		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	24.15	0	108	70	130	2.27	20	
Surr: BFB	2100		966.2		220	15	244	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402407

15-Feb-24

Client: HILCORP ENERGY

Project: San Juan 28 6 Unit 102 N

Sample ID: LCS-80341	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/9/2024		SeqNo: 3807616		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.7	70	130			
Toluene	0.85	0.050	1.000	0	85.4	70	130			
Ethylbenzene	0.87	0.050	1.000	0	86.9	70	130			
Xylenes, Total	2.6	0.10	3.000	0	87.4	70	130			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.4	39.1	146			

Sample ID: mb-80341	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/9/2024		SeqNo: 3807618		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	0.84		1.000		83.7	39.1	146			

Sample ID: 2402407-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: PH01@8'	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/10/2024		SeqNo: 3807644		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.76	0.024	0.9709	0	78.1	70	130			
Toluene	0.79	0.049	0.9709	0.01417	79.8	70	130			
Ethylbenzene	0.80	0.049	0.9709	0.01329	81.4	70	130			
Xylenes, Total	2.4	0.097	2.913	0.02854	82.5	70	130			
Surr: 4-Bromofluorobenzene	0.82		0.9709		84.4	39.1	146			

Sample ID: 2402407-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: PH01@8'	Batch ID: 80341		RunNo: 102999							
Prep Date: 2/8/2024	Analysis Date: 2/10/2024		SeqNo: 3807645		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.024	0.9699	0	80.3	70	130	2.63	20	
Toluene	0.82	0.048	0.9699	0.01417	82.7	70	130	3.42	20	
Ethylbenzene	0.82	0.048	0.9699	0.01329	83.2	70	130	2.11	20	
Xylenes, Total	2.5	0.097	2.910	0.02854	84.3	70	130	2.02	20	
Surr: 4-Bromofluorobenzene	0.82		0.9699		84.3	39.1	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Environment Testin

Eurofins Environment Testing South
Central, LLC4901 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: 2402407

RcptNo: 1

Received By: Tracy Casarrubias

2/8/2024 6:30:00 AM

Completed By: Tracy Casarrubias

2/8/2024 7:51:55 AM

Reviewed By:

JF 2-8-24

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: my 2/8/24Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

Mailing address and phone number are missing on COC- TMC 2/8/24

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Hilcorp Energy Company

Attn: Samantha Grabert

Mailing Address:

Phone #:

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

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

5-day

☒ Standard ☐ Rush

Project Name:

San Juan 28-6 Unit 102 N

Project #:

Project Manager:

Stuart Hyde

Sampler: Al Thomson

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 3.1 - 0.1 = 3.0 (°C)

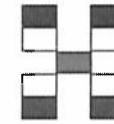
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
2-6	1050	Soil	PH01@4'	1x 4oz	Cool	001
	11:11		PH01@8'			002
	1540		PH02@8'			003
	1550		PH02@10'			004
	1300		PH03@6'			005
	1340		PH03@14'			006
	1415		PH04@10'			007
	1420		PH04@12'			008
	1440		PH05@4'			009
	1500		PH05@11'			010
	1515		PH06@6'			011
	1521		PH06@10'			012

Date: 2-7 Time: 1500 Relinquished by: Al Thomson

Received by: Chris Waser Date: 2/7/24 Time: 1500

Date: 2/7/24 Time: 1720 Relinquished by: Christa Waser

Received by: Chris Waser Date: 2/8/24 Time: 6:30



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
X	X					X													

Remarks: Please CC:
shyde@ensolvum.com
wweichert@ensolvum.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 noted on the analytical report.



APPENDIX D

Photographic Log



Photographic Log
Hilcorp
San Juan 28-6 Unit 102N



Photograph: 1 Date: 1/29/2024
Description: Surface Staining
View: Northwest



Photograph: 2 Date: 2/6/2024
Description: PH03 Adjacent to BGT
View: West



Photograph: 3 Date: 2/6/2024
Description: Staining in Pothole PH01
View: Northeast



Photograph: 4 Date: 2/6/2024
Description: Potholing activities
View: West

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

QUESTIONS

Action 338122

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:
	372171
	Action Number:
	338122
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

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

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

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

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

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QUESTIONS, Page 2

Action 338122

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	338122
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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: 04/26/2024
--	--

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QUESTIONS, Page 3

Action 338122

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:
	372171
	Action Number:
	338122
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

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

Remediation Plan

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

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

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

Chloride	(EPA 300.0 or SM4500 Cl B)	0
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	9100
GRO+DRO	(EPA SW-846 Method 8015M)	9100
BTEX	(EPA SW-846 Method 8021B or 8260B)	787.8
Benzene	(EPA SW-846 Method 8021B or 8260B)	4.6

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

On what estimated date will the remediation commence	01/30/2024
On what date will (or did) the final sampling or liner inspection occur	02/06/2024
On what date will (or was) the remediation complete(d)	02/06/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	2000
What is the estimated volume (in cubic yards) that will be remediated	600

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

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

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QUESTIONS, Page 4

Action 338122

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	338122
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS**Remediation Plan (continued)**

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

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Yes
Which OCD approved facility will be used for on-site disposal	Not answered.
OR which OCD approved well (API) will be used for on-site disposal	30-039-27600 SAN JUAN 28 6 UNIT #102N
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	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: 04/26/2024
--	--

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

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QUESTIONS, Page 5

Action 338122

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 338122
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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
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QUESTIONS, Page 6

Action 338122

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:
	372171
	Action Number:
	338122
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	311202
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/06/2024
What was the (estimated) number of samples that were to be gathered	20
What was the sampling surface area in square feet	30000

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	No

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CONDITIONS

Action 338122

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 338122
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

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