



May 10, 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 29-5 #24
Hilcorp Energy Company
NMOCD Incident No: nAPP2330638542

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Report and Closure Request* for a release at the San Juan 29-5 #24 natural gas production well (Site). The Site is located on private land in Unit B, Section 17, Township 29 North, Range 5 West, Rio Arriba County, New Mexico (Figure 1). This report describes the excavation and confirmation soil sampling activities performed at the Site to remediate impacted soil originating from a release of crude oil (condensate) and produced water.

SITE BACKGROUND

On October 20, 2023, Hilcorp discovered a release of 4.5 barrels (bbls) of crude oil (condensate) and 3.11 bbls of produced water at the Site. Upon inspection, corrosion holes were discovered at the bottom of the condensate aboveground storage tank (AST). The released fluids pooled immediately around the AST and stayed within the secondary containment. No released fluids were recovered. Hilcorp reported the release to the New Mexico Oil Conservation Division (NMOCD) on a *Release Notification Form C-141* on November 2, 2023. The NMOCD subsequently assigned the Site Incident Number nAPP2330638542.

Upon discovery of the release, Hilcorp and Ensolum personnel conducted delineation activities in October, November, and December 2023. Hand auger borings S-1 through S-4 and pothole locations PH01 through PH05 were advanced during this work to vertically and laterally delineate potential soil impacts resulting from the release. During the pothole delineation work, Ensolum personnel field screened soil for volatile organic compounds (VOCs) using a calibrated photoionization detector (PID). Field screening measurements and soil lithology were recorded in the field book, with PID readings included in Table 1. Soil lithology generally consisted of grey and brown, fine-grained sand with silt grading to red-brown silt with clay around 8 feet below ground surface (bgs).

In general, two soil samples were collected from each sampling location during delineation for laboratory analysis: one sample from the depth interval indicating the highest PID reading and one sample from the terminus of the hand auger/pothole. Samples were submitted to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico and analyzed for total petroleum

hydrocarbons (TPH) following United States Environmental Protection Agency (EPA) Method 8015M/D, benzene, toluene, ethylbenzene, and xylenes (BTEX) following EPA Method 8021B, and chloride following EPA Method 300.0.

Analytical results indicated concentrations of TPH and the sum of gasoline range organics (GRO) and diesel range organics (DRO) exceeded the applicable NMOCD Closure Criteria at depths up to 12 feet bgs in areas within the secondary containment berm. Of note, elevated PID readings up to 1,006 parts per million (ppm) were recorded in several soil samples collected during delineation work. Although elevated PID readings were noted, analytical results for these samples indicated constituents of concern (COCs) were below the applicable NMOCD Closure Criteria (as noted in Table 1), and soil impacts had been successfully delineated.

Sampling locations and a summary of analytical results collected during delineation activities are presented on Figure 2. Additional details regarding the delineation activities and results are provided in the *Remediation Work Plan*, dated February 13, 2024.

SITE CLOSURE CRITERIA

As presented in the *Remediation Work Plan*, dated February 13, 2024, the following Closure Criteria for COCs should be applied to the Site. These criteria are based on the applicable standards presented in *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 of the New Mexico Administrative Code [NMAC]):

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

EXCAVATION SOIL SAMPLING ACTIVITIES

Based on the delineation sampling activities described above, Hilcorp excavated soil from the Site to remove impacts resulting from the release. Ensolum personnel conducted excavation oversight and sampling activities on May 1, 2024. Notification to NMOCD was provided at least two business days prior to conducting remediation and sampling work, with correspondence attached in Appendix A. To direct excavation activities, Ensolum personnel field screened soil for VOCs using a calibrated PID. Based on field screening and laboratory analytical results collected during delineation activities, a PID measurement of less than 800 ppm was used to indicate when the excavation floors and sidewalls should be sampled.

Once field screening indicated impacted soil had been removed, five-point composite soil samples were collected from the floor (FS01 through FS04) and sidewalls (SW01 through SW10) of the excavation at a frequency not exceeding one sample per 200 square feet. Sidewall samples SW01 and SW02 were collected at depths from the ground surface to 4 feet bgs. Sidewall samples SW03 through SW10 were collected from depths of 4 feet to 15 feet bgs. Sample locations are presented on Figures 3, 4A, 4B, and 4C.

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 placed into laboratory provided containers and transported under proper chain of custody procedures to Eurofins for analysis of TPH, as proposed in the NMOCD-approved *Remediation Work Plan*.

Analytical results from the excavation indicated concentrations of TPH were compliant with NMOCD Table I Closure Criteria and the reclamation requirement in all confirmation samples. In total, approximately 440 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 B. Photographs taken by Ensolum during the excavation work are included on Figure 3.

CLOSURE REQUEST

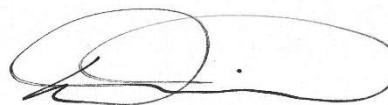
Site excavation and sampling activities were conducted at the Site to address the release of crude oil (condensate) and produced water discovered on October 20, 2023. Laboratory analytical results for the excavation confirmation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and the reclamation requirement 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 nAPP2330638542.

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

Sincerely,
Ensolum, LLC



Stuart Hyde, PG (licensed in WA & TX)
Senior Managing Geologist
(970) 903-1607
shyde@ensolum.com



Daniel R. Moir, PG (licensed in WY & TX)
Senior Managing Geologist
(303) 887-2946
dmoir@ensolum.com

Attachments:

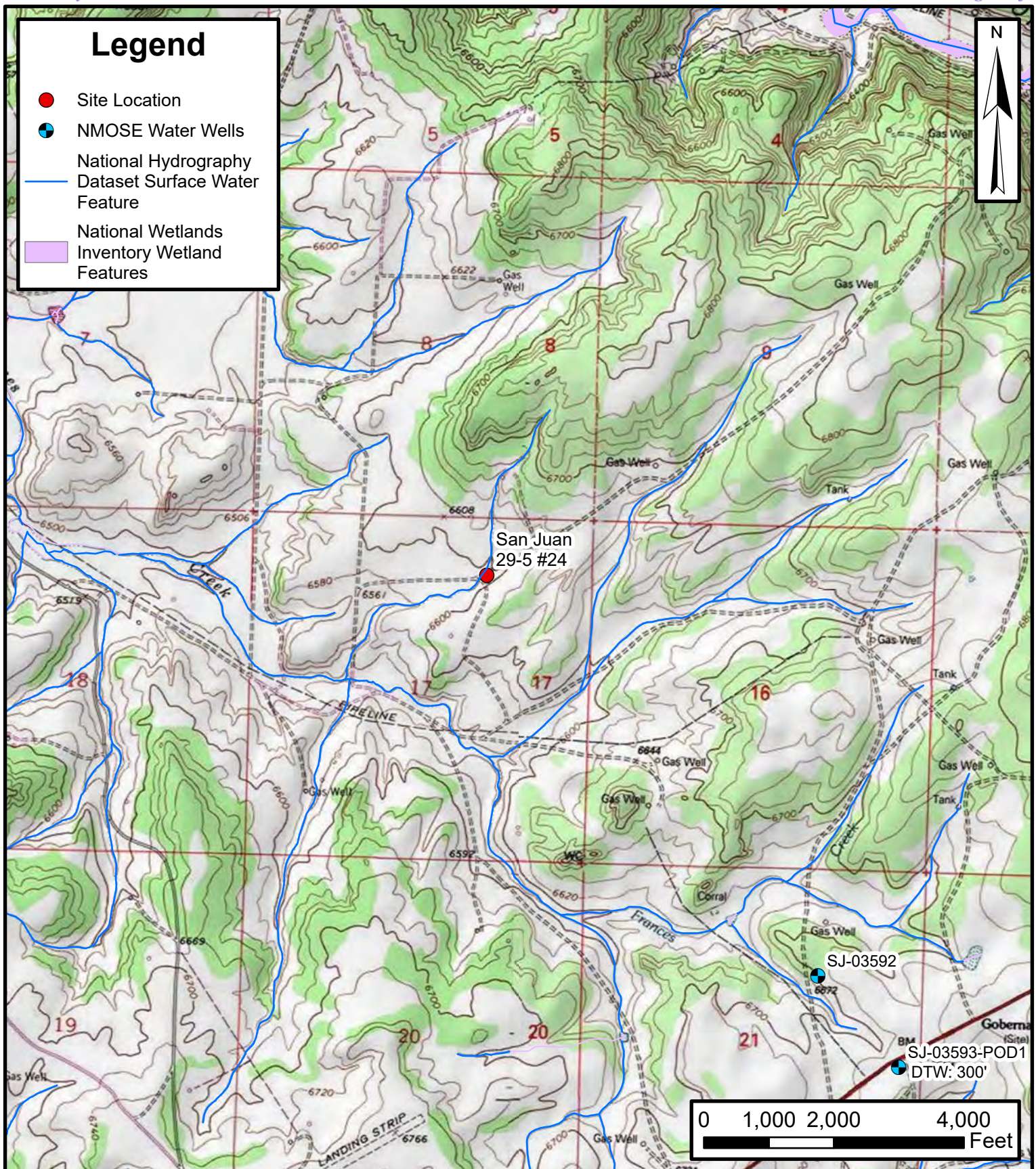
- Figure 1: Site Receptor Map
- Figure 2: Delineation Soil Sample Results
- Figure 3: Excavation Soil Samples
- Figure 4A: N. and W. Sidewall Sample Locations
- Figure 4B: South Sidewall Sample Locations
- Figure 4C: East Sidewall Sample Locations

- Table 1: Soil Sample Analytical Results

- Appendix A: NMOCD Correspondence
- Appendix B: Laboratory Analytical Reports



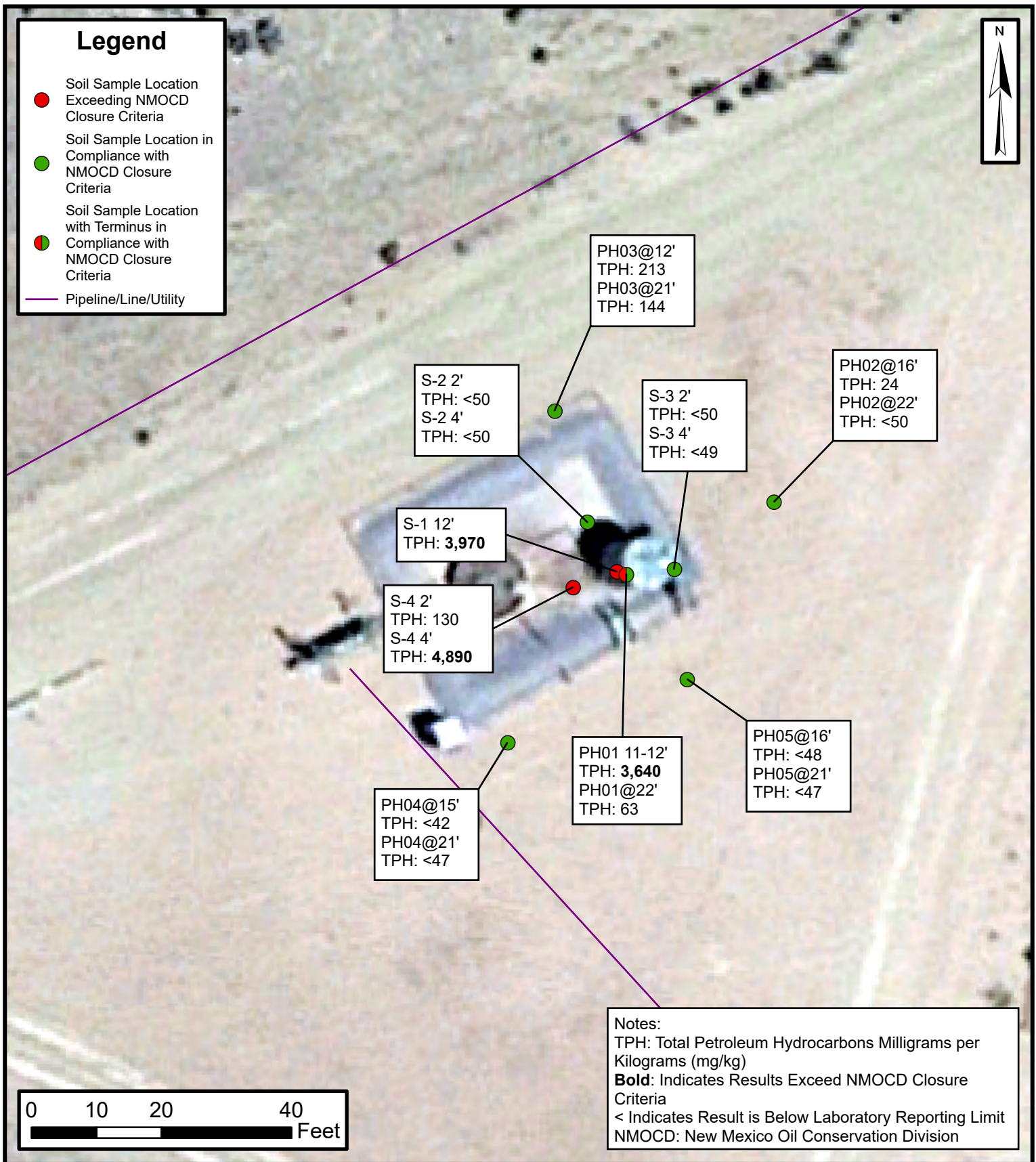
FIGURES



Site Receptor Map

San Juan 29-5 #24
 Hilcorp Energy Company
 36.730450, -107.376274
 Rio Arriba County, New Mexico

FIGURE
 1



Delineation Soil Sample Results

San Juan 29-5 #24
 Hilcorp Energy Company
 36.730450, -107.376274
 Rio Arriba County, New Mexico

FIGURE
2

Legend

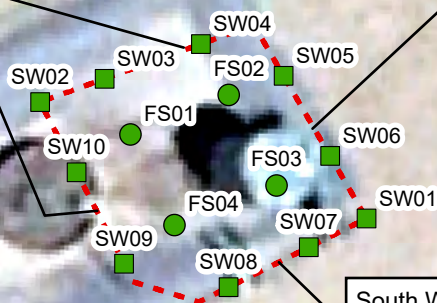
- Excavation Extent
- Excavation Floor Samples in Compliance with NMOCD Closure Criteria
- Excavation Sidewall Samples in Compliance with NMOCD Closure Criteria



North and West Walls



East Wall



South Wall

Notes:
NMOCD: New Mexico Oil Conservation Division

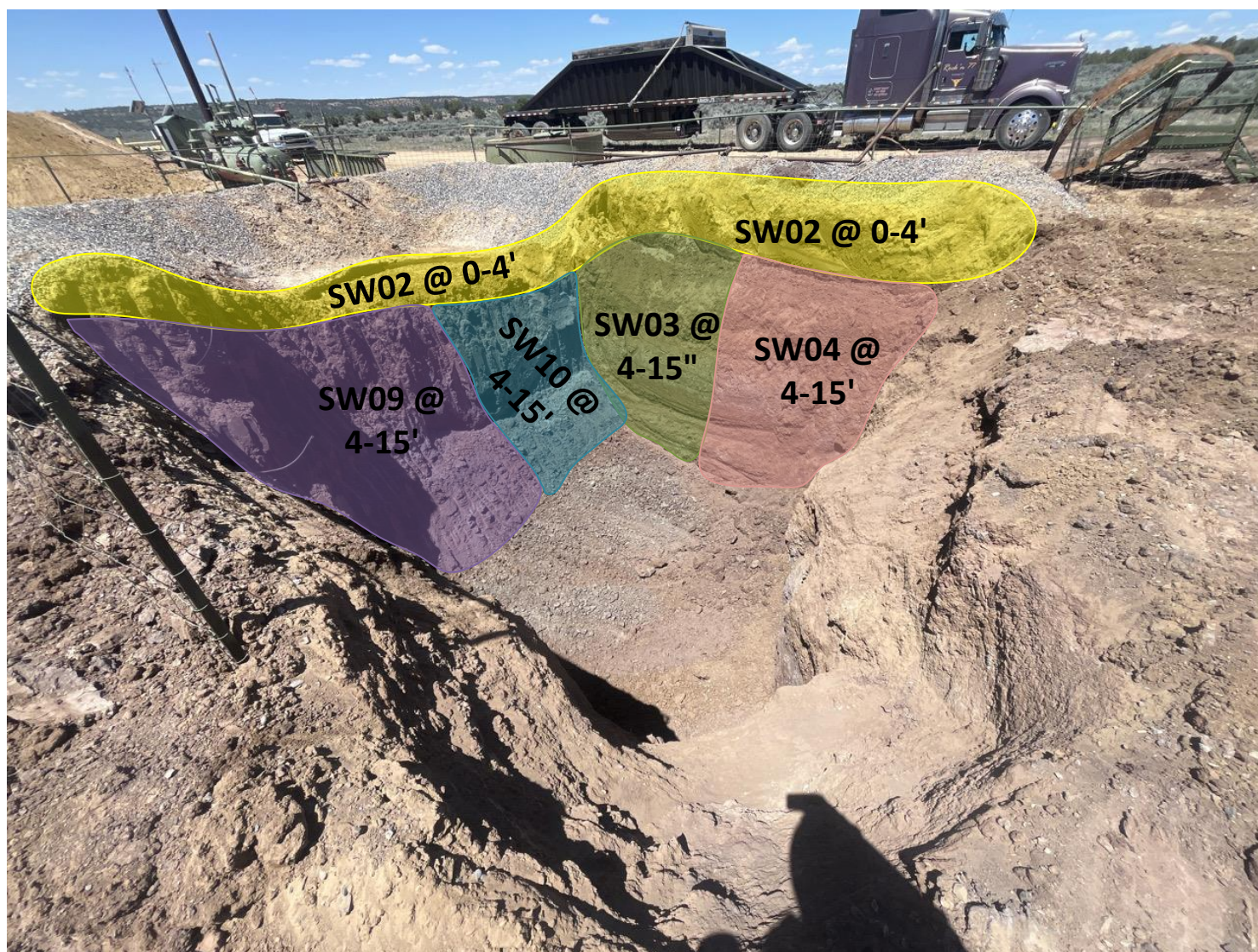
0 10 20 40 Feet

Excavation Soil Samples

San Juan 29-5 #24
Hilcorp Energy Company
36.730450, -107.376274
Rio Arriba County, New Mexico

FIGURE
3



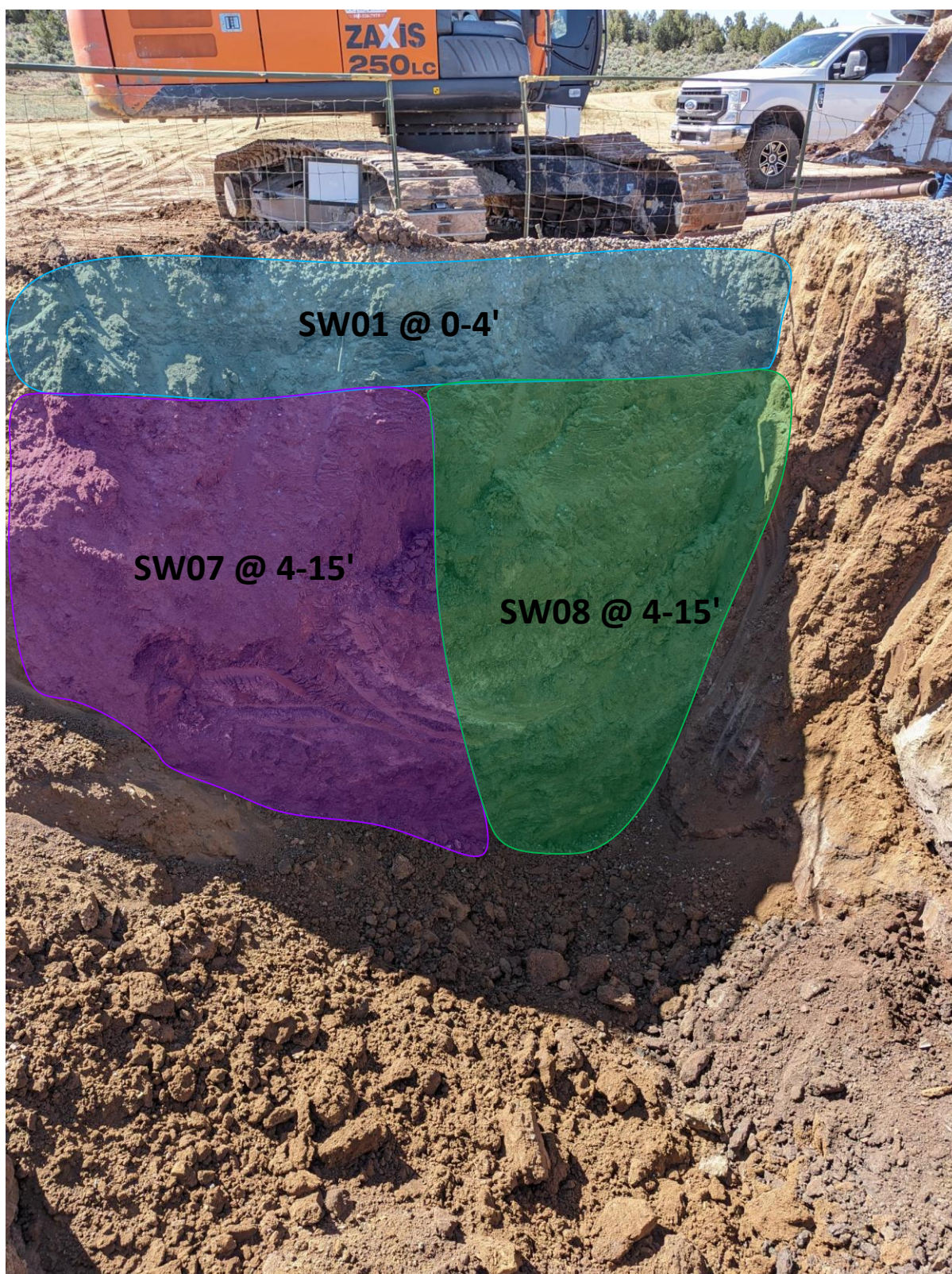


N. and W. Sidewall Sample Locations

San Juan 29-5 #24
Hilcorp Energy Company
36.730295°, -107.377310°
Rio Arriba County, New Mexico

FIGURE
4A

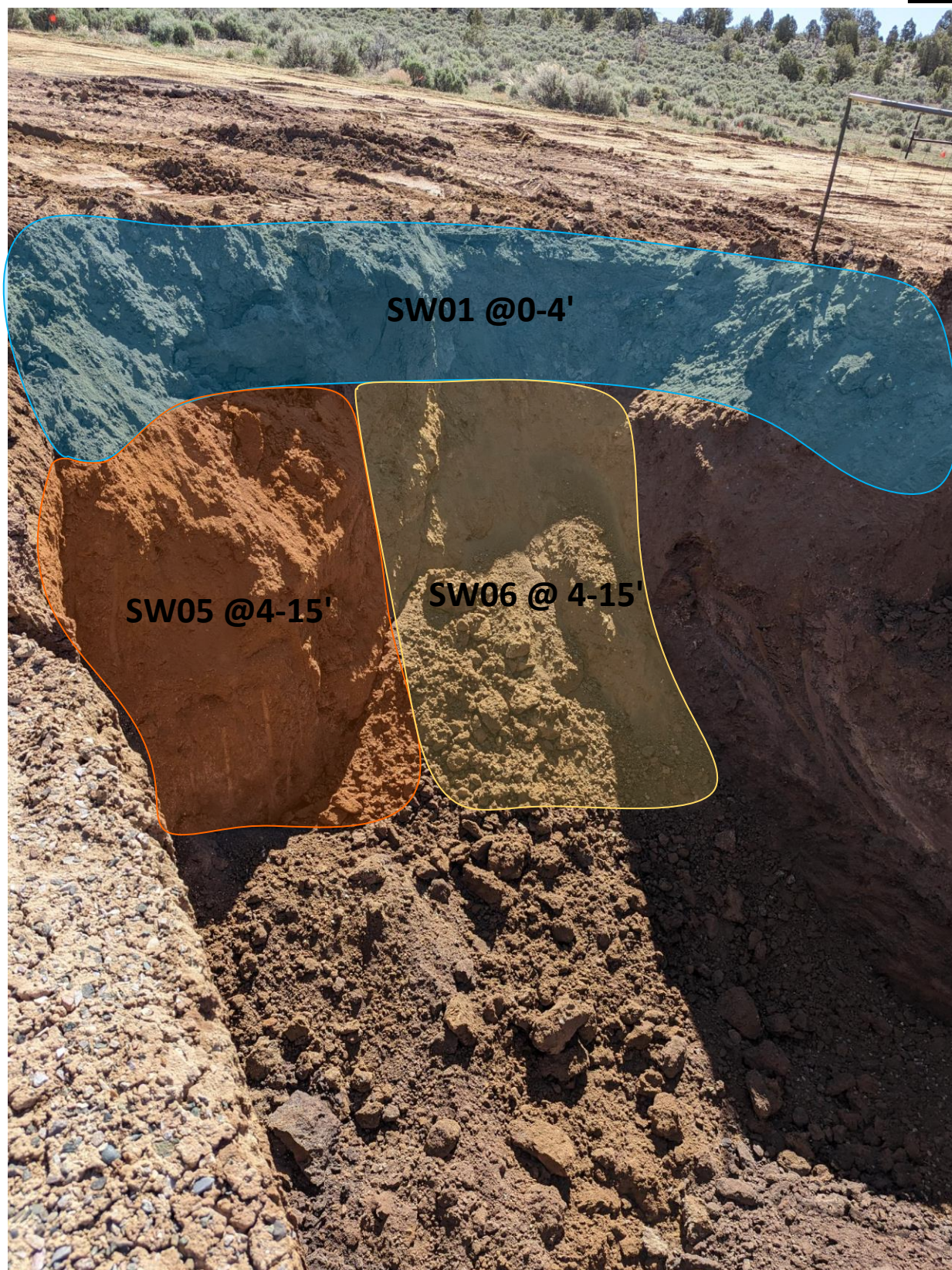




South Sidewall Sample Locations

San Juan 29-5 #24
Hilcorp Energy Company
36.730295°, -107.377310°
Rio Arriba County, New Mexico

FIGURE
4B



East Sidewall Sample Locations

San Juan 29-5 #24
Hilcorp Energy Company
36.730295°, -107.377310°
Rio Arriba County, New Mexico

FIGURE
4C



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 San Juan 29-5 #24
 Hilcorp Energy Company
 Rio Arriba County, New Mexico

Sample ID	Date	Depth (feet bgs)	PID (ppm)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	TPH GRO+DRO (mg/kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			NE	NE	NE	NE	1,000	2,500	10	NE	NE	NE	50	20,000
Delineation Soil Sample Analytical Results														
S-1 12'	10/25/2023	12	--	370	3,600	<490	3,970	3,970	<0.024	<0.048	0.53	20	20.53	<60
S-2 2'	11/1/2023	2	--	<4.8	<9.9	<50	<9.9	<50	<0.024	<0.048	<0.048	<0.095	<0.095	<60
S-2 4'	11/1/2023	4	--	<4.9	<10	<50	<10	<50	<0.025	<0.049	<0.049	<0.099	<0.099	<59
S-3 2'	11/1/2023	2	--	<4.8	<9.9	<50	<9.9	<50	<0.024	<0.048	<0.048	<0.096	<0.096	<60
S-3 4'	11/1/2023	4	--	<4.8	<9.9	<49	<9.9	<49	<0.024	<0.048	<0.048	<0.096	<0.096	<60
S-4 2'	11/1/2023	2	--	<4.8	130	<49	130	130	<0.024	<0.048	<0.048	<0.095	<0.095	73
S-4 4'	11/1/2023	4	--	790	4,100	<930	4,890	4,890	<0.12	<0.25	1.1	28	29.1	68
PH01 11-12	12/11/2023	11-12	254	840	2,800	<480	3,640	3,640	<0.11	<0.23	0.73	16	16.73	<61
PH01@22	12/20/2023	22	600	6.8	56	<46	63	63	<0.023	<0.046	<0.046	<0.093	<0.093	<60
PH02@16	12/20/2023	16	465	<4.6	24	<48	24	24	<0.023	<0.046	<0.046	<0.093	<0.093	<60
PH02@22	12/20/2023	22	4.8	<4.8	<10	<50	<10	<50	<0.024	<0.048	<0.048	<0.095	<0.095	<60
PH03@12	12/20/2023	12	910	23	190	<47	213	213	<0.025	<0.050	<0.050	<0.099	<0.099	<60
PH03@21	12/20/2023	21	516	14	130	<50	144	144	<0.024	<0.047	<0.047	<0.094	<0.094	<60
PH04@15	12/20/2023	15	395	<4.8	<8.4	<42	<8.4	<42	<0.024	<0.048	<0.048	<0.097	<0.097	<60
PH04@21	12/20/2023	21	1,006	<4.6	<9.4	<47	<9.4	<47	<0.023	<0.046	<0.046	<0.093	<0.093	<60
PH05@16	12/20/2023	16	17	<4.8	<9.7	<48	<9.7	<48	<0.024	<0.048	<0.048	<0.096	<0.096	<60
PH05@21	12/20/2023	21	2.8	<4.7	<9.4	<47	<9.4	<47	<0.024	<0.047	<0.047	<0.095	<0.095	<61
Excavation Sidewall Soil Sample Analytical Results														
SW01 @ 0-4'	5/1/2024	0-4	9.2	<20	<25	<50	<25	<50	--	--	--	--	--	--
SW02 @ 0-4'	5/1/2024	0-4	8.8	<20	<25	<50	<25	<50	--	--	--	--	--	--
SW03 @ 4-15'	5/1/2024	4-15	360	<20	<25	<50	<25	<50	--	--	--	--	--	--
SW04 @ 4-15'	5/1/2024	4-15	48.1	20.8	<25	<50	20.8	20.8	--	--	--	--	--	--
SW05 @ 4-15'	5/1/2024	4-15	298	<20	107	<50	107	107	--	--	--	--	--	--
SW06 @ 4-15'	5/1/2024	4-15	189	<20	<25	<50	<25	<50	--	--	--	--	--	--
SW07 @ 4-15'	5/1/2024	4-15	694	<20	91.1	<50	91.1	91.1	--	--	--	--	--	--
SW08 @ 4-15'	5/1/2024	4-15	783	85	559	<50	644	664	--	--	--	--	--	--
SW09 @ 4-15'	5/1/2024	4-15	574	<20	<25	<50	<25	<50	--	--	--	--	--	--
SW10 @ 4-15'	5/1/2024	4-15	118	<20	<25	<50	<25	<50	--	--	--	--	--	--



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 San Juan 29-5 #24
 Hilcorp Energy Company
 Rio Arriba County, New Mexico

Sample ID	Date	Depth (feet bgs)	PID (ppm)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	TPH GRO+DRO (mg/kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			NE	NE	NE	NE	1,000	2,500	10	NE	NE	NE	50	20,000
Excavation Floor Soil Sample Analytical Results														
FS01 @ 15'	5/1/2024	15	101	<20	<25	<50	<25	<50	--	--	--	--	--	--
FS02 @ 15'	5/1/2024	15	659	38.8	235	<50	273.8	273.8	--	--	--	--	--	--
FS03 @ 15'	5/1/2024	15	513	<20	74.8	<50	74.8	74.8	--	--	--	--	--	--
FS04 @ 15'	5/1/2024	15	593	<20	93.1	<50	93.1	93.1	--	--	--	--	--	--

Notes:

bgs: Below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

mg/kg: Milligrams per kilogram

NE: Not Established

NMOCD: New Mexico Oil Conservation Division

PID: Photoionization Detector

ppm: Parts per million

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

': feet

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

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



APPENDIX A

NMOCD Correspondence

From: OCDOnline@state.nm.us
To: [Stuart Hyde](#)
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 337537
Date: Thursday, April 25, 2024 8:52:42 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#) nAPP2330638542.

The sampling event is expected to take place:

When: 05/01/2024 @ 08:00

Where: B-17-29N-05W 990 FNL 1650 FEL (36.7301331,-107.3774109)

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

Additional Instructions: San Juan 29-5 #24 Well Pad, Coordinates 36.730450, -107.376274

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.

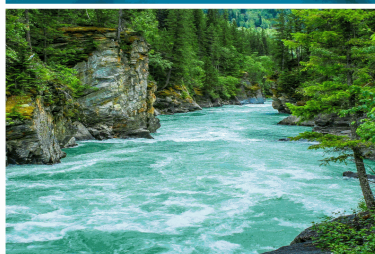
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505



APPENDIX B

Laboratory Analytical Reports

Report to:
Stuart Hyde



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Hilcorp Energy Co

Project Name: San Juan 29-5 #24

Work Order: E405004

Job Number: 17051-0002

Received: 5/1/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/3/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 5/3/24

Stuart Hyde
PO Box 61529
Houston, TX 77208



Project Name: San Juan 29-5 #24
Workorder: E405004
Date Received: 5/1/2024 2:41:00PM

Stuart Hyde,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/1/2024 2:41:00PM, under the Project Name: San Juan 29-5 #24.

The analytical test results summarized in this report with the Project Name: San Juan 29-5 #24 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SW01 @ 0-4'	5
SW02 @ 0-4'	6
SW03 @ 4-15'	7
SW04 @ 4-15'	8
SW05 @ 4-15'	9
SW06 @ 4-15'	10
SW07 @ 4-15'	11
SW08 @ 4-15'	12
SW09 @ 4-15'	13
SW10 @ 4-15'	14
FS01 @ 15'	15
FS02 @ 15"	16
FS03 @ 15"	17
FS04 @ 15"	18
QC Summary Data	19
QC - Nonhalogenated Organics by EPA 8015D - GRO	19
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	20
Definitions and Notes	21
Chain of Custody etc.	22

Sample Summary

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 05/03/24 14:57
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01 @ 0-4'	E405004-01A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW02 @ 0-4'	E405004-02A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW03 @ 4-15'	E405004-03A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW04 @ 4-15'	E405004-04A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW05 @ 4-15'	E405004-05A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW06 @ 4-15'	E405004-06A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW07 @ 4-15'	E405004-07A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW08 @ 4-15'	E405004-08A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW09 @ 4-15'	E405004-09A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
SW10 @ 4-15'	E405004-10A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
FS01 @ 15'	E405004-11A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
FS02 @ 15"	E405004-12A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
FS03 @ 15"	E405004-13A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.
FS04 @ 15"	E405004-14A	Soil	05/01/24	05/01/24	Glass Jar, 4 oz.



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW01 @ 0-4'

E405004-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.7 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	88.0 %	50-200		05/02/24	05/02/24	

Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW02 @ 0-4'
E405004-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/01/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	96.8 %	70-130		05/01/24	05/01/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	98.8 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW03 @ 4-15'
E405004-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.3 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	99.4 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW04 @ 4-15'

E405004-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	20.8	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.9 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	109 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW05 @ 4-15'
E405004-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	99.4 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	107	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	114 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW06 @ 4-15'
E405004-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.1 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	79.6 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW07 @ 4-15'

E405004-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.7 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	91.1	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	82.4 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW08 @ 4-15'
E405004-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	85.0	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.7 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	559	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	105 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW09 @ 4-15'

E405004-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.6 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	75.8 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

SW10 @ 4-15'
E405004-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.5 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	73.1 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

FS01 @ 15'
E405004-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.4 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	69.6 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

FS02 @ 15"

E405004-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	38.8	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.2 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	235	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	88.1 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

FS03 @ 15"
E405004-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.7 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	74.8	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	85.4 %	50-200		05/02/24	05/02/24	



Sample Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported: 5/3/2024 2:57:26PM
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	

FS04 @ 15"

E405004-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2418081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/01/24	05/02/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.7 %	70-130		05/01/24	05/02/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2418090	
Diesel Range Organics (C10-C28)	93.1	25.0	1	05/02/24	05/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/02/24	05/02/24	
Surrogate: n-Nonane	111 %	50-200		05/02/24	05/02/24	



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	5/3/2024 2:57:26PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2418081-BLK1) Prepared: 05/01/24 Analyzed: 05/01/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.91		8.00		98.9	70-130			

LCS (2418081-BS2) Prepared: 05/01/24 Analyzed: 05/01/24

Gasoline Range Organics (C6-C10)	52.4	20.0	50.0		105	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		8.00		96.0	70-130			

Matrix Spike (2418081-MS2) Source: E405004-02 Prepared: 05/01/24 Analyzed: 05/01/24

Gasoline Range Organics (C6-C10)	55.8	20.0	50.0	ND	112	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.00		8.00		100	70-130			

Matrix Spike Dup (2418081-MSD2) Source: E405004-02 Prepared: 05/01/24 Analyzed: 05/01/24

Gasoline Range Organics (C6-C10)	51.1	20.0	50.0	ND	102	70-130	8.83	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.98		8.00		99.8	70-130			



QC Summary Data

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	Reported:
PO Box 61529	Project Number:	17051-0002	
Houston TX, 77208	Project Manager:	Stuart Hyde	5/3/2024 2:57:26PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2418090-BLK1)					Prepared: 05/02/24 Analyzed: 05/03/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	37.8		50.0		75.7	50-200			

LCS (2418090-BS1)					Prepared: 05/02/24 Analyzed: 05/03/24				
Diesel Range Organics (C10-C28)	266	25.0	250		106	38-132			
Surrogate: n-Nonane	38.1		50.0		76.2	50-200			

Matrix Spike (2418090-MS1)					Source: E405004-08		Prepared: 05/02/24 Analyzed: 05/03/24		
Diesel Range Organics (C10-C28)	850	25.0	250	559	116	38-132			
Surrogate: n-Nonane	48.0		50.0		96.0	50-200			

Matrix Spike Dup (2418090-MSD1)					Source: E405004-08		Prepared: 05/02/24 Analyzed: 05/03/24		
Diesel Range Organics (C10-C28)	844	25.0	250	559	114	38-132	0.754	20	
Surrogate: n-Nonane	51.1		50.0		102	50-200			

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



Definitions and Notes

Hilcorp Energy Co	Project Name:	San Juan 29-5 #24	
PO Box 61529	Project Number:	17051-0002	Reported:
Houston TX, 77208	Project Manager:	Stuart Hyde	05/03/24 14:57

- ND Analyte NOT DETECTED at or above the reporting limit
 - NR Not Reported
 - RPD Relative Percent Difference
 - DNI Did Not Ignite
 - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 2

Client: <u>HEC Hilcorp Energy Co.</u>				Bill To				Lab Use Only				TAT				EPA Program			
Project: <u>San Juan 29-5 #24</u>				Attention: <u>Kate Kaufman</u>				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA		
Project Manager: <u>Stuart Hyde</u>				Address:				<u>E405004</u>		<u>17051-0002</u>		<input checked="" type="checkbox"/>							
Address:				City, State, Zip				Analysis and Method										RCRA	
City, State, Zip				Phone:				DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0					State	
Email: <u>SHyde@ensolun.com</u>				Email: <u>KKaufman@Hilcorp.com</u>														NM	CO
Report due by:																		Remarks	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number														
1140	5/1/24	Soil	1	SW01 @ 0-4'	1	X	X												
1150				SW02 @ 0-4'	2														
1200				SW03 @ 4-15'	3														
1210				SW04 @ 4-15'	4														
1220				SW05 @ 4-15'	5														
1230				SW06 @ 4-15'	6														
1240				SW07 @ 4-15'	7														
1250				SW08 @ 4-15'	8														
1300				SW09 @ 4-15'	9														
1310	✓	✓	✓	SW10 @ 4-15'	10	✓	✓												

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: AL Thomson

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

Relinquished by: (Signature) <u>AL Thomson</u>	Date <u>5-1</u>	Time <u>1140</u>	Received by: (Signature) <u>Shen</u>	Date <u>5/1/24</u>	Time <u>14:41</u>	Lab Use Only Received on Ice: <u>Y/N</u> T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4.0</u>
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Envirotech Analytical Laboratory

Printed: 5/1/2024 3:08:14PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Hilcorp Energy Co	Date Received:	05/01/24 14:41	Work Order ID:	E405004
Phone:	-	Date Logged In:	05/01/24 14:56	Logged In By:	Jessica Liesse
Email:	shyde@ensolum.com	Due Date:	05/02/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Al ThompsonComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? Yes
Collectors name? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

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 342966

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	342966
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2330638542
Incident Name	NAPP2330638542 SAN JUAN 29-5 UNIT 24 @ 30-039-07637
Incident Type	Release Other
Incident Status	Remediation Closure Report Received
Incident Well	[30-039-07637] SAN JUAN 29 5 UNIT #024

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SAN JUAN 29-5 UNIT 24
Date Release Discovered	10/20/2023
Surface Owner	Private

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	Cause: Corrosion Production Tank Crude Oil Released: 5 BBL Recovered: 0 BBL Lost: 5 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion Production Tank Produced Water Released: 3 BBL Recovered: 0 BBL Lost: 3 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)	4.5 bbl oil & 3.11 bbl produced water release

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 342966

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	342966
	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	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 05/10/2024
--	--

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 3

Action 342966

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	342966
	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 500 and 1000 (ft.)
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 500 and 1000 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

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

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

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

Chloride	(EPA 300.0 or SM4500 Cl B)	73
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	4890
GRO+DRO	(EPA SW-846 Method 8015M)	4890
BTEX	(EPA SW-846 Method 8021B or 8260B)	29.1
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

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	03/15/2024
On what date will (or did) the final sampling or liner inspection occur	04/01/2024
On what date will (or was) the remediation complete(d)	03/20/2024
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	900
What is the estimated volume (in cubic yards) that will be remediated	500

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

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

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 4

Action 342966

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	342966
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	ENVIROTECH LANDFARM #2 [FEEM0112336756]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 05/10/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

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

QUESTIONS, Page 5

Action 342966

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	342966
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

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

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 6

Action 342966

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:
	372171
	Action Number:
	342966
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	337544
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/02/2024
What was the (estimated) number of samples that were to be gathered	14
What was the sampling surface area in square feet	900

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	700
What was the total volume (cubic yards) remediated	440
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	Laboratory analytical results for the excavation confirmation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and the reclamation requirement 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.

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: 05/10/2024
--	--

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

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

QUESTIONS, Page 7

Action 342966

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 342966
	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

COMMENTS

Action 342966

COMMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 342966
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

COMMENTS

Created By	Comment	Comment Date
csmith	Returned to OCD Review, Pending Review of Remediation Plan.	6/11/2024

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

CONDITIONS

Action 342966

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 342966
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation closure approved.	6/11/2024
amaxwell	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	6/11/2024
amaxwell	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	6/11/2024