District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2330627962
District RP	
Facility ID	
Application ID	

I Release Notification

Responsible Party

Responsible Party: Hilcorp Energy	OGRID 372171
Contact Name: Kate Kaufman	Contact Telephone: 346-237-2275
Contact email: kkaufman@hilcorp.com	Incident # *(assigned by OCD)* nAPP2330627962
Contact mailing address: 1111 Travis St. Houston, TX 77471	

Location of Release Source

Latitude 36.60096 Longitude -107.842634
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Kutz J Federal #1E	Site Type: Well Site
Date Release Discovered: 10/27/2023	API# *(if applicable)* 30-045-31135

Unit Letter	Section	Township	Range	County
J	01	027N	010W	San Juan

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:*)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 70	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls) 0
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe) Unknown hydrocarbon	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

A water hauler arrived at the location on 10/27 and discovered the pit had approximately 2" of water in it and there was water in the cellar. A vac truck pulled the remaining fluid from the pit which revealed a hole in the base of the tank due to corrosion. It is estimated 70 bbls of produced water was released and not recovered. Soil samples were collected for analysis to determine next steps for remediation.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2330627962
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Release volume was greater than 25 bbls.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Immediate notice was provided by Kate Kaufman to Nelson Velez, NMOCD and Emmanuel Adeloye, BLM via email on Friday, 10/27/2023.

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.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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.

Printed Name: __Kate Kaufman_____ Title: __Environmental Specialist_____

Signature: Kathryn Kaufman _____ Date: __11/2/2023_____

email: __kkaufman@hilcorp.com_____ Telephone: _____346-237-2275_____

OCD Only

Received by: _Shelly Wells_____ Date: _11/2/2023_____

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

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

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 282023
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	11/2/2023

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2308124076
District RP	
Facility ID	
Application ID	

Closure

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 (electronic submittals in .pdf format are preferred) 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.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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.

Printed Name: Mitch Killough Title: Environmental Specialist

Signature: Date: 1/19/2024

email: mkillough@hilcorp.com Telephone: 713-757-5247

OCD Only

Received by: Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ENSOLUM

January 19, 2024

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

Re: Site Summary Report and Closure Request
Kutz J Federal #1E
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident No: napp2330627962

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Site Summary Report and Closure Request* associated with a produced water release at the Kutz J Federal #1E natural gas production well (Site, Figure 1). The Site is located on surface managed by the Bureau of Land Management (BLM) in Unit J, Section 1, Township 27 North, Range 10 West, San Juan County, New Mexico.

SITE BACKGROUND

On October 27, 2023, a water hauler arrived at the Site and discovered the produced water below grade tank (BGT) contained approximately 2 inches of water at the bottom and there was water within the wood cellar surrounding the BGT. A vacuum truck was dispatched to the Site and removed the remaining fluid from the BGT and surrounding cellar. Upon inspection, it was discovered that a hole was present at the base of the BGT due to corrosion. Based on tank gauging data, it is estimated 70 barrels (bbls) of produced water containing less than 10,000 milligrams per liter (mg/L) was released from the BGT.

Hilcorp notified the New Mexico Oil Conservation Division (NMOCD) within 24 hours of discovery and submitted an initial *Form C-141 Release Notification* on November 2, 2023. NMOCD assigned the release incident number napp2330627962.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

The Site is located within the Nacimiento Geologic Formation. In the report titled "*Hydrogeology and Water Resources of San Juan Basin, New Mexico*" (Stone, et. al., 1983), the Nacimiento Formation is characterized by interbedded black carbonaceous mudstones and white, coarse-grained sandstones, which ranges in thickness from 418 feet to 2,232 feet. The hydrogeologic properties of the Nacimiento Formation display variable hydrogeologic properties dependent on location. Where sufficient yield is present, the primary use of water from this formation is for domestic and/or livestock supply. The Nacimiento Formation is underlain by the Ojo Alamo sandstone (Stone et. al., 1983).

The closest significant watercourse is an unnamed dry wash located 450 feet south of the Site and is defined by a bed and bank and is identified by a dashed blue line on a United States Geologic Survey (USGS) 7.5-minute quadrangle map. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland (Figure 1). The nearest fresh-water well is New Mexico Office of the State Engineer (NMOSE) permitted well SJ-04045 (Appendix A), located approximately 5,600 feet southwest of the Site. The recorded depth to water on the NMOSE database is 50 feet below ground surface (bgs). The well is approximately 400 feet lower in elevation than the Site, therefore depth to groundwater at the Site is estimated to be greater than 100 feet bgs. No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile radius 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 designated as low potential karst by the BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site.

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:

- Chloride: 20,000 milligrams per kilogram (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
- TPH-GRO + TPH-DRO: 1,000 mg/kg
- A combination of benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 mg/kg
- Benzene: 10 mg/kg

2023 SITE ASSESSMENT ACTIVITIES

To assess potential soil impacts from the release, Hilcorp and Ensolum advanced six potholes (PH01 through PH06) using a backhoe on December 13, 2023. The NMOCD and BLM were notified at least two business days prior to commencing on-Site activities (Appendix B). Pothole PH01 was advanced first and directly adjacent to the BGT to assess petroleum hydrocarbon and chloride concentrations at the release source. Potholes PH02 through PH06 were advanced laterally away from the source area to assess the lateral extent of potential impacts. All potholes were advanced until they met refusal on sandstone bedrock during the delineation activities (Figure 2). During assessment activities, an Ensolum personnel observed and field screened the soil for petroleum hydrocarbon staining, odors, and chloride crusting. Soil samples were field screened for the presence of organic vapors using a calibrated photoionization detector (PID) and chloride using Hach® QuanTab® test strips, with results noted on the field notes (attached as Appendix C).

Two soil samples were collected from each pothole from depth intervals indicating the greatest potential for impacts based on field screening measurements, as well as field observations. Soil samples were collected directly into laboratory-provided jars, immediately placed on ice, and submitted to Eurofins Environment Testing (Eurofins) for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH-GRO, TPH-DRO, TPH-MRO following EPA Method 8015M/D, and chloride following EPA Method 300.0. Field indications of petroleum hydrocarbons, including staining, odors, and/or elevated PID readings, were not observed in any of the potholes during the work. Photographs taken during field activities are attached as Appendix D.

Concentrations of total BTEX, TPH-GRO, and TPH-MRO were not detected above laboratory report limits in any of the soil samples collected during the December 2023 assessment. Chloride and TPH-DRO were detected in one or more samples analyzed during the delineation effort; however, all detected concentrations were below the NMOCD Table I Closure Criteria and the reclamation requirement. Soil sample analytical results are summarized in Table 1, with complete laboratory analytical reports attached as Appendix E.

CONCLUSIONS AND CLOSURE REQUEST

Based on the delineation activities and soil analytical results described above, petroleum hydrocarbon and/or chloride contaminants were not detected in any of the samples collected at the Site above the NMOCD Table I Closure Criteria or reclamation requirement. The Site appears to be absent of soil impacts and waste-containing soil. As such, Site conditions appear to be protective of human health, the environment, and groundwater and Hilcorp respectfully requests closure for Incident Number napp2330627962.

REFERENCES

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

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

Sincerely,
Ensolum, LLC

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

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

Attachments:

Figure 1: Site Receptor Map
Figure 2: Soil Delineation Analytical Results

Table 1: Soil Sample Analytical Results

Appendix A: NMOSE Point of Diversion Summary
Appendix B: Agency Sampling Notification
Appendix C: Field Notes
Appendix D: Photographic Log
Appendix E: Laboratory Analytical Reports

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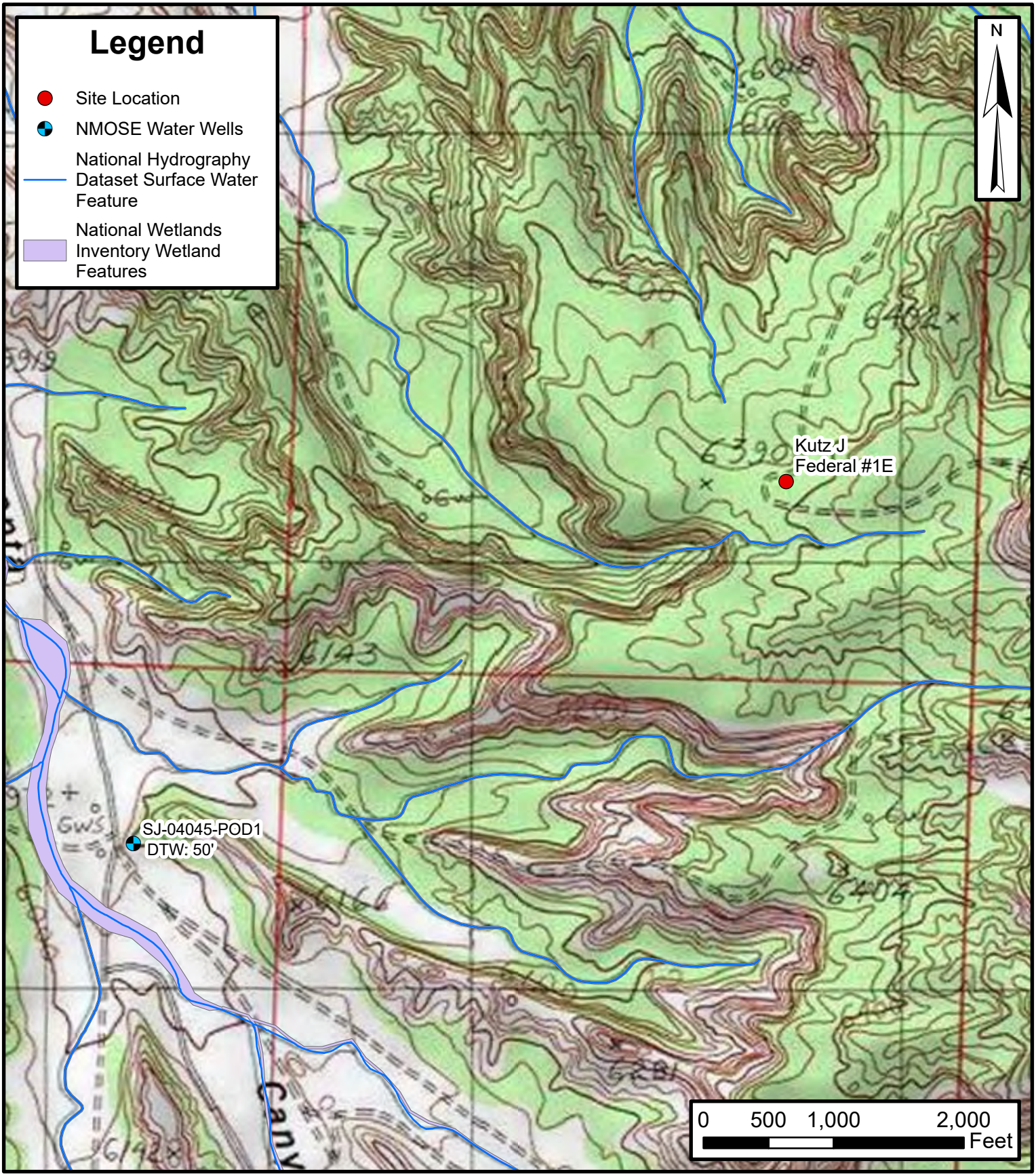
FIGURES

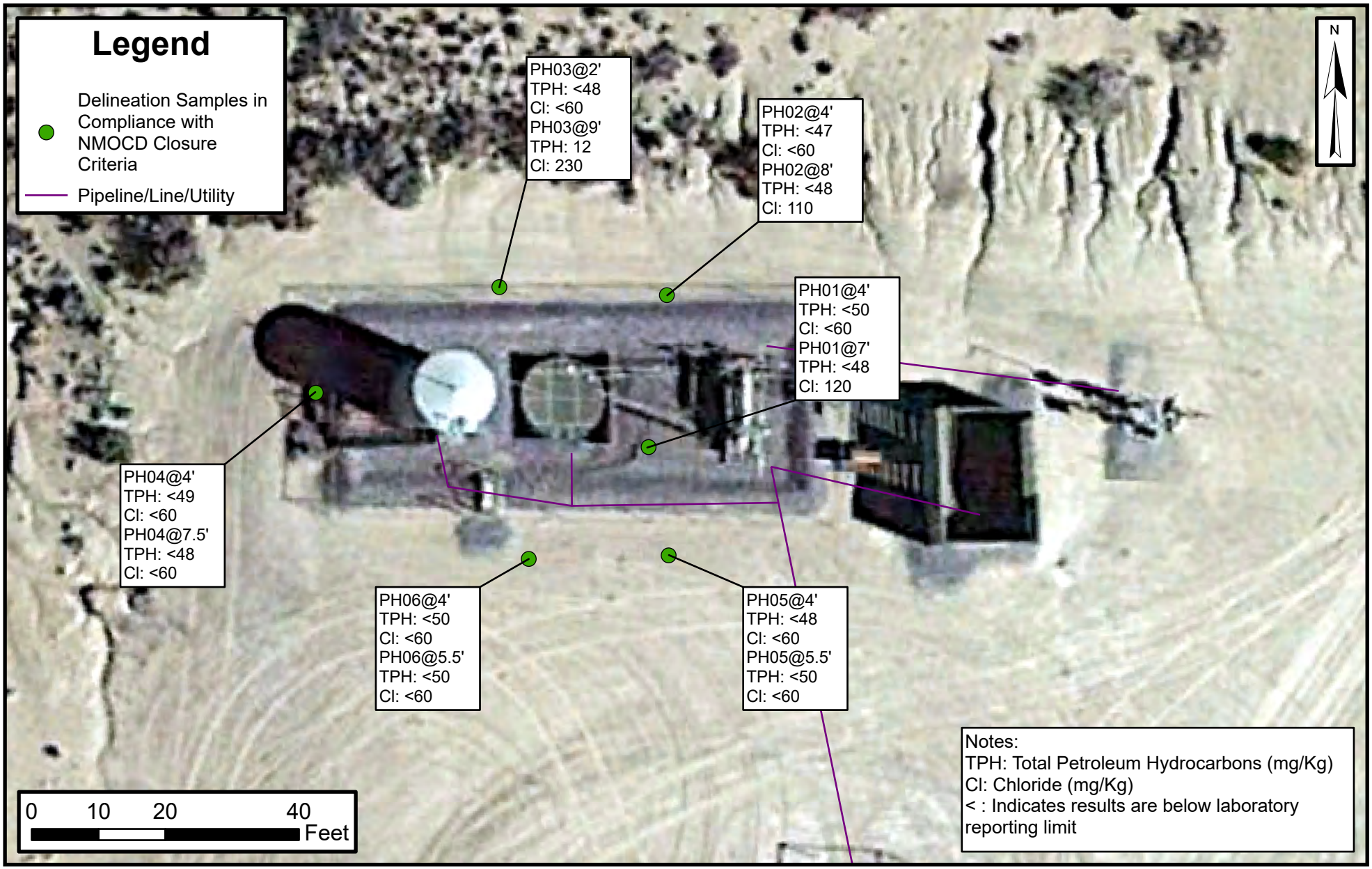


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Kutz J Federal #1E
Hilcorp Energy Company
Incident Number: napp2330627962
36.60096, -107.84263
San Juan County, New Mexico

FIGURE
1



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Environmental, Engineering and Hydrogeologic Consultants

Soil Delineation Analytical Results

Kutz J Federal #1E
Hilcorp Energy Company
Incident Number: napp2330627962
36.60096, -107.84263
San Juan County, New Mexico

FIGURE
2

Sources: Google Earth

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Kutz J Federal #1E
Hilcorp Energy Company
San Juan County, New Mexico

Sample ID	Date	Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	TPH GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
PH01@4	12/13/2023	4	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<10	<50	<15	<50	<60
PH01@7	12/13/2023	7	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.6	<48	<14.4	<48	120
PH02@4	12/13/2023	4	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.4	<47	<11.4	<47	<60
PH02@8	12/13/2023	8	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.6	<48	<14.3	<48	110
PH03@2	12/13/2023	2	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.5	<48	<14.2	<48	<60
PH03@9	12/13/2023	9	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	12	<48	12	12	230
PH04@4	12/13/2023	4	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.8	<49	<14.6	<49	<60
PH04@7.5	12/13/2023	7.5	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.6	<48	<14.4	<48	<60
PH05@4	12/13/2023	4	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.6	<48	<14.3	<48	<60
PH05@5.5	12/13/2023	5.5	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.9	<50	<14.8	<50	<60
PH06@4	12/13/2023	4	<0.023	<0.046	<0.046	<0.091	<0.091	<4.6	<9.9	<50	<14.5	<50	<60
PH06@5.5	12/13/2023	5.5	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.9	<50	<14.6	<50	<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/Lube Oil Range Organics
TPH: Total Petroleum Hydrocarbon
< : indicates result less than the stated laboratory reporting limit (RL)
*Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table I Closure Criteria for Soils Impacted by a Release*

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APPENDIX A

NMOSE Point of Diversion Summary

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

2013 OCT -1 AM 9:40

1. GENERAL AND WELL LOCATION

POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S): SJ 4045
WELL OWNER NAME(S): Shatasha Coffman	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 583 RD4990	CITY: Bloomfield STATE: NM ZIP: 87413

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	36	35	35.00	N
LONGITUDE	107	51	36.00	W

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

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS:

2. OPTIONAL

(2.5 ACRE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION	TOWNSHIP	RANGE
¼	¼	¼	¼	11	27 ☑ NORTH ☐ SOUTH	10 ☐ EAST ☑ WEST

SUBDIVISION NAME	LOT NUMBER	BLOCK NUMBER	UNIT/TRACT

HYDROGRAPHIC SURVEY	MAP NUMBER	TRACT NUMBER

3. DRILLING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD 717	Terry Hood	Western Water Wells

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
9/15/13	9/25/13	310	310	50

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): 50

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

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

DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
0	230	8	PVC		5	SDR21	
230	310	8	PVC		5	SDR21	.060

4. WATER BEARING STRATA

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	YIELD (GPM)
145	180	35	Sandstone	1
240	285	45	Blue Sandstone	5-6

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA	TOTAL ESTIMATED WELL YIELD (GPM)
air lift	6-7

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

FILE NUMBER	SJ-4045 POD1	POD NUMBER	1	TRN NUMBER	532352
LOCATION	27N.10W.11.241				PAGE 1 OF 2

5. SEAL AND PUMP

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

ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	4	20	9	Cement	4	Surface Pour

6. GEOLOGIC LOG OF WELL

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
0	3	3	Sand & Clay	☐ YES ☑ NO
3	12	9	White Sandstone	☐ YES ☑ NO
12	48	36	Blue Sandy Shale	☐ YES ☑ NO
48	80	32	Sandstone (moist)	☐ YES ☑ NO
80	145	65	Sandy Shale	☐ YES ☑ NO
145	180	35	Sandstone	☑ YES ☐ NO
180	240	60	Blue Sandy Shale	☐ YES ☑ NO
240	285	45	Blue Sandstone	☑ YES ☐ NO
285	310	25	BlueSandy Shale	☐ YES ☑ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO

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

7. TEST & ADDITIONAL INFO

WELL TEST — METHOD: ☐ BAILER ☐ PUMP ☑ AIR LIFT ☐ OTHER – SPECIFY:

TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

ADDITIONAL STATEMENTS OR EXPLANATIONS:

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2013 OCT -1 AM 9:40

8. SIGNATURE

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

SIGNATURE OF DRILLER — DATE: 10/1/13

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

FILE NUMBER	SJ-4045 POD1	POD NUMBER		TRN NUMBER	532352
LOCATION	27N.10W.11.241			PAGE 2 OF 2	

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APPENDIX B

Agency Sampling Notification

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 292783
Date: Friday, December 8, 2023 3:03:49 PM

[**EXTERNAL EMAIL**]

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

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2330627962.

The sampling event is expected to take place:

When: 12/13/2023 @ 09:00
Where: J-01-27N-10W 1485 FSL 1515 FEL (36.60096,-107.842634)

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

Additional Instructions: Site coordinates are 36.60096, -107.842634.

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

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

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

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

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

From: Velez, Nelson, EMNRD
To: Stuart Hyde; Adeloye, Abiodun A
Cc: Mitch Killough; Devin Hencmann; Reece Hanson
Subject: Re: [EXTERNAL] napp2330627962 - Kutz J Federal #1E Sampling Notification
Date: Friday, December 8, 2023 1:32:26 PM
Attachments: image001.png
image002.png
image003.png
image004.png
Outlook-fq2uzv3f.png

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

Good afternoon Stuart,

Thank you for the notification. Please refer to pages 67-74 of the "Implement Implementation-of-Digital-C-141-and-Incident-Statuses.pdf" document previously submitted for the sampling notification submittal procedures.

Thank you!

Regards,

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

From: Stuart Hyde <shyde@ensolum.com>
Sent: Friday, December 8, 2023 11:20 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Mitch Killough <mkillough@hilcorp.com>; Devin Hencmann <dhencmann@ensolum.com>; Reece Hanson <rhanson@ensolum.com>
Subject: [EXTERNAL] napp2330627962 - Kutz J Federal #1E Sampling Notification

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

All,

On behalf of Hilcorp Energy Company, we are submitting this notification for sampling activities at the Kutz J Federal #1E site, located in San Juan County at coordinates 36.60096, -107.842634. Sampling work will commence at 9 AM on Wednesday December 13, 2023. Please reach out with any questions. Thanks.

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

ENSOLUM

APPENDIX C

Field Notes

46

Location Kutz 3 fed 1E Date 12/13/23

Project / Client Hilcorp

RH, Truck/tools, PID, GPS, Sample kit, CI strips, Hgt

45° F, cloudy, windy

9:05 - RH on Site, followed Dale & Mitch
- discuss plans w/ Mitch, CF&M running 2.5 hours late

9:35 - update from CF&M not running as late as thought
- wait for CF&M
- GPS utilities

10:05 - Mitch & Dale off Site

10:50 - Mitch & Dale, CF&M on Site
- Tailgate meeting, review scope of work, sign JSA
- Dig on 6 outhills
PH 01 Just SE of BGT inside fencing
- bedrock @ ~7' bgs

		PID	CI	Time
Pit 01	@ 4'	1.0	<124	1325
	@ 7'	3.2	<124	1328
Pit 02	@ 2'	0.3	<124	—
	@ 4'	0.4	<124	1334
	@ 8'	1.6	124	1336

→ finance →

Location Yurtz Date 12/13/23

Project / Client Hilcorp

→ continued

		PID	Cl	Time
PH03	@ 2'	1.5	<124	1340
	@ 4'	0.8	<124	—
	@ 6'	1.0	<124	—
	@ 9'	2.6	228	1343
PH04	@ 2	0.6	<124	—
	@ 4	2.1	<124	1348
	@ 6	2.0	<124	—
	@ 7.5	0.3	<124	1350

PH04 rock @ 7.5' bgs

		PID	Cl	Time
PH05	@ 2'	1.5	<124	—
	4'	2.9	<124	1353
	5.5'	1.3	<124	1355
PH06	2	1.4	<124	—
	4	2.2	<124	1357
	5.5	2.7	<124	1400

14:05 · RH, Dale + Mitch off Site

RH

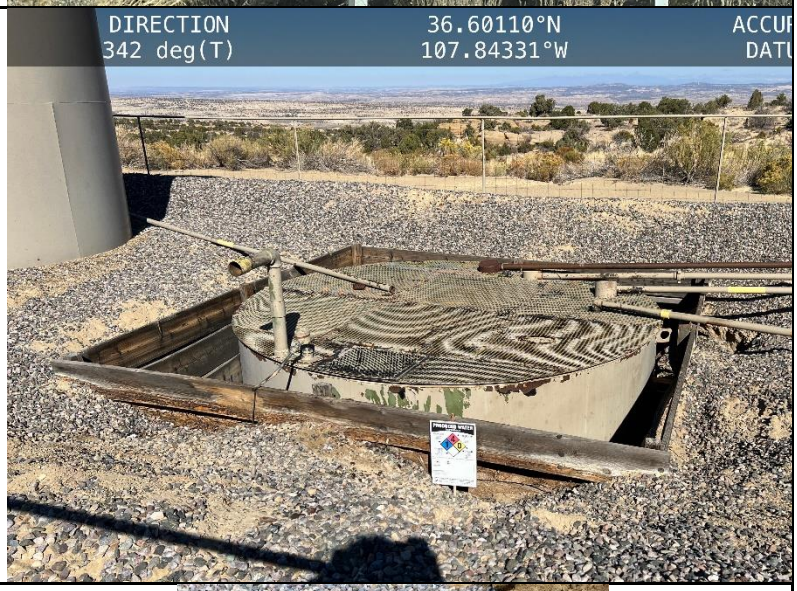
Rite in the Rain

ENSOLUM

APPENDIX D

Photographic Log

PHOTOGRAPHIC LOG
Kutz J Federal #1E
Hilcorp Energy Company

Photograph 1: 10/27/2023 Entrance to the Kutz J Federal #1E site, view looking west.	
Photograph 2: 12/13/2023 View of the below grade tank and source of the release, looking north.	
Photograph 3: 12/13/2023 View of completed pothole PH01, located directly adjacent to the site below grade tank and source of the release.	

ENSOLUM

APPENDIX E

Laboratory Analytical Reports

eurofins | Environment Testing

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

January 08, 2024

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

RE: Kutz J Fed 1E OrderNo.: 2312917

Dear Mitch Killough:

Eurofins Environment Testing South Central, LLC received 12 sample(s) on 12/15/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH01@4
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:25:00 PM
Lab ID: 2312917-001 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/28/2023 1:56:19 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/28/2023 1:56:19 PM
Surr: DNOP	99.6	69-147		%Rec	1	12/28/2023 1:56:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/22/2023 5:03:58 PM
Surr: BFB	99.8	15-244		%Rec	1	12/22/2023 5:03:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	12/22/2023 5:03:58 PM
Toluene	ND	0.050		mg/Kg	1	12/22/2023 5:03:58 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/22/2023 5:03:58 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/22/2023 5:03:58 PM
Surr: 4-Bromofluorobenzene	98.7	39.1-146		%Rec	1	12/22/2023 5:03:58 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	1/2/2024 6:16:14 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** PH01@7
Project: Kutz J Fed 1E **Collection Date:** 12/13/2023 1:28:00 PM
Lab ID: 2312917-002 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/28/2023 2:20:35 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2023 2:20:35 PM
Surr: DNOP	99.8	69-147		%Rec	1	12/28/2023 2:20:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/22/2023 5:27:49 PM
Surr: BFB	97.7	15-244		%Rec	1	12/22/2023 5:27:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	12/22/2023 5:27:49 PM
Toluene	ND	0.048		mg/Kg	1	12/22/2023 5:27:49 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/22/2023 5:27:49 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/22/2023 5:27:49 PM
Surr: 4-Bromofluorobenzene	97.1	39.1-146		%Rec	1	12/22/2023 5:27:49 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	120	60		mg/Kg	20	1/2/2024 6:53:26 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH02@4
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:34:00 PM
Lab ID: 2312917-003 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/28/2023 2:44:50 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/28/2023 2:44:50 PM
Surr: DNOP	96.2	69-147		%Rec	1	12/28/2023 2:44:50 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/22/2023 5:51:40 PM
Surr: BFB	100	15-244		%Rec	1	12/22/2023 5:51:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	12/22/2023 5:51:40 PM
Toluene	ND	0.050		mg/Kg	1	12/22/2023 5:51:40 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/22/2023 5:51:40 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/22/2023 5:51:40 PM
Surr: 4-Bromofluorobenzene	98.6	39.1-146		%Rec	1	12/22/2023 5:51:40 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	1/2/2024 7:05:51 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH02@8
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:36:00 PM
Lab ID: 2312917-004 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/28/2023 3:09:10 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2023 3:09:10 PM
Surr: DNOP	96.5	69-147		%Rec	1	12/28/2023 3:09:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/22/2023 6:15:33 PM
Surr: BFB	99.3	15-244		%Rec	1	12/22/2023 6:15:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	12/22/2023 6:15:33 PM
Toluene	ND	0.047		mg/Kg	1	12/22/2023 6:15:33 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/22/2023 6:15:33 PM
Xylenes, Total	ND	0.093		mg/Kg	1	12/22/2023 6:15:33 PM
Surr: 4-Bromofluorobenzene	97.7	39.1-146		%Rec	1	12/22/2023 6:15:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	110	60		mg/Kg	20	1/2/2024 7:18:16 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH03@2
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:40:00 PM
Lab ID: 2312917-005 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/28/2023 3:33:24 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2023 3:33:24 PM
Surr: DNOP	103	69-147		%Rec	1	12/28/2023 3:33:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/22/2023 7:03:18 PM
Surr: BFB	97.0	15-244		%Rec	1	12/22/2023 7:03:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	12/22/2023 7:03:18 PM
Toluene	ND	0.047		mg/Kg	1	12/22/2023 7:03:18 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/22/2023 7:03:18 PM
Xylenes, Total	ND	0.094		mg/Kg	1	12/22/2023 7:03:18 PM
Surr: 4-Bromofluorobenzene	96.4	39.1-146		%Rec	1	12/22/2023 7:03:18 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	1/2/2024 7:55:30 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH03@9
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:43:00 PM
Lab ID: 2312917-006 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	12	9.7		mg/Kg	1	12/28/2023 3:57:46 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2023 3:57:46 PM
Surr: DNOP	99.9	69-147		%Rec	1	12/28/2023 3:57:46 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/22/2023 7:27:06 PM
Surr: BFB	97.5	15-244		%Rec	1	12/22/2023 7:27:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	12/22/2023 7:27:06 PM
Toluene	ND	0.047		mg/Kg	1	12/22/2023 7:27:06 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/22/2023 7:27:06 PM
Xylenes, Total	ND	0.094		mg/Kg	1	12/22/2023 7:27:06 PM
Surr: 4-Bromofluorobenzene	96.1	39.1-146		%Rec	1	12/22/2023 7:27:06 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	230	60		mg/Kg	20	1/2/2024 8:07:55 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH04@4
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:48:00 PM
Lab ID: 2312917-007 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/28/2023 4:46:07 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/28/2023 4:46:07 PM
Surr: DNOP	110	69-147		%Rec	1	12/28/2023 4:46:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/22/2023 7:51:14 PM
Surr: BFB	98.7	15-244		%Rec	1	12/22/2023 7:51:14 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	12/22/2023 7:51:14 PM
Toluene	ND	0.048		mg/Kg	1	12/22/2023 7:51:14 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/22/2023 7:51:14 PM
Xylenes, Total	ND	0.095		mg/Kg	1	12/22/2023 7:51:14 PM
Surr: 4-Bromofluorobenzene	96.7	39.1-146		%Rec	1	12/22/2023 7:51:14 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	1/2/2024 8:20:20 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH04@7.5
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:50:00 PM
Lab ID: 2312917-008 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/28/2023 5:10:18 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2023 5:10:18 PM
Surr: DNOP	96.4	69-147		%Rec	1	12/28/2023 5:10:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/22/2023 8:15:03 PM
Surr: BFB	98.0	15-244		%Rec	1	12/22/2023 8:15:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	12/22/2023 8:15:03 PM
Toluene	ND	0.048		mg/Kg	1	12/22/2023 8:15:03 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/22/2023 8:15:03 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/22/2023 8:15:03 PM
Surr: 4-Bromofluorobenzene	95.8	39.1-146		%Rec	1	12/22/2023 8:15:03 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	1/3/2024 2:01:05 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH05@4
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:53:00 PM
Lab ID: 2312917-009 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/28/2023 5:34:30 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2023 5:34:30 PM
Surr: DNOP	99.5	69-147		%Rec	1	12/28/2023 5:34:30 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/22/2023 8:38:49 PM
Surr: BFB	97.8	15-244		%Rec	1	12/22/2023 8:38:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	12/22/2023 8:38:49 PM
Toluene	ND	0.047		mg/Kg	1	12/22/2023 8:38:49 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/22/2023 8:38:49 PM
Xylenes, Total	ND	0.094		mg/Kg	1	12/22/2023 8:38:49 PM
Surr: 4-Bromofluorobenzene	96.1	39.1-146		%Rec	1	12/22/2023 8:38:49 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	1/3/2024 3:15:33 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH05@5.5
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:55:00 PM
Lab ID: 2312917-010 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/28/2023 5:58:35 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/28/2023 5:58:35 PM
Surr: DNOP	94.9	69-147		%Rec	1	12/28/2023 5:58:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/22/2023 9:02:33 PM
Surr: BFB	98.4	15-244		%Rec	1	12/22/2023 9:02:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	12/22/2023 9:02:33 PM
Toluene	ND	0.049		mg/Kg	1	12/22/2023 9:02:33 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/22/2023 9:02:33 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/22/2023 9:02:33 PM
Surr: 4-Bromofluorobenzene	97.4	39.1-146		%Rec	1	12/22/2023 9:02:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	1/3/2024 3:27:58 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH06@4
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 1:57:00 PM
Lab ID: 2312917-011 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/28/2023 6:22:36 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/28/2023 6:22:36 PM
Surr: DNOP	92.7	69-147		%Rec	1	12/28/2023 6:22:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/22/2023 9:26:24 PM
Surr: BFB	99.8	15-244		%Rec	1	12/22/2023 9:26:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	12/22/2023 9:26:24 PM
Toluene	ND	0.046		mg/Kg	1	12/22/2023 9:26:24 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/22/2023 9:26:24 PM
Xylenes, Total	ND	0.091		mg/Kg	1	12/22/2023 9:26:24 PM
Surr: 4-Bromofluorobenzene	97.5	39.1-146		%Rec	1	12/22/2023 9:26:24 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	1/3/2024 3:40:22 PM

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

Qualifiers:

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

Analytical Report
Lab Order **2312917**
Date Reported: **1/8/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: PH06@5.5
Project: Kutz J Fed 1E
Collection Date: 12/13/2023 2:00:00 PM
Lab ID: 2312917-012 **Matrix:** SOIL **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/28/2023 6:46:35 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/28/2023 6:46:35 PM
Surr: DNOP	93.2	69-147		%Rec	1	12/28/2023 6:46:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/22/2023 9:50:07 PM
Surr: BFB	98.2	15-244		%Rec	1	12/22/2023 9:50:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	12/22/2023 9:50:07 PM
Toluene	ND	0.047		mg/Kg	1	12/22/2023 9:50:07 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/22/2023 9:50:07 PM
Xylenes, Total	ND	0.093		mg/Kg	1	12/22/2023 9:50:07 PM
Surr: 4-Bromofluorobenzene	96.1	39.1-146		%Rec	1	12/22/2023 9:50:07 PM
EPA METHOD 300.0: ANIONS						Analyst: **KCB**
Chloride	ND	60		mg/Kg	20	1/3/2024 3:52:47 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312917**

08-Jan-24

Client: HILCORP ENERGY

Project: Kutz J Fed 1E

Sample ID: **MB-79690**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**								
Client ID: **PBS**	Batch ID: **79690**	RunNo: **102194**								
Prep Date: **1/2/2024**	Analysis Date: **1/2/2024**	SeqNo: **3772697**	Units: **mg/Kg**							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-79690**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**								
Client ID: **LCSS**	Batch ID: **79690**	RunNo: **102194**								
Prep Date: **1/2/2024**	Analysis Date: **1/2/2024**	SeqNo: **3772698**	Units: **mg/Kg**							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: **MB-79720**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**								
Client ID: **PBS**	Batch ID: **79720**	RunNo: **102238**								
Prep Date: **1/3/2024**	Analysis Date: **1/3/2024**	SeqNo: **3774164**	Units: **mg/Kg**							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-79720**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**								
Client ID: **LCSS**	Batch ID: **79720**	RunNo: **102238**								
Prep Date: **1/3/2024**	Analysis Date: **1/3/2024**	SeqNo: **3774165**	Units: **mg/Kg**							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312917**

08-Jan-24

Client: HILCORP ENERGY

Project: Kutz J Fed 1E

Sample ID: **MB-79621**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **79621**	RunNo: **102130**
Prep Date: **12/27/2023**	Analysis Date: **12/28/2023**	SeqNo: **3769479** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		100	69	147			

Sample ID: **LCS-79621**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **79621**	RunNo: **102130**
Prep Date: **12/27/2023**	Analysis Date: **12/28/2023**	SeqNo: **3769480** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	61.9	130			
Surr: DNOP	4.3		5.000		86.9	69	147			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312917**

08-Jan-24

Client: HILCORP ENERGY

Project: Kutz J Fed 1E

Sample ID: **lcs-79535**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **79535**	RunNo: **102078**
Prep Date: **12/20/2023**	Analysis Date: **12/22/2023**	SeqNo: **3767109** 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	104	70	130			
Surr: BFB	2100		1000		210	15	244			

Sample ID: **mb-79535**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **79535**	RunNo: **102078**
Prep Date: **12/20/2023**	Analysis Date: **12/22/2023**	SeqNo: **3767112** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.7	15	244			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312917**

08-Jan-24

Client: HILCORP ENERGY

Project: Kutz J Fed 1E

Sample ID: **LCS-79535**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **79535**	RunNo: **102078**
Prep Date: **12/20/2023**	Analysis Date: **12/22/2023**	SeqNo: **3767216** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.0	70	130			
Toluene	0.86	0.050	1.000	0	85.7	70	130			
Ethylbenzene	0.87	0.050	1.000	0	87.0	70	130			
Xylenes, Total	2.6	0.10	3.000	0	87.5	70	130			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	39.1	146			

Sample ID: **mb-79535**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **79535**	RunNo: **102078**
Prep Date: **12/20/2023**	Analysis Date: **12/22/2023**	SeqNo: **3767219** 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	0.97		1.000		97.5	39.1	146			

Qualifiers:

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

eurofins | Environment Testing

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

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2312917 RcptNo: 1

Received By: Tracy Casarrubias 12/15/2023 6:50:00 AM

Completed By: Tracy Casarrubias 12/15/2023 9:55:35 AM

Reviewed By: SCM 12/15/23

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: SCM 12/15/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: Mailing address and phone number are missing on COC- TMC 12/15/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes	Morty		

Chain-of-Custody Record

Client: Hilcorp

Attn: Mitch Killough

Mailing Address:

Phone #:

email or Fax#: MKillough@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush 5-day

Project Name: Kutz J Fed #1E

Project #:

Project Manager: Stuart Hyde

Sampler: Reece Hanson

On Ice: ☒ Yes ☐ No

# of Coolers: 3.3 ± 0 = 3.3 °C mar-t

Cooler Temp(including CF): 1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2312917	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)
12/13/23	1325	Soil	Pit01 @ 4	1, 4 oz	Cool	001	X	X					X			
	1328		Pit01 @ 7			002										
	1334		Pit02 @ 4			003										
	1336		Pit02 @ 8			004										
	1340		Pit03 @ 2			005										
	1343		Pit03 @ 9			006										
	1348		Pit04 @ 4			007										
	1350		Pit04 @ 7.5			008										
	1353		PH05 @ 4			009										
	1355		Pit05 @ 5.5			010										
	1357		PH06 @ 4			011										
	1400		Pit06 @ 5.5			012										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
12/14/23	1012				12/14/23	1012
12/14/23	1750			courier	12/15/23	6:50

Remarks: RIT

cc: stuart hyde shyde@ensolum.com rhanson

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

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

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

QUESTIONS

Action 305583

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 305583
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2330627962**
Incident Name	**NAPP2330627962 KUTZ J FEDERAL #1E @ 30-045-31135**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-045-31135] KUTZ J FEDERAL #001E**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	KUTZ J FEDERAL #1E
Date Release Discovered	10/27/2023
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Corrosion | Pit (Specify) | Produced Water | Released: 70 BBL | Recovered: 0 BBL | Lost: 70 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

District I
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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
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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 305583
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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

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

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 01/19/2024

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QUESTIONS (continued)

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	Action Number: 305583
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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 1 and 5 (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)	230
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	12
GRO+DRO (EPA SW-846 Method 8015M)	12
BTEX (EPA SW-846 Method 8021B or 8260B)	0
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	01/01/2024
On what date will (or did) the final sampling or liner inspection occur	01/01/2024
On what date will (or was) the remediation complete(d)	01/01/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	No remediation needed
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.	

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I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 01/19/2024

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

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QUESTIONS (continued)

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QUESTIONS

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

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QUESTIONS (continued)

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QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**292783**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**12/13/2023**
What was the (estimated) number of samples that were to be gathered	**10**
What was the sampling surface area in square feet	**12000**

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	0
What was the total volume (cubic yards) remediated	0
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)	Remediation not required based on analytical data gathered for the site.

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.

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QUESTIONS (continued)

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QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 305583

CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/26/2024