



July 29, 2024

District Supervisor  
Oil Conservation Division, District 1  
1625 North French Drive  
Hobbs, New Mexico 88240

**Re: Remediation/Reclamation Report and Closure Request  
Maverick Permian, LLC  
SEMU Permian 126 Flowline Release  
Unit Letter L, Section 19, Township 20 South, Range 38 East  
Lea County, New Mexico  
Incident ID# nAPP2401128986**

Dear Sir or Madam,

Tetra Tech, Inc. (Tetra Tech) was contracted by Maverick Permian, LLC (Maverick) to assess and remediate a release that occurred from a pinhole leak in a flow line associated with the SEMU Permian #015 Well (API 30-025-07810). The release footprint is located near Jay Lane in Public Land Survey System (PLSS) Unit Letter L, Section 19, Township 20 South, Range 38 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.5571°, -103.1925° as shown in **Figure 1** and **Figure 2**.

**BACKGROUND**

The release was discovered by Maverick Operations on January 9, 2024, the cause of the release was a pinhole leak in a flowline associated with the SEMU Permian #015 well which led to a release of 2 barrels (bbls) of crude oil and 13 bbls of produced water. The release occurred in the adjacent pasture. Approximately 0 bbls of oil and 0 bbls of produced water were recovered during the initial response. The NMOCD received the Initial C-141 on February 27, 2024, and subsequently assigned the release Incident ID nAPP2401128986. The initial C-141 Release notification form is available from the NMOCD ePermitting portal under incident ID nAPP2401128986.

**SITE CHARACTERIZATION**

Tetra Tech performed a Site characterization that included the identification of sensitive receptors, a depth to groundwater determination, and assessment of site soils. Site Characterization data are summarized below and included in **Attachment 1**.

**Site Characterization Summary**

Shallowest Depth to Groundwater (feet bgs)	> 55 feet bgs
Method to determine depth to groundwater	Direct Measurement
Did this release impact groundwater or surface water	No
Distance to a continuously flowing watercourse	1 to 5 Miles
Distance to any lakebed, sinkhole, or playa lake	1 to 5 Miles
Distance to any occupied permanent residence, school, hospital, institution, or church	> 5 Miles

**Tetra Tech, Inc.**  
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Remediation/Reclamation Report and Closure Request  
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### Site Characterization Summary

Distance to A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	1 to 5 Miles
Distance to any other freshwater well or spring	1 to 5 miles
Distance to Incorporated municipal boundaries or a defined municipal freshwater well field	1 to 5 Miles
Distance to a wetland	1 to 5 Miles
Distance to a subsurface mine	> 5 Miles
Distance to an (non-karst) unstable area	> 5 Miles
Risk of the Site being in a karst geology	Low
Distance to a 100-year floodplain	> 5 Miles
Did the release impact areas not on an exploration, development, production, or storage site	No

### Depth to Groundwater

According to the New Mexico Office of State Engineer's (NMOSE) Reporting System, there are no water wells within 1 mile of the Site. Groundwater has been estimated as greater than 55 feet below ground surface based on a USGS groundwater well approximately 0.35 miles south the Site with a water level of 82 feet, however, this well was last measured in 1976.

On March 7, 2024, Tetra Tech and West Texas Water Well mobilized and installed a Depth-To-Water (DTW) boring to 55 feet bgs at 32.560316°, -103.190072°, approximately 0.23-miles (375 meters) northeast of the Site. The DTW boring did not encounter groundwater in the upper 55 feet and confirms that groundwater is not present to a depth of 55 feet bgs at the Site.

### Soils

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the Site is mapped as Kermit soils and Dune land, 0 to 12 percent slopes, which are both classified as sand soils.

### REGULATORY FRAMEWORK

Based upon the release footprint location and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Total Petroleum Hydrocarbons (TPH), and chloride in soil.

Based on the proven depth to water and distances to potential receptors, and in accordance with Table I of 19.15.29.12 NMAC, the following are the remediation RRALs for the Site for groundwater between 51 and 100 feet bgs:

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#### Closure Criteria for Soils Impacted by a Release

Constituent	Remediation RRAL
Chloride	10,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

Additionally, in accordance with the New Mexico Oil Conservation District (NMOCD) guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* dated September 6, 2019, the following Reclamation Requirements for surface soils (0-4 feet bgs) are as follows:

#### Reclamation Requirements

Constituent	Remediation RRAL
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

### INITIAL RESPONSE ACTIVITIES

The release occurred due to a pinhole leak in a flowline releasing oil and produced water onto an approximately 6,450 square foot area in open pasture, as shown in **Figure 3**. According to Site records, initial response actions were taken by Maverick at the release site on January 9, 2023. Maverick responded to the site by stopping the leak, repairing the flowline, and initiating the excavation of impacted soils.

### SITE ASSESSMENT

On January 19, 2024, Tetra Tech personnel mobilized to the Site to conduct soil sampling to delineate the release extent. A total of 13 hand auger borings were installed in an attempt to achieve vertical and horizontal delineation of the release. Hand auger borings AH-1 through AH-5 were advanced within the footprint of the release to a depth of 4 feet bgs. Auger borings H-1 through H-8 were advanced along the perimeter of the reported release extent to a depth of 0.5 ft bgs to horizontally delineate the release. Soil Assessment boring locations are detailed in **Table 1** and depicted in **Figure 4**.

Results from the January 19, 2024, soil sampling event are summarized in **Table 2**. The samples collected from within the release footprint reported BTEX, chloride, and TPH concentrations greater than Reclamation Requirements at AH-1 through AH-5. All the samples collected along the perimeter of the release footprint reported constituent concentrations as less than Reclamation Requirements.

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## REMEDIATION AND CONFIRMATION SAMPLING

Excavation activities commenced on May 27, 2024, and concluded on June 13, 2024. Maverick's subcontractor, McNabb Partners (McNabb) used heavy equipment to excavate impacted soil from the remediation area to depths of 5 feet bgs. McNabb excavated a total of 1,650 cubic yards of contaminated soil from an approximate total area of 8,000 square feet. Excavated material was transported to R360 Halfway Disposal and Landfill in Hobbs, New Mexico, for offsite disposal. Photographic documentation showing the open excavation is provided in **Attachment 2**.

### Confirmation Sampling Notification

On May 25, 2024, Tetra Tech notified the NMOCD of the anticipated initial confirmation sampling through the submission of a C-141N Sampling Notification submission in the NMOCD Permitting portal and provided subsequent C-141N Sampling Notification submissions through the NMOCD Permitting portal up to and including final confirmation sampling at the Site performed on June 6, 2024. Sampling notification was conducted in accordance with 19.15.29.12(D)(1)(a) NMAC and the Energy, Minerals and Natural Resources Department (EMNRD) *Notice Process Updates re: Submissions of Form C-141 Release Notification and Corrective Actions* dated December 1, 2023. Sample notifications are available in the NMOCD Portal under Incident ID NAPP2401128986.

### Confirmation Sampling

Upon reaching the final lateral and vertical excavation extents of the excavation, Tetra Tech collected 39 final confirmation samples including 30 five-point composite floor samples and 9 five-point composite side wall samples from the excavated areas. The remediation excavation concluded as a 5-foot-deep excavation with an approximately 6,400 square-foot base and 1,600 square feet of sidewall for a total area of 8,000 square feet from which 38 confirmation samples were collected for a sampling density of approximately one sample per 205 square feet.

Samples were submitted to Cardinal Laboratory in Hobbs, New Mexico for analysis of BTEX by Method 8021B, TPH by Method 8015M, and chloride by Method SM4500 CL-B. Laboratory analytical results for final confirmation samples reported concentrations of BTEX, chloride, and TPH as less than respective Reclamation Requirements or RRALs, as applicable, demonstrating clean margins.

Shallow confirmation sample laboratory analytical results screened against Reclamation Requirements are summarized in **Table 3**, Deep confirmation sample analytical results screened against RRALs are summarized in **Table 4**, and laboratory analytical data packages including chain of custody documentation remediation confirmation sampling are included in **Attachment 3**.

### Excavation Backfill

Between June 14 and 19, 2024, subsequent to the receipt of confirmation sample results, McNabb completed backfilling of the excavated areas with 1,438 cubic yards of clean topsoil sourced from the nearby Boyd Pit.

### Reclamation and Revegetation

To restore the impacted surface areas to the condition that existed prior to the release, the excavated areas in the pasture have been backfilled with clean topsoil. The disturbed areas have been graded back to match the surrounding topography and the pre-existing conditions prior to contouring to provide erosion control, long-term stability, prevent ponding of water, and preserve surface water flow patterns.

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Subsequent to restoring topography and contouring the disturbed areas, disturbed pasture areas of the Site were seeded with New Mexico State Land Office (NMSLO) Sandy (S) Sites Seed Mixture to aid in vegetation growth to complete reclamation in accordance with the Site soil profile detailed above in the Site Characterization Section. Seeding was broadcast and harrowed in per the specifications for broadcast application in pound pure live seed per acre according to the NMSLO Seed Mix Sandy (S) data sheet provided in **Attachment 4**.

Site inspections will be performed periodically to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the Bureau of Land Management will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate.

Revegetation will be considered complete once uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels or a vegetative cover approved by BLM. Upon completion of Revegetation, Tetra Tech will prepare and submit a Revegetation Report in accordance with the *EMNRD Notice Process Updates re: Submissions of Form C-141 Release Notification and Corrective Actions* requirements.

## CONCLUSION

Based on the results of the confirmation sampling, the impacted soil within the release footprint with TPH, BTEX, or chloride concentrations greater than RRALs and Reclamation Requirements, as applicable, have been removed and properly disposed of offsite and the excavated area has been backfilled with clean soil, graded, and seeded. Therefore, Site remediation and reclamation is complete. A Revegetation Report for the Site will be submitted to the NMOCD under separate cover containing the NMOCD required information upon completion of revegetation. If you have any questions concerning the remediation activities for the Site, please contact Charles Terhune by email at [Chuck.Terhune@tetrattech.com](mailto:Chuck.Terhune@tetrattech.com) or by phone at (832) 252-2093.

Sincerely,



Lisbeth Chavira  
Staff Geoscientist  
Tetra Tech, Inc.



Charles H. Terhune IV, P.G.  
Program Manager  
Tetra Tech, Inc.

cc: Bryce Wagoner, Maverick Permian, LLC  
Bureau of Land Management

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## LIST OF ATTACHMENTS

### Figures

- Figure 1 – Site Location Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent
- Figure 4 – Site Assessment Locations
- Figure 5 – Remediation Extents and Confirmation Sample Locations

### Tables

- Table 1 – Soil Assessment Locations
- Table 2 – Summary of Analytical Results – Soil Assessment Sampling
- Table 3 – Summary of Analytical Results – Shallow Remediation Confirmation Sampling
- Table 4 – Summary of Analytical Results – Deep Remediation Confirmation Sampling

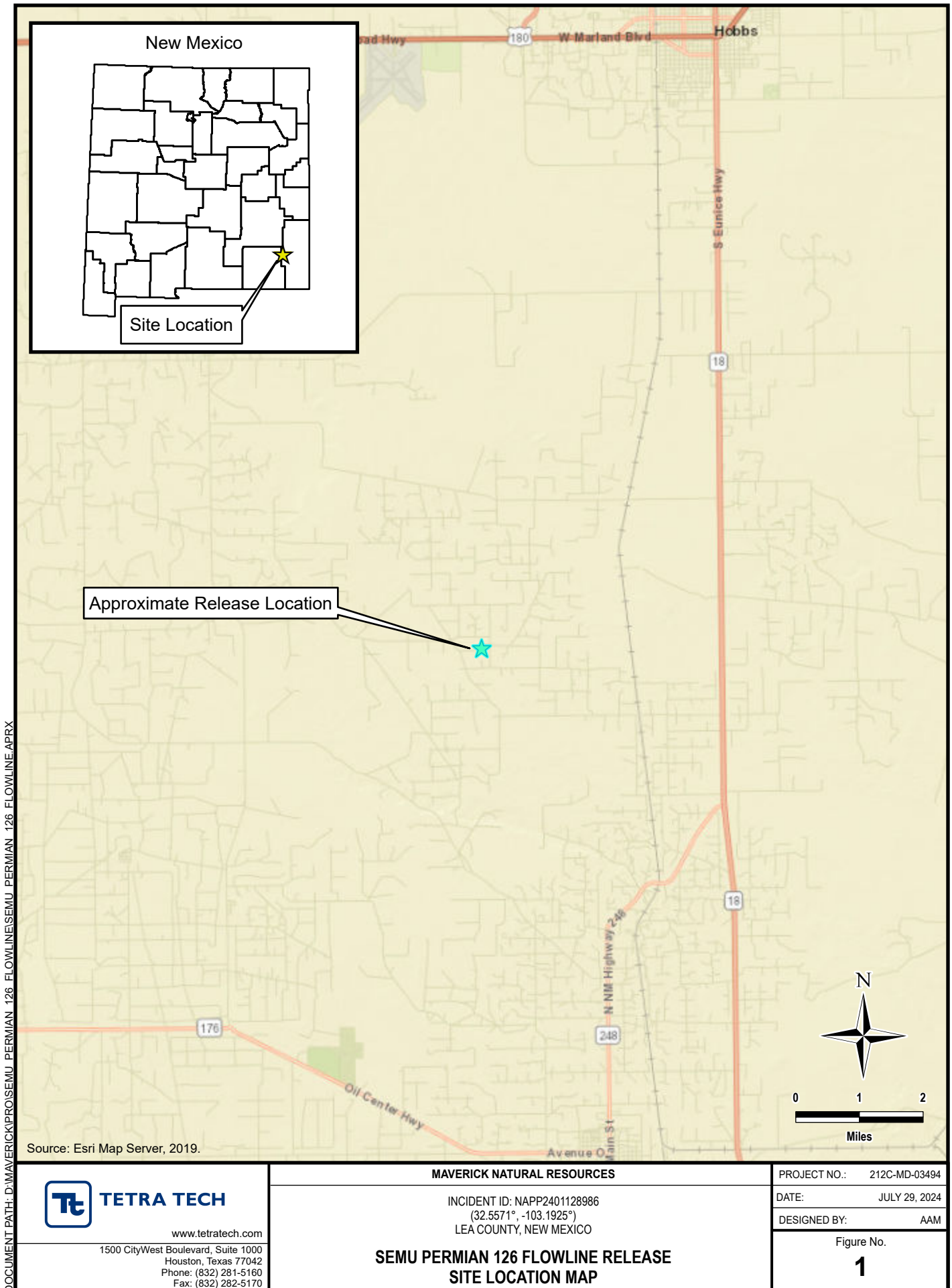
### Attachments

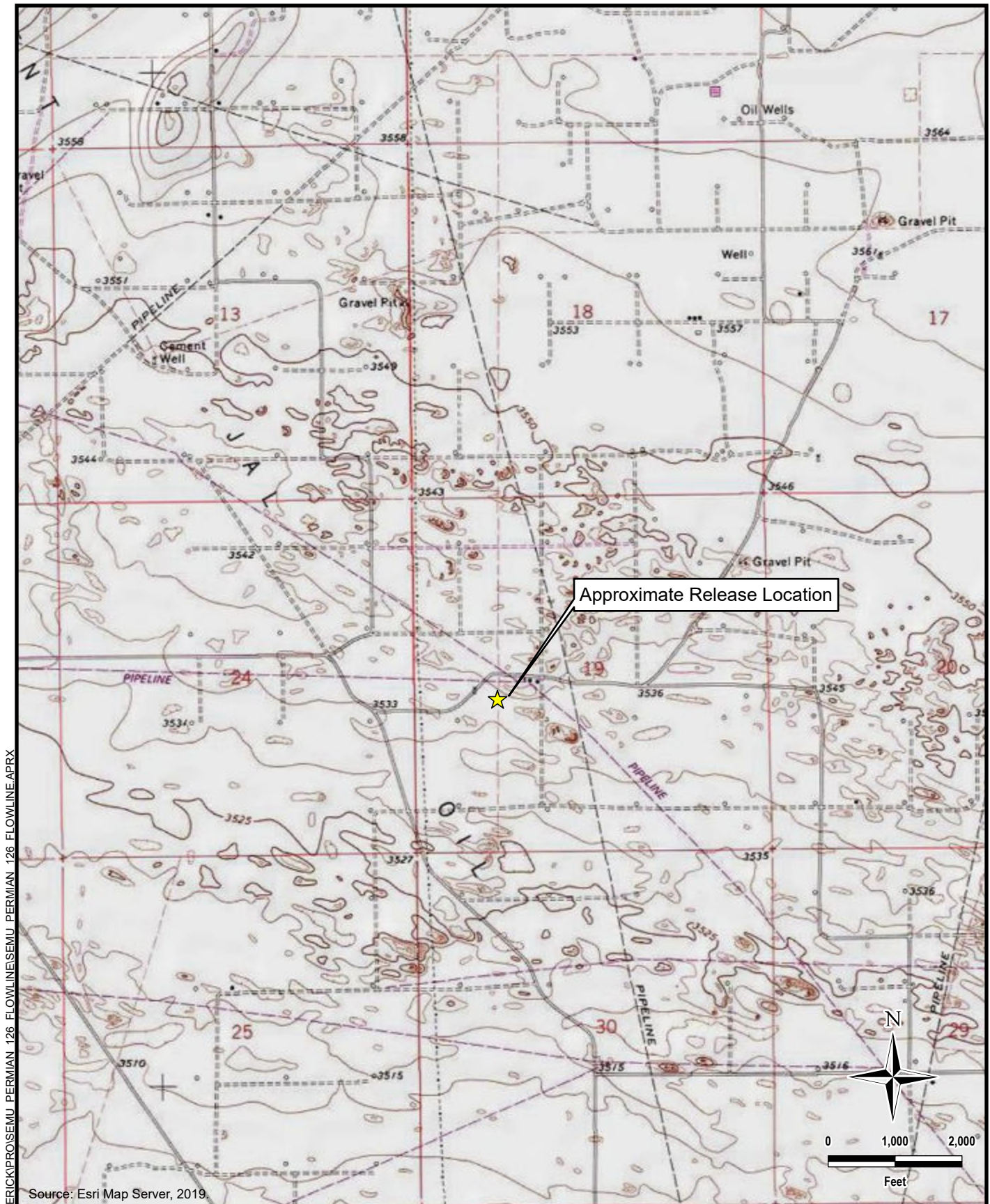
- Attachment 1 – Site Characterization Data
- Attachment 2 – Photographic Documentation
- Attachment 3 – Laboratory Analytical Report
- Attachment 4 – Seed Mixture Details

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SEMU Permian 126 Flowline Release  
Incident ID: nAPP2401128986

July 29, 2024

## FIGURES





DOCUMENT PATH: D:\MAVERICK\PROSEMU PERMIAN 126 FLOWLINE\SEMU PERMIAN 126 FLOWLINE.APRX


**TETRA TECH**
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**MAVERICK NATURAL RESOURCES**

 INCIDENT ID: NAPP2401128986  
 (32.5571°, -103.1925°)  
 LEA COUNTY, NEW MEXICO

**SEMU PERMIAN 126 FLOWLINE RELEASE  
 TOPOGRAPHIC MAP**

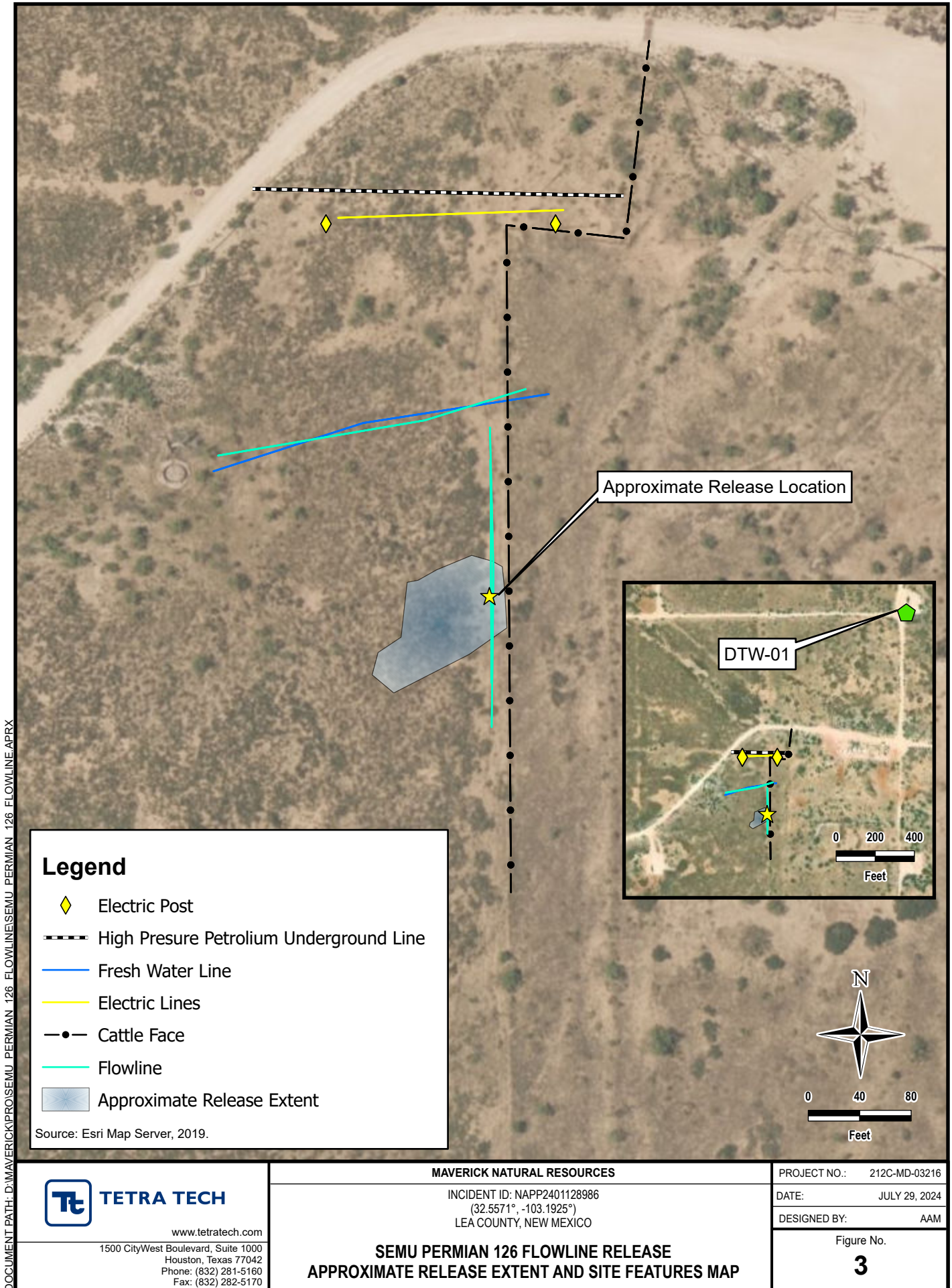
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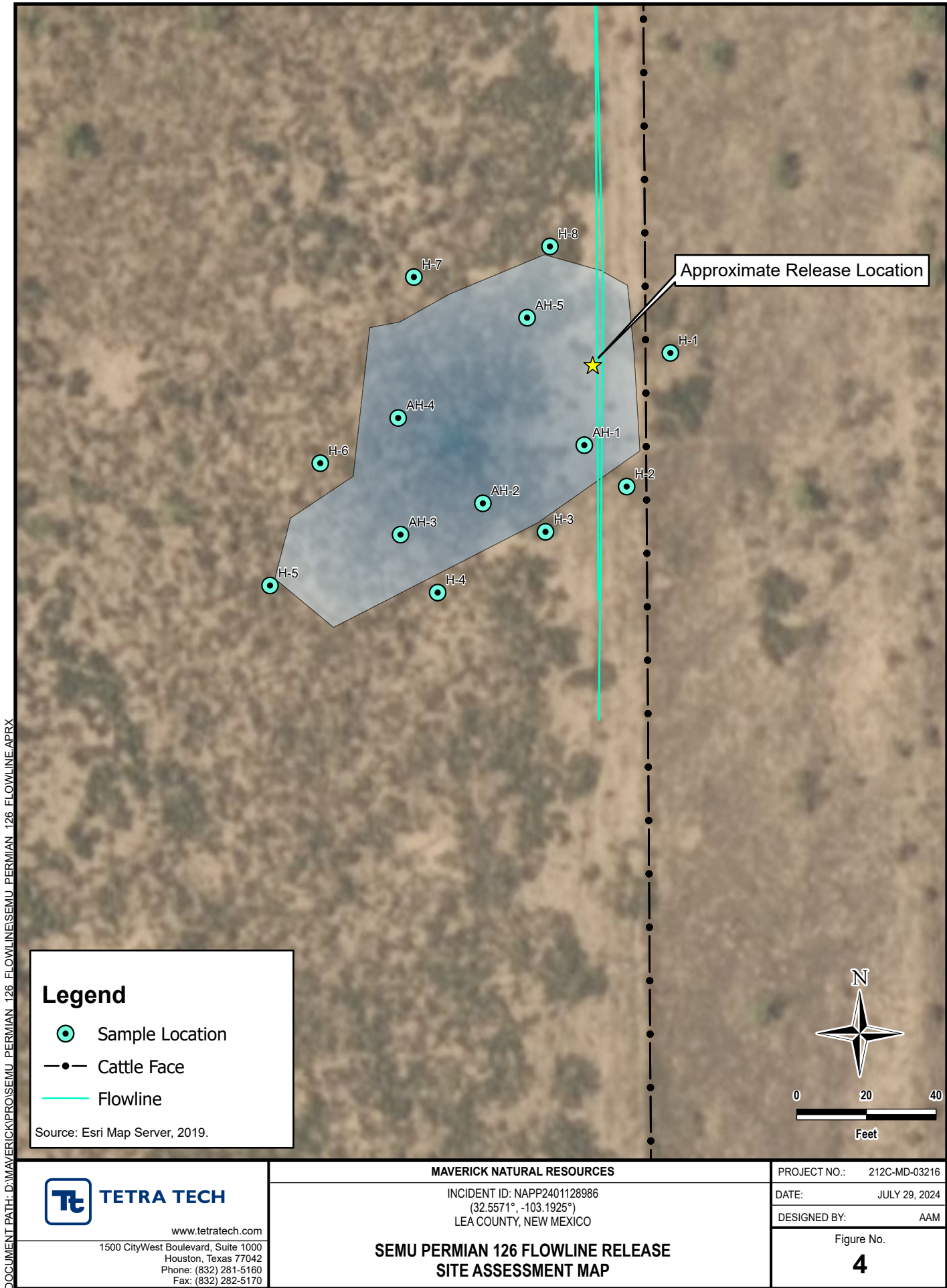
DATE: JULY 29, 2024

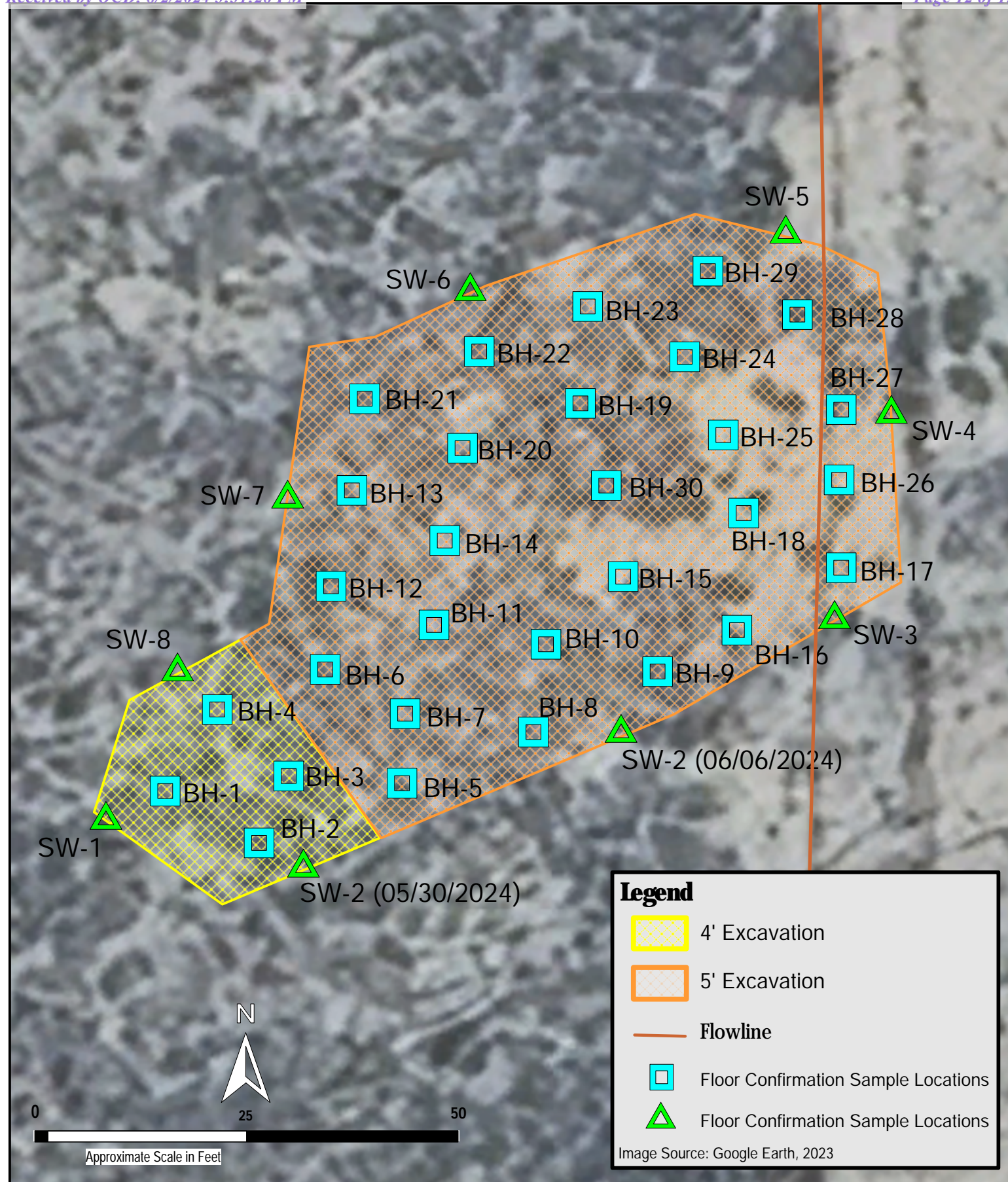
DESIGNED BY: AAM

Figure No.

**2**







**TETRA TECH**

1500 CityWest Boulevard  
Suite 1000  
Houston, Texas 77042

**MAVERICK PERMIAN, LLC**  
INCIDENT ID: NAPP2401128986  
(32.5571°, -103.1925°)

Lea County, New Mexico  
**SEMU PERMIAN 126 FLOWLINE RELEASES  
EXCAVATION AND CONFIRMATION SAMPLING**

PROJECT NO: 212C-MD-03216  
DATE: August 2, 2024  
DESIGNED BY: CHT

**Figure  
5**

Remediation/Reclamation Report and Closure Request  
Maverick Permian, LLC  
SEMU Permian 126 Flowline Release  
Incident ID: nAPP2401128986

July 29, 2024

TABLES



TABLE 1

SOIL ASSESSMENT LOCATIONS  
INCIDENT ID NAPP2401128986  
MAVERICK PERMIAN, LLC  
SEMU PERMIAN 126 FLOWLINE RELEASE  
LEA COUNTY, NEW MEXICO

Boring ID	Date	Latitude	Longitude
AH-1	1/19/2024	32.557437	-103.192422
AH-2	1/19/2024	32.557392	-103.192517
AH-3	1/19/2024	32.557368	-103.192594
AH-4	1/19/2024	32.557460	-103.192595
AH-5	1/19/2024	32.557538	-103.192474
H-1	1/19/2024	32.557509	-103.192341
H-2	1/19/2024	32.557404	-103.192383
H-3	1/19/2024	32.557369	-103.192459
H-4	1/19/2024	32.557322	-103.192560
H-5	1/19/2024	32.557329	-103.192716
H-6	1/19/2024	32.557425	-103.192668
H-7	1/19/2024	32.557571	-103.192579
H-8	1/19/2024	32.557594	-103.192452



**TABLE 2**  
**SUMMARY OF ANALYTICAL RESULTS**  
**SOIL ASSESSMENT SAMPLING - INCIDENT nAPP2401128986**  
**MAVERICK PERMIAN, LLC**  
**SEMU PERMIAN 126 FLOWLINE RELEASE**  
**LEA COUNTY, NEW MEXICO**

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	C <sub>6</sub> - C <sub>10</sub>	Q	> C <sub>10</sub> - C <sub>28</sub>	Q	> C <sub>28</sub> - C <sub>36</sub>	Q	mg/kg		
Reclamation Requirements (19.15.29 NMAC)			600		10								50								100	
AH - 1 (0-.5')	1/19/2024	0.0 - 0.5	1,310		8.26		24.4		23.4		90.1		146		3,840		8,740		1,690		14,270	
AH - 1 (1-2')	1/19/2024	1.0 - 2.0	864		32.6		80.4		52.5		256		422		11,100		24,300		4,380		39,780	
AH - 1 (3-4')	1/19/2024	3.0- 4.0	832		<0.050		0.735		1.46		9.72		11.9		738		2,870		463		4,071	
AH - 2 (0-.5')	1/19/2024	0.0 - 0.5	704		3.16		21.6		24.4		110		159		3,820		13,600		2,410		19,830	
AH - 2 (1-2')	1/19/2024	1.0 - 2.0	816		<0.050		<0.050		<0.050		0		<0.300		12.8		537		108		657.8	
AH - 2 (3-4')	1/19/2024	3.0 -4.0	1,260		<0.050		0.179		1.22		5.62		7.02		601		5,250		870		6,721	
AH - 3 (0-.5')	1/19/2024	0.0 - 0.5	656		<2.00		10.3		37.8		167		215		7,230		44700		8,550		60,480	
AH - 3 (1-2')	1/19/2024	1.0 - 2.0	720		<2.00		11.1		30.7		130		172		3,390		15800		2,890		22,080	
AH - 3 (3-4')	1/19/2024	3.0 - 4.0	1,220		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		164		20		184	
AH - 4 (0-.5')	1/19/2024	0.0 - 0.5	736		<2.00		35.3		62.5		243		341		7,670		28,800		5,410		41,880	
AH - 4 (1-2')	1/19/2024	1.0 - 2.0	704		<2.00		23.5		59.6		244		328		9,780		49,800		9,460		69,040	
AH - 4 (3-4')	1/19/2024	3.0 - 4.0	1,040		<0.050		0		0.858		3.79		4.83		181		1,820		343		2,344	
AH - 5 (0-.5')	1/19/2024	0.0 - 0.5	752		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		167		33.2		200.2	
AH - 5 (1-2')	1/19/2024	1.0 -2.0	1,260		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		101		18.5		119.5	
AH - 5 (3-4')	1/19/2024	3.0 - 4.0	1,180		2.93		22		26.8		102		153		2,980		8,970		1,930		13,880	
H - 1 (0-.5')	1/19/2024	0.0 - 0.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
H - 2 (0-.5')	1/19/2024	0.0 - 0.5	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
H - 3 (0-.5')	1/19/2024	0.0 - 0.5	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		20.1		<10.0		20.1	
H - 4 (0-.5')	1/19/2024	0.0 - 0.5	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
H - 5 (0-.5')	1/19/2024	0.0 - 0.5	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
H - 6 (0-.5')	1/19/2024	0.0 - 0.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
H - 7 (0-.5')	1/19/2024	0.0 - 0.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
H - 8 (0-.5')	1/19/2024	0.0 - 0.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	

**NOTES:**

bgs: Below ground surface

mg/kg: Milligrams per kilogram

TPH: Total Petroleum Hydrocarbons

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

1: Method SM4500CI-B

2: Method 8021B

3: Method 8015M

**Bold and highlighted values indicate exceedance of Reclamation Requirements (19.15.29 NMAC).**



TABLE 3  
SUMMARY OF ANALYTICAL RESULTS  
SHALLOW SOIL CONFIRMATION SAMPLING - INCIDENT nAPP2401128986  
MAVERICK PERMIAN, LLC  
SEMU PERMIAN 126 FLOWLINE RELEASE  
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
		C <sub>6</sub> - C <sub>10</sub>		> C <sub>10</sub> - C <sub>28</sub>		> C <sub>28</sub> - C <sub>36</sub>		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q			
feet bgs			mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
Reclamation Requirements (19.15.29 NMAC)			600		10								50								100	
SW - 1	5/30/2024	0.0 - 4.0	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW - 2	5/30/2024	0.0 - 4.0	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW - 2	6/6/2024	0.0 - 5.0	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW - 3	6/10/2024	0.0 - 5.0	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW - 4	6/10/2024	0.0 - 5.0	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW - 5	6/11/2024	0.0 - 5.0	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		19		<10.0		19	
SW - 6	6/10/2024	0.0 - 5.0	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW - 7	6/11/2024	0.0 - 5.0	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW - 8	5/30/2024	0.0 - 4.0	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	

NOTES:  
bgs: Below ground surface  
mg/kg: Milligrams per kilogram  
TPH: Total Petroleum Hydrocarbons

GRO: Gasoline Range Organics  
DRO: Diesel Range Organics  
ORO: Oil Range Organics

1: Method SM4500CI-B  
2: Method 8021B  
3: Method 8015M

Bold and highlighted values indicate exceedance of Reclamation Requirements (19.15.29 NMAC).



**TABLE 4**  
**SUMMARY OF ANALYTICAL RESULTS**  
**DEEP CONFIRMATION SAMPLING - INCIDENT nAPP2401128986**  
**MAVERICK PERMIAN, LLC**  
**SEMU PERMIAN 126 FLOWLINE RELEASE**  
**LEA COUNTY, NEW MEXICO**

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		TPH	Total TPH (GRO+DRO+EXT DRO)
		feet bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	C <sub>6</sub> - C <sub>10</sub>	> C <sub>10</sub> - C <sub>28</sub>	> C <sub>28</sub> - C <sub>36</sub>	GRO+DRO	mg/kg			
RRALs (Table I 19.15.29.12 NMAC)			10,000		10								50							1,000	2,500	
BH - 1 (4.0')	5/30/2024	4.0 - 4.5	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		28.7		<10.0		28.7	28.7
BH - 2 (4.0')	5/30/2024	4.0 - 4.5	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		31.6		<10.0		31.6	31.6
BH - 3 (4.0')	5/30/2024	4.0 - 4.5	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		17.9		<10.0		17.9	17.9
BH - 4 (4.0')	5/30/2024	4.0 - 4.5	352		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		322		52.7		322	374.7
BH - 5 (5.0')	6/5/2024	5.0 - 5.5	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 6 (5.0')	6/5/2024	5.0 - 5.5	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 7 (5.0')	6/5/2024	5.0 - 5.5	592		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 8 (5.0')	6/5/2024	5.0 - 5.5	672		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 9 (5.0')	6/5/2024	5.0 - 5.5	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		18.6		<10.0			18.6
BH - 10 (5.0')	6/5/2024	5.0 - 5.5	320		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		35.5		<10.0		35.5	35.5
BH - 11 (5.0')	6/5/2024	5.0 - 5.5	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 12 (5.0')	6/5/2024	5.0 - 5.5	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 13 (5.0')	6/5/2024	5.0 - 5.5	384		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 14 (5.0')	6/5/2024	5.0 - 5.5	688		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 15 (5.0')	6/5/2024	5.0 - 5.5	64		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 16 (5.0')	6/11/2024	5.0 - 5.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		19		<10.0		19	19
BH - 17 (5.0')	6/11/2024	5.0 - 5.5	720		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		64.5		<10.0		64.5	64.5
BH - 18 (5.0')	6/6/2024	5.0 - 5.5	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		49.7		<10.0		49.7	49.7
BH - 19 (5.0')	6/6/2024	5.0 - 5.5	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		49.4		<10.0		49.4	49.4
BH - 20 (5.0')	6/10/2024	5.0 - 5.5	688		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		19.7		<10.0		19.7	19.7
BH - 21 (5.0')	6/10/2024	5.0 - 5.5	640		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 22 (5.0')	6/6/2024	5.0 - 5.5	608		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 23 (5.0')	6/12/2024	5.0 - 5.5	352		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 24 (5.0')	6/11/2024	5.0 - 5.5	960		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		20.5		<10.0		20.5	20.5
BH - 25 (5.0')	6/6/2024	5.0 - 5.5	64		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		236		50.1		236	286.1
BH - 26 (5.0')	6/11/2024	5.0 - 5.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 27 (5.0')	6/10/2024	5.0 - 5.5	672		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
BH - 28 (5.0')	6/10/2024	5.0 - 5.5	656		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		48.9		<10.0		48.9	48.9
BH - 29 (5.0')	6/12/2024	5.0 - 5.5	832		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		11.5		<10.0		11.5	11.5
BH - 30 (5.0')	6/10/2024	5.0 - 5.5	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		26		<10.0		26	26

**NOTES:**

bgs: Below ground surface  
mg/kg: Milligrams per kilogram  
TPH: Total Petroleum Hydrocarbons

GRO: Gasoline Range Organics  
DRO: Diesel Range Organics  
EXT DRO: Oil Range Organics

1: Method SM4500Cl-B  
2: Method 8021B  
3: Method 8015M

**Bold and highlighted values indicate exceedance of Table I 19.15.29.12 NMAC.**

Remediation/Reclamation Report and Closure Request  
Maverick Permian, LLC  
SEMU Permian 126 Flowline Release  
Incident ID: nAPP2401128986

July 29, 2024

## **ATTACHMENT 1 – SITE CHARACTERIZATION DATA**



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are smallest to largest)

(meters)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
<a href="#">L 15414 POD1</a>		L	LE	SW	NW	SW	20	20S	38E	671043.0	3603587.4		1338	103		
<a href="#">L 04412 S</a>		L	LE	SE	SE	NE	13	20S	37E	669189.0	3605491.0 *		1888	155	84	71

Average Depth to Water: 84 feet

Minimum Depth: 84 feet

Maximum Depth: 84 feet

Record Count: 2

Basin/County Search:

County: LE

UTM Filters (in meters):

Easting: 669707.0

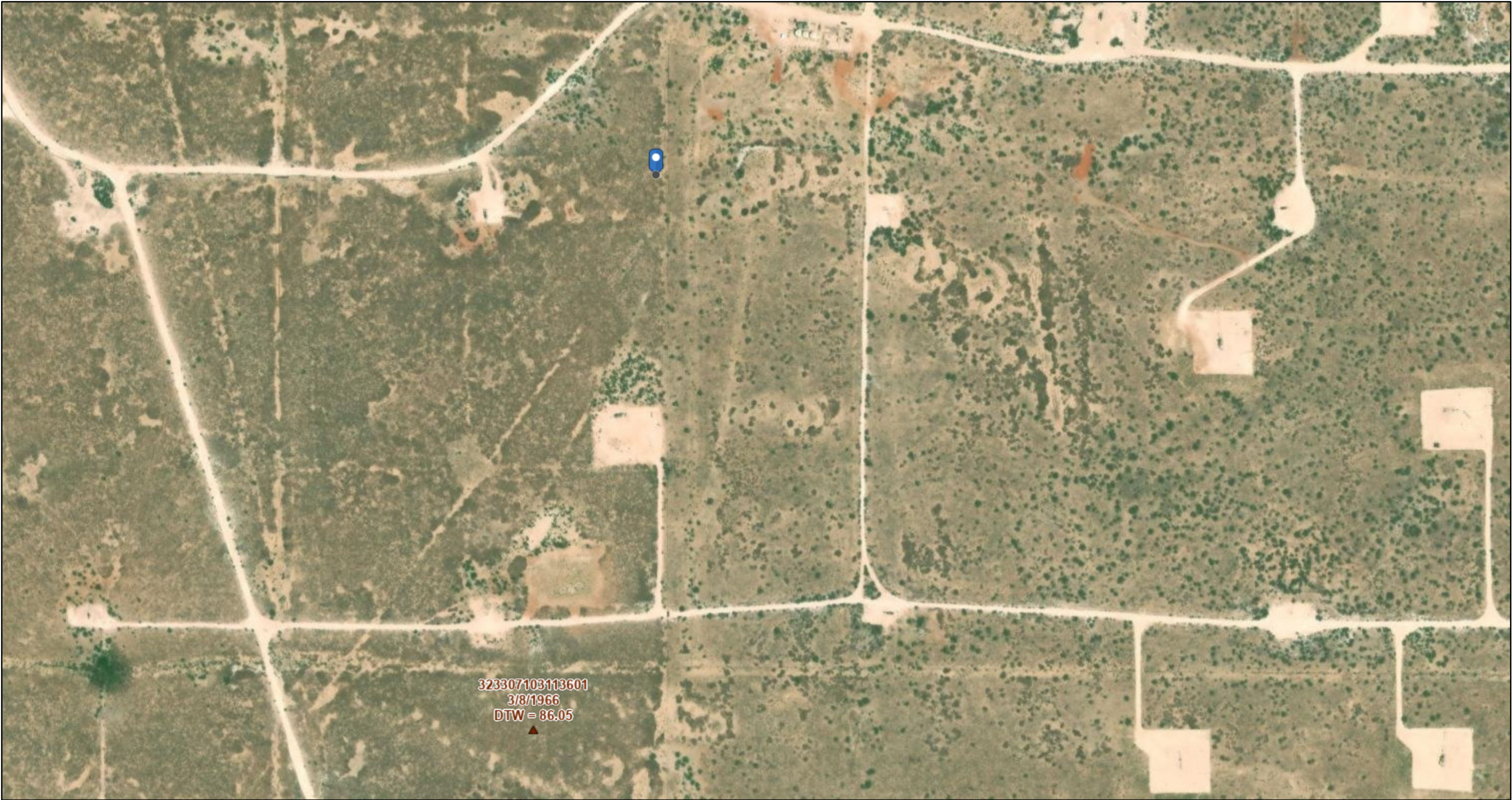
Northing: 3603674.99

Radius: 002000

\* UTM location was derived from PLSS - see Help

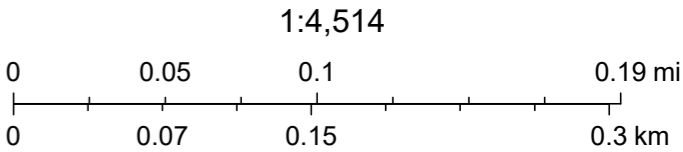
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# OCD USGS Groundwater Wells



7/26/2024, 10:01:35 AM

▲ USGS Historical GW Wells



USGS, Esri, HERE, Garmin, iPC, Maxar

**BORING LOG: DTW-01 (L-15651 POD1)**

<b>PROJECT NUMBER:</b> 212C-MD-03271	<b>DRILLING COMPANY:</b> West Texas Water Well	<b>LATITUDE:</b> 32.560316°
<b>PROJECT NAME:</b> SEMU Permian Remediations	<b>DRILL RIG:</b> Air Rotary Rig	<b>LONGITUDE:</b> -103.190072°
<b>CLIENT:</b> Maverick Permian, LLC	<b>DRILLING METHOD:</b> Air Rotary	<b>SURFACE ELEVATION:</b> 3,547 feet AMSL
<b>ADDRESS:</b> 1410 NW County Road Hobbs, NM 88240	<b>BORING TYPE:</b> Depth-to-Water	<b>LOGGED BY:</b> Adrian Garcia
	<b>TOTAL DEPTH:</b> 55 feet	<b>CHECKED BY:</b> Charles Terhune
	<b>DIAMETER:</b> 8 inches	

**COMMENTS:** AMSL: Above Mean Sea Level

Depth (Feet)	Drilling Method	Boring Completion	Graphic Log	Material Description
				CALICHE, white, dry, poorly sorted, angular, homogeneous.
5				SAND, light brown, dry, fine to medium grained, poorly sorted, loose, sub-angular to sub-rounded, homogeneous.
10				
15	AR			CALICHE, white/pink, moist, medium dense.
20				SAND, light brown, moist, loose, fine to medium grained, sub-angular to sub-rounded, poorly sorted.
25				CALICHE/SAND, tan, loose, moist.
30				
35				
40				SAND, brown, moist, loose, fine to medium grained, sub-angular to sub-rounded, poorly sorted.
45				SAND/CALICHE, tan and white, moist, medium dense, poorly sorted.
50				
55				End of Hole at 55 feet below ground surface. No groundwater encountered, Hole plugged with hydrated 3/8" bentonite chips.

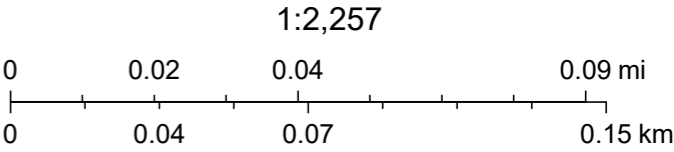
# OCD Karst Potential Map



7/25/2024, 4:53:13 PM

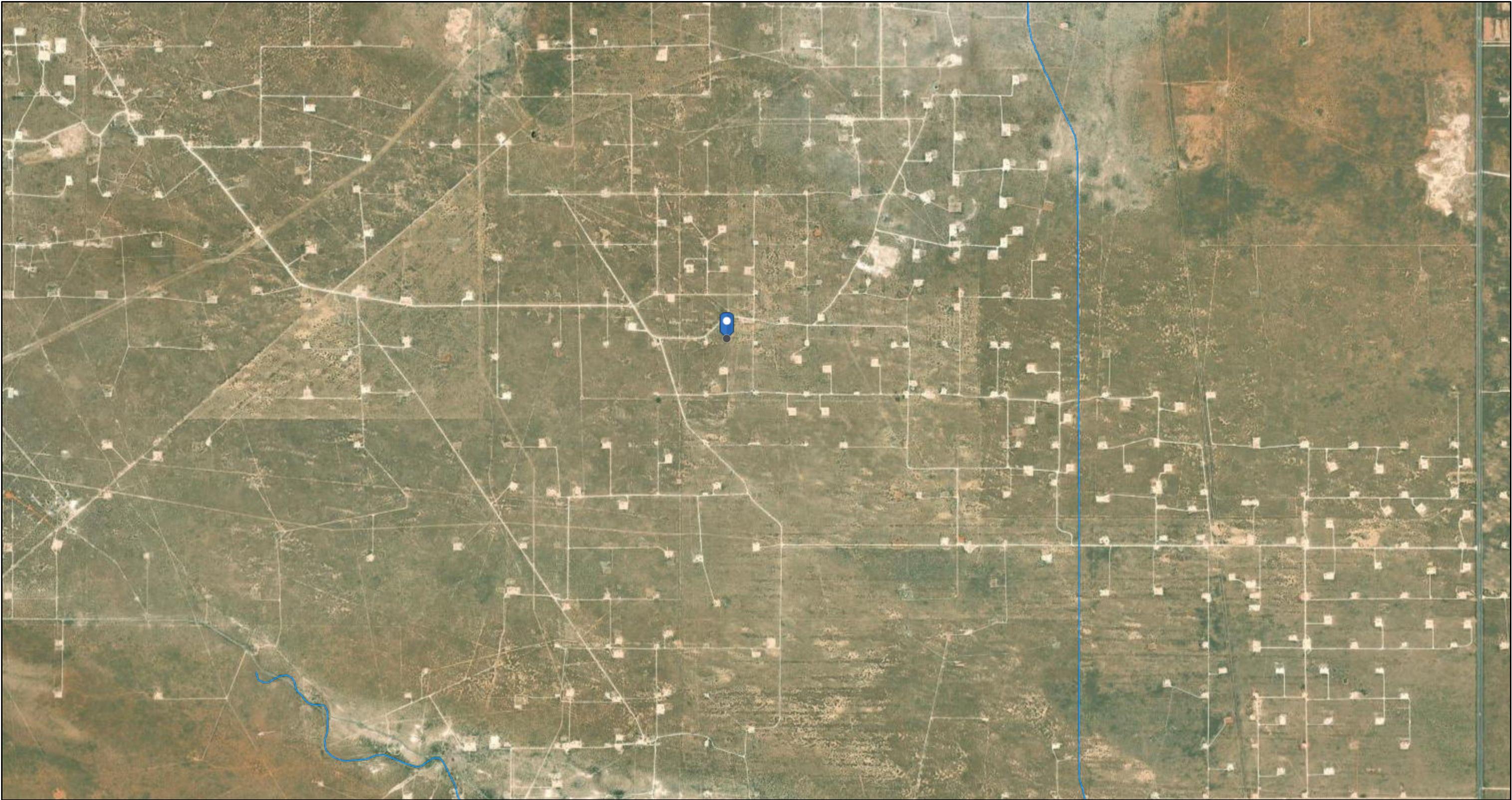
Karst Occurrence Potential

Low



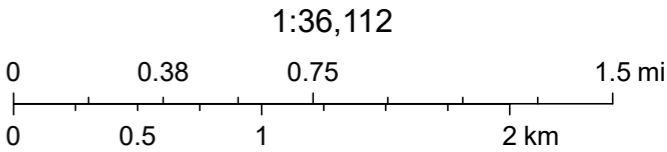
BLM, OCD, New Mexico Tech, Maxar, Microsoft, Esri, HERE, Garmin, iPC

# OCD Waterbodies Map



7/25/2024, 4:55:39 PM

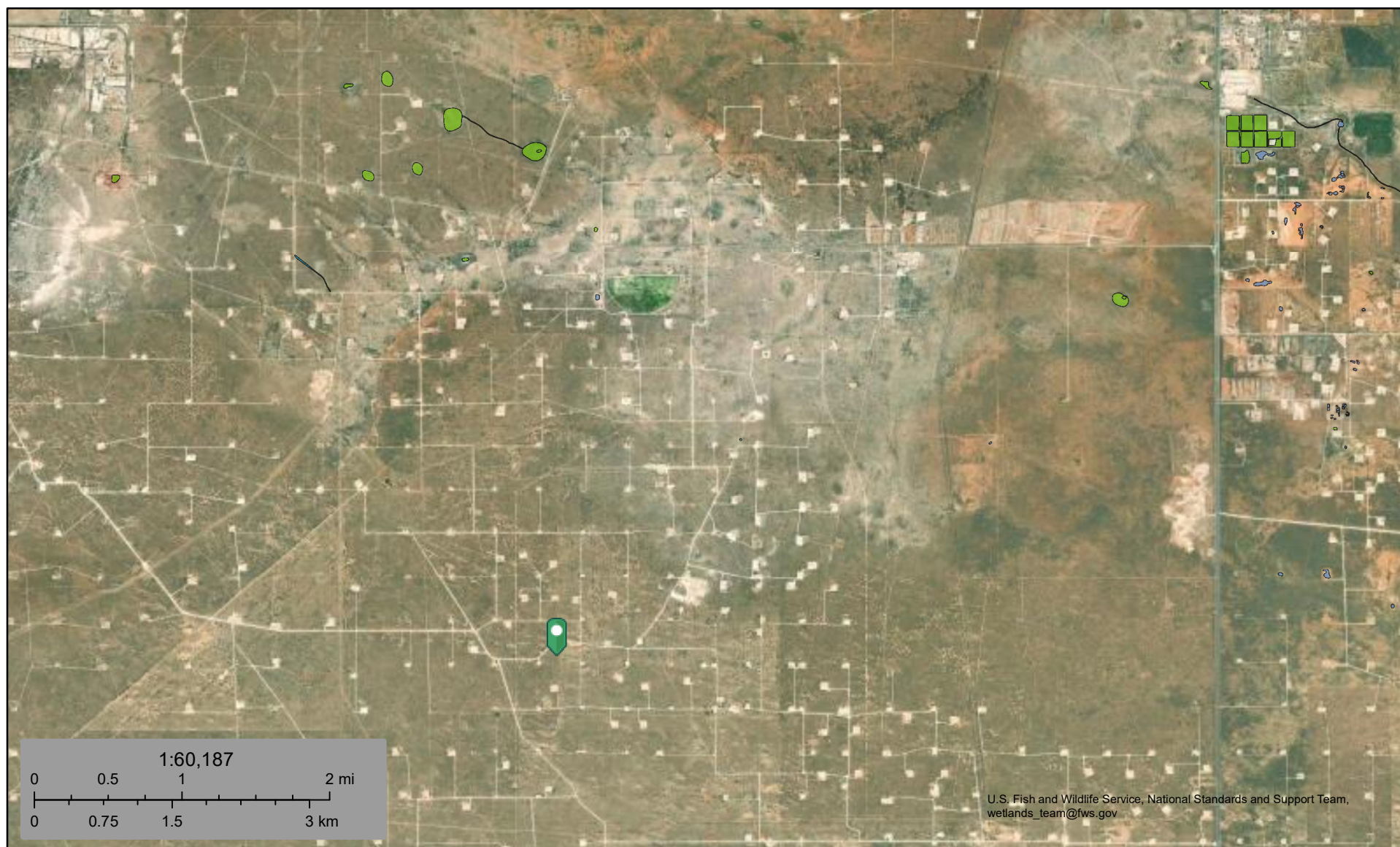
— OSE Streams



Esri, HERE, Garmin, Maxar, NM OSE



# SEMU Permian 126 Wetlands Map



July 25, 2024

## Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

# National Flood Hazard Layer FIRMette



103°11'52"W 32°33'41"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°11'14"W 32°33'11"N

Released to Imaging: 8/5/2024 9:16:08 AM

Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/25/2024 at 6:01 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# OCD Mineral and Surface Ownership Map



7/25/2024, 4:54:30 PM

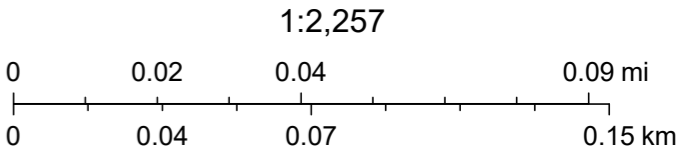
Mineral Ownership

A-All minerals are owned by U.S.

Land Ownership

BLM

P



U.S. BLM, Maxar, Microsoft, Esri, HERE, Garmin, iPC



United States  
Department of  
Agriculture

NRCS

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Lea County, New Mexico



July 25, 2024

# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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## How Soil Surveys Are Made

---

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report  
Soil Map



## Custom Soil Resource Report

## MAP LEGEND

## Area of Interest (AOI)

 Area of Interest (AOI)


## Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

## Special Point Features

 Blowout

 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip

 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

## Water Features

 Streams and Canals


## Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

## Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico  
Survey Area Data: Version 20, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Custom Soil Resource Report

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KM	Kermit soils and Dune land, 0 to 12 percent slopes	1.6	100.0%
<b>Totals for Area of Interest</b>		<b>1.6</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

## Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Custom Soil Resource Report

## Lea County, New Mexico

## KM—Kermit soils and Dune land, 0 to 12 percent slopes

## Map Unit Setting

*National map unit symbol:* dmpx  
*Elevation:* 3,000 to 4,400 feet  
*Mean annual precipitation:* 10 to 15 inches  
*Mean annual air temperature:* 60 to 62 degrees F  
*Frost-free period:* 190 to 205 days  
*Farmland classification:* Not prime farmland

## Map Unit Composition

*Kermit and similar soils:* 46 percent  
*Dune land:* 44 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Kermit

## Setting

*Landform:* Dunes  
*Landform position (two-dimensional):* Shoulder, backslope, footslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave, convex, linear  
*Across-slope shape:* Convex  
*Parent material:* Calcareous sandy eolian deposits derived from sedimentary rock

## Typical profile

*A - 0 to 8 inches:* fine sand  
*C - 8 to 60 inches:* fine sand

## Properties and qualities

*Slope:* 5 to 12 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high (20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 3 percent  
*Gypsum, maximum content:* 1 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 2.0  
*Available water supply, 0 to 60 inches:* Low (about 3.1 inches)

## Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* R070BC022NM - Sandhills  
*Hydric soil rating:* No

## Custom Soil Resource Report

**Description of Dune Land****Setting**

*Landform:* Dunes

*Landform position (two-dimensional):* Shoulder, backslope, footslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave, convex, linear

*Across-slope shape:* Convex

*Parent material:* Sandy eolian deposits derived from sedimentary rock

**Typical profile**

*A - 0 to 6 inches:* fine sand

*C - 6 to 60 inches:* fine sand

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

**Minor Components****Palomas**

*Percent of map unit:* 3 percent

*Ecological site:* R070BD003NM - Loamy Sand

*Hydric soil rating:* No

**Pyote**

*Percent of map unit:* 3 percent

*Ecological site:* R070BD003NM - Loamy Sand

*Hydric soil rating:* No

**Wink**

*Percent of map unit:* 2 percent

*Ecological site:* R070BD003NM - Loamy Sand

*Hydric soil rating:* No

**Maljamar**

*Percent of map unit:* 2 percent

*Ecological site:* R070BD003NM - Loamy Sand

*Hydric soil rating:* No

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

## Custom Soil Resource Report

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Remediation/Reclamation Report and Closure Request  
Maverick Permian, LLC  
SEMU Permian 126 Flowline Release  
Incident ID: nAPP2401128986

July 29, 2024

## **ATTACHMENT 2 – PHOTOGRAPHIC DOCUMENTATION**

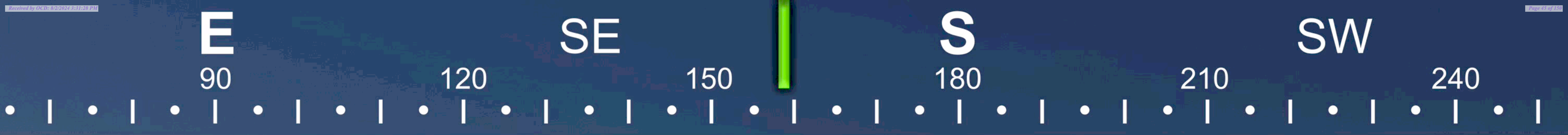


☀ 206°SW (T) LAT: 32.557594 LON: -103.192418 ±4m ▲ 1079m



Site Remediation  
Tetra Tech

Maverick- SEMU 126  
Jan 19 2024, 12:21:10 MST

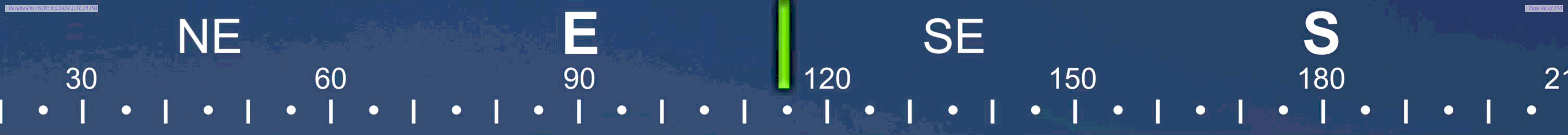


☀ 159°S (T) LAT: 32.557624 LON: -103.192493 ±4m ▲ 1081m



Site Remediation  
Tetra Tech

Maverick-SEMU 126  
Jun 17 2024, 10:59:16 MDT

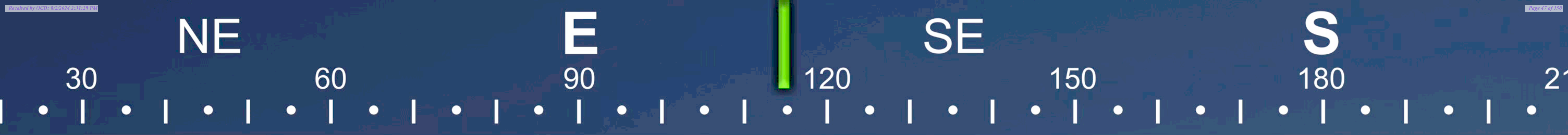


☀ 115°SE (T) LAT: 32.557606 LON: -103.192566 ±4m ▲ 1081m



Site Remediation  
Tetra Tech

Maverick-SEMU 126  
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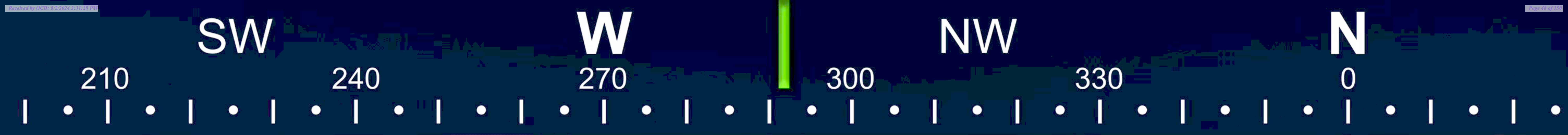


☀ 115°SE (T) LAT: 32.557612 LON: -103.192565 ±4m ▲ 1081m



Site Remediation  
Tetra Tech

Maverick-SEMU 126  
Jun 17 2024, 10:59:47 MDT



☉ 292°W (T) LAT: 32.557560 LON: -103.192496 ±4m ▲ 1081m



Site Remediation  
Tetra Tech

Maverick-SEMU 126  
Jun 17 2024, 10:59:59 MDT



☀ 238°SW (T) LAT: 32.557443 LON: -103.192532 ±4m ▲ 1080m



Site Remediation  
Tetra Tech

Maverick-SEMU 126  
Jun 17 2024, 11:00:26 MDT

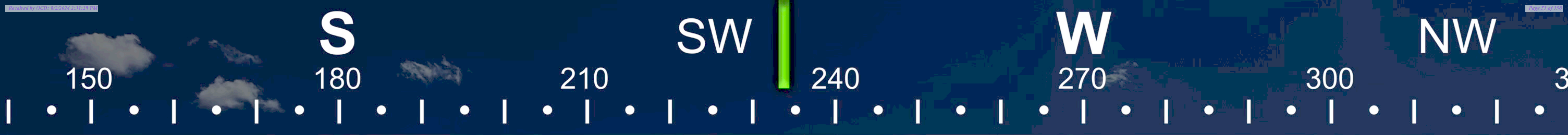


☉ 189°S (T) LAT: 32.557921 LON: -103.192503 ±3m ▲ 1080m



Site Remediation  
Tetra Tech

Maverick- SEMU 126  
Jul 01 2024, 15:07:18 MDT



☀ 234°SW (T) LAT: 32.557607 LON: -103.192376 ±4m ▲ 1081m



Site Remediation  
Tetra Tech

Maverick- SEMU 126  
Jul 01 2024, 15:08:10 MDT

Remediation/Reclamation Report and Closure Request  
Maverick Permian, LLC  
SEMU Permian 126 Flowline Release  
Incident ID: nAPP2401128986

July 29, 2024

## **ATTACHMENT 3 – LABORATORY ANALYTICAL DATA**



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

January 25, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU 126 RELEASE FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 01/22/24 10:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 1 ( 0-.5' ) (H240263-01)**

BTEX 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2024	ND	2.12	106	2.00	0.534	
Toluene*	<0.050	0.050	01/22/2024	ND	2.10	105	2.00	0.203	
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.11	106	2.00	0.0564	
Total Xylenes*	<0.150	0.150	01/22/2024	ND	6.26	104	6.00	0.0246	
Total BTEX	<0.300	0.300	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/22/2024	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	209	104	200	0.801	
DRO >C10-C28*	<10.0	10.0	01/22/2024	ND	190	95.1	200	2.59	
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 2 ( 0-.5' ) (H240263-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.12	106	2.00	0.534		
Toluene*	<0.050	0.050	01/22/2024	ND	2.10	105	2.00	0.203		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.11	106	2.00	0.0564		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	6.26	104	6.00	0.0246		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836		
DRO >C10-C28*	<10.0	10.0	01/22/2024	ND	221	110	200	2.38		
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND						

Surrogate: 1-Chlorooctane 87.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.2 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 3 ( 0-.5' ) (H240263-03)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2024	ND	2.12	106	2.00	0.534	
Toluene*	<0.050	0.050	01/22/2024	ND	2.10	105	2.00	0.203	
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.11	106	2.00	0.0564	
Total Xylenes*	<0.150	0.150	01/22/2024	ND	6.26	104	6.00	0.0246	
Total BTEX	<0.300	0.300	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	20.1	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 93.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 4 ( 0-.5' ) (H240263-04)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.12	106	2.00	0.534		
Toluene*	<0.050	0.050	01/22/2024	ND	2.10	105	2.00	0.203		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.11	106	2.00	0.0564		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	6.26	104	6.00	0.0246		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	<10.0	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 98.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 5 ( 0-.5' ) (H240263-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836		
DRO >C10-C28*	<10.0	10.0	01/22/2024	ND	221	110	200	2.38		
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND						

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 6 ( 0-.5' ) (H240263-06)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	<10.0	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 98.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 7 ( 0-.5' ) (H240263-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	<10.0	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: H - 8 ( 0-.5' ) (H240263-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	<10.0	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 1 ( 0-.5' ) (H240263-09)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	8.26	2.00	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	24.4	2.00	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	23.4	2.00	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	90.1	6.00	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	146	12.0	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>1310</b>	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M	mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	3840	100	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	8740	100	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	1690	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 174 % 48.2-134

Surrogate: 1-Chlorooctadecane 160 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 1 ( 1-2' ) (H240263-10)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>32.6</b>	2.00	01/22/2024	ND	2.28	114	2.00	4.99	
<b>Toluene*</b>	<b>80.4</b>	2.00	01/22/2024	ND	2.26	113	2.00	1.50	
<b>Ethylbenzene*</b>	<b>52.5</b>	2.00	01/22/2024	ND	2.36	118	2.00	2.44	
<b>Total Xylenes*</b>	<b>256</b>	6.00	01/22/2024	ND	7.11	118	6.00	2.71	
<b>Total BTEX</b>	<b>422</b>	12.0	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 150 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>864</b>	16.0	01/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>11100</b>	100	01/22/2024	ND	220	110	200	0.0836	
<b>DRO &gt;C10-C28*</b>	<b>24300</b>	100	01/22/2024	ND	221	110	200	2.38	
<b>EXT DRO &gt;C28-C36</b>	<b>4380</b>	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 393 % 48.2-134

Surrogate: 1-Chlorooctadecane 325 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 1 ( 3-4' ) (H240263-11)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/23/2024	ND	2.28	114	2.00	4.99	
Toluene*	<b>0.735</b>	0.050	01/23/2024	ND	2.26	113	2.00	1.50	
Ethylbenzene*	<b>1.46</b>	0.050	01/23/2024	ND	2.36	118	2.00	2.44	
Total Xylenes*	<b>9.72</b>	0.150	01/23/2024	ND	7.11	118	6.00	2.71	
Total BTEX	<b>11.9</b>	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 240 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>832</b>	16.0	01/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<b>738</b>	100	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	<b>2870</b>	100	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	<b>463</b>	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 192 % 48.2-134

Surrogate: 1-Chlorooctadecane 157 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 2 ( 0-.5' ) (H240263-12)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>3.16</b>	2.00	01/22/2024	ND	2.28	114	2.00	4.99	
<b>Toluene*</b>	<b>21.6</b>	2.00	01/22/2024	ND	2.26	113	2.00	1.50	
<b>Ethylbenzene*</b>	<b>24.4</b>	2.00	01/22/2024	ND	2.36	118	2.00	2.44	
<b>Total Xylenes*</b>	<b>110</b>	6.00	01/22/2024	ND	7.11	118	6.00	2.71	
<b>Total BTEX</b>	<b>159</b>	12.0	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 145 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>704</b>	16.0	01/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>3820</b>	100	01/22/2024	ND	220	110	200	0.0836	
<b>DRO &gt;C10-C28*</b>	<b>13600</b>	100	01/22/2024	ND	221	110	200	2.38	
<b>EXT DRO &gt;C28-C36</b>	<b>2410</b>	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 200 % 48.2-134

Surrogate: 1-Chlorooctadecane 188 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 2 ( 1-2' ) (H240263-13)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
<b>Total Xylenes*</b>	<b>0.205</b>	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>816</b>	16.0	01/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	12.8	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	537	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	108	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 2 ( 3-4' ) (H240263-14)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/23/2024	ND	2.28	114	2.00	4.99	
Toluene*	0.179	0.050	01/23/2024	ND	2.26	113	2.00	1.50	
Ethylbenzene*	1.22	0.050	01/23/2024	ND	2.36	118	2.00	2.44	
Total Xylenes*	5.62	0.150	01/23/2024	ND	7.11	118	6.00	2.71	
Total BTEX	7.02	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 217 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	01/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	601	100	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	5250	100	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	870	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 183 % 48.2-134

Surrogate: 1-Chlorooctadecane 148 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 3 ( 0-.5' ) (H240263-15)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	01/22/2024	ND	2.28	114	2.00	4.99	
Toluene*	10.3	2.00	01/22/2024	ND	2.26	113	2.00	1.50	
Ethylbenzene*	37.8	2.00	01/22/2024	ND	2.36	118	2.00	2.44	
Total Xylenes*	167	6.00	01/22/2024	ND	7.11	118	6.00	2.71	
Total BTEX	215	12.0	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 166 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	01/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	7230	100	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	44700	100	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	8550	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 622 % 48.2-134

Surrogate: 1-Chlorooctadecane 591 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 3 ( 1-2' ) (H240263-16)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	01/22/2024	ND	2.28	114	2.00	4.99	
Toluene*	11.1	2.00	01/22/2024	ND	2.26	113	2.00	1.50	
Ethylbenzene*	30.7	2.00	01/22/2024	ND	2.36	118	2.00	2.44	
Total Xylenes*	130	6.00	01/22/2024	ND	7.11	118	6.00	2.71	
Total BTEX	172	12.0	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 153 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	01/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	3390	100	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	15800	100	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	2890	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 233 % 48.2-134

Surrogate: 1-Chlorooctadecane 224 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 3 ( 3-4' ) (H240263-17)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1220	16.0	01/22/2024	ND	400	100	400	3.92	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	164	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	20.0	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 4 ( 0-.5' ) (H240263-18)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	01/22/2024	ND	2.28	114	2.00	4.99	
<b>Toluene*</b>	<b>35.3</b>	2.00	01/22/2024	ND	2.26	113	2.00	1.50	
<b>Ethylbenzene*</b>	<b>62.5</b>	2.00	01/22/2024	ND	2.36	118	2.00	2.44	
<b>Total Xylenes*</b>	<b>243</b>	6.00	01/22/2024	ND	7.11	118	6.00	2.71	
<b>Total BTEX</b>	<b>341</b>	12.0	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 185 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>736</b>	16.0	01/22/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>7670</b>	100	01/22/2024	ND	220	110	200	0.0836	
<b>DRO &gt;C10-C28*</b>	<b>28800</b>	100	01/22/2024	ND	221	110	200	2.38	
<b>EXT DRO &gt;C28-C36</b>	<b>5410</b>	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 436 % 48.2-134

Surrogate: 1-Chlorooctadecane 400 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 4 ( 1-2' ) (H240263-19)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	01/22/2024	ND	2.28	114	2.00	4.99	
Toluene*	23.5	2.00	01/22/2024	ND	2.26	113	2.00	1.50	
Ethylbenzene*	59.6	2.00	01/22/2024	ND	2.36	118	2.00	2.44	
Total Xylenes*	244	6.00	01/22/2024	ND	7.11	118	6.00	2.71	
Total BTEX	328	12.0	01/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 188 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	01/22/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	9780	100	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	49800	100	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	9460	100	01/22/2024	ND					

Surrogate: 1-Chlorooctane 717 % 48.2-134

Surrogate: 1-Chlorooctadecane 656 % 49.1-148

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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 4 ( 3-4' ) (H240263-20)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/23/2024	ND	2.28	114	2.00	4.99	
Toluene*	<b>0.184</b>	0.050	01/23/2024	ND	2.26	113	2.00	1.50	
Ethylbenzene*	<b>0.858</b>	0.050	01/23/2024	ND	2.36	118	2.00	2.44	
Total Xylenes*	<b>3.79</b>	0.150	01/23/2024	ND	7.11	118	6.00	2.71	
Total BTEX	<b>4.83</b>	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 167 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>1040</b>	16.0	01/22/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<b>181</b>	10.0	01/23/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	<b>1820</b>	10.0	01/23/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	<b>343</b>	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 142 % 48.2-134

Surrogate: 1-Chlorooctadecane 143 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 5 ( 0-.5' ) (H240263-21)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	752	16.0	01/22/2024	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2024	ND	220	110	200	0.0836	
DRO >C10-C28*	167	10.0	01/22/2024	ND	221	110	200	2.38	
EXT DRO >C28-C36	33.2	10.0	01/22/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 5 ( 1-2' ) (H240263-22)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	<0.050	0.050	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	<0.050	0.050	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	<0.150	0.150	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	<0.300	0.300	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1260	16.0	01/22/2024	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2024	ND	193	96.4	200	6.42	
DRO >C10-C28*	101	10.0	01/23/2024	ND	179	89.4	200	6.99	
EXT DRO >C28-C36	18.5	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	01/22/2024	Sampling Date:	01/19/2024
Reported:	01/25/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: AH - 5 ( 3-4' ) (H240263-23)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	2.93	2.00	01/22/2024	ND	2.28	114	2.00	4.99		
Toluene*	22.0	2.00	01/22/2024	ND	2.26	113	2.00	1.50		
Ethylbenzene*	26.8	2.00	01/22/2024	ND	2.36	118	2.00	2.44		
Total Xylenes*	102	6.00	01/22/2024	ND	7.11	118	6.00	2.71		
Total BTEX	153	12.0	01/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>1180</b>	16.0	01/22/2024	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2980	100	01/23/2024	ND	193	96.4	200	6.42	
DRO >C10-C28*	8970	100	01/23/2024	ND	179	89.4	200	6.99	
EXT DRO >C28-C36	1930	100	01/23/2024	ND					

Surrogate: 1-Chlorooctane 343 % 48.2-134

Surrogate: 1-Chlorooctadecane 211 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name: Maverick Natural Resources

Site Manager: Chuck Terhune

Project Name: SEMU 126 Release Flowline Release

281-755-8965

Project Location: Lea County, NM

Project #: chuck.terhune@tetratech.com

Invoice to:

Attn: Chuck Terhune

Receiving Laboratory:

Cardinal Labs

Sampler Signature:

Jorge Fernandez

Comments:

LAB # 4340363  
LAB USE ONLY

SAMPLE IDENTIFICATION

		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
1	H-1 (0-5')	1/19/2024		X			X		
2	H-2 (0-5')	1/19/2024		X			X		
3	H-3 (0-5')	1/19/2024		X			X		
4	H-4 (0-5')	1/19/2024		X			X		
5	H-5 (0-5')	1/19/2024		X			X		
6	H-6 (0-5')	1/19/2024		X			X		
7	H-7 (0-5')	1/19/2024		X			X		
8	H-8 (0-5')	1/19/2024		X			X		

ANALYSIS REQUEST

(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M ( GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	

Hold

Inquired by: Date: 01-21-24 Time: 1400

Inquired by: Date: 01-21-24 Time: 1040

Inquired by: Date: 01-22-24 Time: 1040

Received by: Date: 01-21-24 Time: 1400

Received by: Date: 01-22-23 Time: 1400

LAB USE ONLY

REMARKS:

Standard TAT

Sample Temperature

33.0

#140

- ☐ RUSH: Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 582-4559  
Fax (432) 582-3946

Client Name: **Maverick Natural Resources** Site Manager: **Chuck Terhune**

Project Name: **SEMU 126 Release Flowline Release** 281-755-8965

Project Location: **Lea County, NM** Project #: [chuck.terhune@tetratech.com](mailto:chuck.terhune@tetratech.com)

Invoice to: **Attn: Chuck Terhune**

Receiving Laboratory: **Cardinal Labs** Sampler Signature: **Jorge Fernandez**

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX				PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		YEAR: 2023	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE		

9	AH-1 (0-5')		1/19/2024		X			X			
10	AH-1 (1-2)		1/19/2024			X			X		
11	AH-1 (3-4)		1/19/2024		X			X			
12	AH-2 (0-5')		1/19/2024		X			X			
13	AH-2 (1-2)		1/19/2024		X			X			
14	AH-2 (3-4)		1/19/2024		X			X			
15	AH-3 (0-5')		1/19/2024		X			X			
16	AH-3 (1-2)		1/19/2024		X			X			
17	AH-3 (3-4)		1/19/2024		X			X			

Inquired by: **Chuck Terhune** Date: **1-21-24** Time: **1040**  
Received by: **Chuck Terhune** Date: **01-21-24** Time: **1040**  
Inquired by: **Chuck Terhune** Date: **01-22-24** Time: **1040**  
Received by: **Chuck Terhune** Date: **01-22-24** Time: **1040**

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

<input checked="" type="checkbox"/>	BTEX 8021B	<input checked="" type="checkbox"/>	BTEX 8260B
<input checked="" type="checkbox"/>	TPH TX1005 (Ext to C35)	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	TPH 8015M ( GRO - DRO - ORO - MRO)	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	PAH 8270C	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	Total Metals Ag As Ba Cd Cr Pb Se Hg	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	TCLP Volatiles	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	TCLP Semi Volatiles	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	RCI	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	GC/MS Vol. 8260B / 624	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	GC/MS Semi. Vol. 8270C/625	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	PCB's 8082 / 608	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	NORM	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	PLM (Asbestos)	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	Chloride	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	Chloride Sulfate TDS	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	General Water Chemistry (see attached list)	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	Anion/Cation Balance	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	Hold	<input checked="" type="checkbox"/>	

LAB USE ONLY

REMARKS: **Standard TAT**  
☐ RUSH: Same Day 24 hr 48 hr 72 hr  
☐ Rush Charges Authorized  
☐ Special Report Limits or TRRP Report

#140

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Analysis Request of Custody Record



Tetra Tech, Inc.

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name: Maverick Natural Resources Site Manager: Chuck Terhune

Project Name: SEMU 126 Release Flowline Release 281-755-8965

Project Location: Lea County, NM Project #: chuck.terhune@tetratech.com

Invoice to: Attn: Chuck Terhune

Receiving Laboratory: Cardinal Labs Sampler Signature: Jorge Fernandez

Comments:

LAB # <i>H240263</i>	LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		CONTAINERS	FILTERED (Y/N)	
			YEAR: 2023		WATER	SOIL	HCL	HNO <sub>3</sub>			H <sub>2</sub> O <sub>2</sub>
			DATE	TIME							

18	AH-4 (0-5')	1/19/2024		X			X		
19	AH-4 (1-2')	1/19/2024		X			X		
20	AH-4 (3-4')	1/19/2024		X			X		
21	AH-5 (0-5')	1/19/2024		X			X		
22	AH-5 (1-2')	1/19/2024		X			X		
23	AH-5 (3-4')	1/19/2024		X			X		

LAB USE ONLY		REMARKS:	
Sample Temperature 3.3c		Standard TAT	
#140		Special Report Limits or TRRP Report	

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 04, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU 126 RELEASE FLOWLINE

Enclosed are the results of analyses for samples received by the laboratory on 05/30/24 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Snyder", is written in a cursive style.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03149	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

**Sample ID: BH - 1 (4.0') (H243030-01)**

BTX 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/03/2024	ND	1.80	90.1	2.00	1.93	
Toluene*	<0.050	0.050	06/03/2024	ND	1.78	88.8	2.00	1.40	
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.80	89.9	2.00	1.16	
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.18	86.3	6.00	1.58	
Total BTX	<0.300	0.300	06/03/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.2 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/03/2024	ND	400	100	400	11.3	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	28.7	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03149	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

**Sample ID: BH - 2 (4.0') (H243030-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/03/2024	ND	1.80	90.1	2.00	1.93		
Toluene*	<0.050	0.050	06/03/2024	ND	1.78	88.8	2.00	1.40		
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.80	89.9	2.00	1.16		
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.18	86.3	6.00	1.58		
Total BTEX	<0.300	0.300	06/03/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	06/03/2024	ND	400	100	400	11.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	31.6	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03149	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

**Sample ID: BH - 3 (4.0') (H243030-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/02/2024	ND	1.80	90.1	2.00	1.93		
Toluene*	<0.050	0.050	06/02/2024	ND	1.78	88.8	2.00	1.40		
Ethylbenzene*	<0.050	0.050	06/02/2024	ND	1.80	89.9	2.00	1.16		
Total Xylenes*	<0.150	0.150	06/02/2024	ND	5.18	86.3	6.00	1.58		
Total BTEX	<0.300	0.300	06/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/03/2024	ND	400	100	400	11.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	17.9	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03149	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

**Sample ID: BH - 4 (4.0') (H243030-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/03/2024	ND	1.80	90.1	2.00	1.93		
Toluene*	<0.050	0.050	06/03/2024	ND	1.78	88.8	2.00	1.40		
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.80	89.9	2.00	1.16		
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.18	86.3	6.00	1.58		
Total BTEX	<0.300	0.300	06/03/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	06/03/2024	ND	400	100	400	11.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	322	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	52.7	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03149	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

**Sample ID: SW - 1 (H243030-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/03/2024	ND	1.76	88.2	2.00	4.33		
Toluene*	<0.050	0.050	06/03/2024	ND	1.89	94.4	2.00	3.19		
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.88	94.0	2.00	2.65		
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.84	97.3	6.00	1.97		
Total BTEX	<0.300	0.300	06/03/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/03/2024	ND	400	100	400	11.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03149	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

**Sample ID: SW - 2 (H243030-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/03/2024	ND	1.76	88.2	2.00	4.33		
Toluene*	<0.050	0.050	06/03/2024	ND	1.89	94.4	2.00	3.19		
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.88	94.0	2.00	2.65		
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.84	97.3	6.00	1.97		
Total BTEX	<0.300	0.300	06/03/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/03/2024	ND	400	100	400	11.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	SEMU 126 RELEASE FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03149	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

**Sample ID: SW - 8 (H243030-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/03/2024	ND	1.76	88.2	2.00	4.33		
Toluene*	<0.050	0.050	06/03/2024	ND	1.89	94.4	2.00	3.19		
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.88	94.0	2.00	2.65		
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.84	97.3	6.00	1.97		
Total BTEX	<0.300	0.300	06/03/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/03/2024	ND	400	100	400	11.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 123 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- BS-3            Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
- ND            Analyte NOT DETECTED at or above the reporting limit
- RPD           Relative Percent Difference
- \*\*            Samples not received at proper temperature of 6°C or below.
- \*\*\*           Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Mike Snyder".

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name:

Maverick Natural Resources

Site Manager:

Chuck Terhune

Project Name:

Semu 126 Flow Line

281-755-8965

[chuck.terhune@tetratech.com](mailto:chuck.terhune@tetratech.com)

Project Location:

Lea County, NM

Project #:

212C-MD-03149

Invoice to:

Attn: Chuck Terhune

Receiving Laboratory:

Cardinal Labs

Sampler Signature:

Jorge Fernandez

Comments:

Include : Chris Straub Chris.Straub@tetratech.com

LAB #  
#243030  
LAB USE ONLY

SAMPLE IDENTIFICATION

		SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)															
		YEAR: 2023	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE																	
1	BH-1 (4.0')		5/30/2024		X				X			X														
2	BH-2 (4.0')		5/30/2024		X				X			X														
3	BH-3 (4.0')		5/30/2024		X				X			X														
4	BH-4 (4.0')		5/30/2024		X				X			X														
5	SW-1		5/30/2024		X				X			X														
6	SW-2		5/30/2024		X				X			X														
7	SW-8		5/30/2024		X				X			X														

Relinquished by: Date: Time: 1404

Relinquished by: Date: Time: 1405

Relinquished by: Date: Time: 1405

Received by: Date: Time: 1405

Received by: Date: Time: 1405

ANALYSIS REQUEST  
(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M ( GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
Hold	

REMARKS: Standard TAT

LAB USE ONLY

Sample Temperature

#140

- ☒ RUSH: Same Day 24 hr 48 hr 72 hr  
☐ Rush Charges Authorized  
☐ Special Report Limits or TRRP Report

ORIGINAL COPY



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---

June 07, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU 126 FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 06/05/24 14:44.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 5 ( 5.0' ) (H243198-01)**

BTEX 8021B		mg/kg	Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68	
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58	
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70	
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99	
Total BTEX	<0.300	0.300	06/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 93.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.4 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 6 ( 5.0' ) (H243198-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 93.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.6 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 7 ( 5.0' ) (H243198-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 95.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.3 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 8 ( 5.0' ) (H243198-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	672	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 91.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.6 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 9 ( 5.0' ) (H243198-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	18.6	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 90.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.6 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 10 ( 5.0' ) (H243198-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	35.5	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 96.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.6 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 11 ( 5.0' ) (H243198-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 97.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.5 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 12 ( 5.0' ) (H243198-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 96.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.1 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 13 ( 5.0' ) (H243198-09)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/06/2024	ND	1.98	98.9	2.00	2.68		
Toluene*	<0.050	0.050	06/06/2024	ND	1.96	98.1	2.00	3.58		
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.01	101	2.00	4.70		
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.86	97.7	6.00	4.99		
Total BTEX	<0.300	0.300	06/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 94.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.7 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/05/2024	Sampling Date:	06/05/2024
Reported:	06/07/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Shalyn Rodriguez
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 14 ( 5.0' ) (H243198-10)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/07/2024	ND	2.03	101	2.00	3.55		
Toluene*	<0.050	0.050	06/07/2024	ND	1.99	99.3	2.00	3.01		
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	1.97	98.6	2.00	2.51		
Total Xylenes*	<0.150	0.150	06/07/2024	ND	5.73	95.6	6.00	2.82		
Total BTEX	<0.300	0.300	06/07/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	688	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.7 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/05/2024  
 Reported: 06/07/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/05/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH - 15 ( 5.0' ) (H243198-11)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/07/2024	ND	2.03	101	2.00	3.55		
Toluene*	<0.050	0.050	06/07/2024	ND	1.99	99.3	2.00	3.01		
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	1.97	98.6	2.00	2.51		
Total Xylenes*	<0.150	0.150	06/07/2024	ND	5.73	95.6	6.00	2.82		
Total BTEX	<0.300	0.300	06/07/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	06/07/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	208	104	200	0.0403	
DRO >C10-C28*	<10.0	10.0	06/07/2024	ND	201	100	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 89.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.2 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Mike Snyder".

---

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W Wall Street, Suite 1000  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name: Maverick Natural Resources		Site Manager: Chuck Terhune	
Project Name: Semu 126 Flow Line		281-755-8965	
Project Location: Lea County, NM		chuck.terhune@tetratech.com	
Invoice to: (county, state)		212C-MD-03494	
Attn: Chuck Terhune		Project #:	
Receiving Laboratory: Cardinal Labs		Sampler Signature: Jorge Fernandez	
Comments: Include : Chris Straub Chris.Straub@tetratech.com Jorge.Fernandez@tetratech.com			
LAB # 424398			
LAB USE ONLY			
SAMPLE IDENTIFICATION			
YEAR: 2023			
DATE			
TIME			
WATER			
SOIL			
HCL			
HNO3			
ICE			
# CONTAINERS			
FILTERED (Y/N)			
BTEX 8021B BTEX 8260B			
TPH TX1005 (Ext to C35)			
TPH 8015M ( GRO - DRO - ORO - MRO)			
PAH 8270C			
Total Metals Ag As Ba Cd Cr Pb Se Hg			
TCLP Metals Ag As Ba Cd Cr Pb Se Hg			
TCLP Volatiles			
TCLP Semi Volatiles			
RCI			
GC/MS Vol. 8260B / 624			
GC/MS Semi. Vol. 8270C/625			
PCB's 8082 / 608			
NORM			
PLM (Asbestos)			
Chloride			
Chloride Sulfate TDS			
General Water Chemistry (see attached list)			
Anion/Cation Balance			
Hold			
LAB USE ONLY			
REMARKS: Standard TAT removed			
* dup sample removed			
RUSH: Same Day 24 hr 48 hr 72 hr			
Rush Charges Authorized			
Special Report Limits or TRRP Report			

Page 14 of 15

Page 2.0f

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Site Manager:  
Chuck Terhune

281-756-8965

[chuck.terhune@tetratech.com](mailto:chuck.terhune@tetratech.com)

Project #: 212C-MD-03484

Attn: Chuck Terhune

Cardinal Labs

Jorge Fernandez

Include : Chris Straub [Chris.Straub@tetratech.com](mailto:Chris.Straub@tetratech.com) Jorge.Fernandez@tetratech.com

SAMPLING	
2023	

DATE \_\_\_\_\_  
TIME \_\_\_\_\_

5/2024	
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5/2024	
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1	2
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ived by:

Yes

ived by:

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ORIGINAL CONTRIBUTION

100

ANALYSIS REQUEST  
(Circle or Specify Method No.)

Page 15 of 15

Released to Imaging: 8/5/2024 9:16:08 AM



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 11, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU 126 FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 06/06/24 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/06/2024	Sampling Date:	06/06/2024
Reported:	06/11/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: SW - 2 (H243225-01)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2024	ND	1.86	93.1	2.00	5.25	
Toluene*	<0.050	0.050	06/07/2024	ND	1.86	92.9	2.00	3.65	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	1.92	96.1	2.00	1.50	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	5.59	93.1	6.00	1.49	
Total BTEx	<0.300	0.300	06/07/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/07/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	191	95.7	200	0.379	
DRO >C10-C28*	<10.0	10.0	06/07/2024	ND	196	97.9	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 92.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.4 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/06/2024	Sampling Date:	06/06/2024
Reported:	06/11/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 18 ( 5.0' ) (H243225-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/07/2024	ND	1.86	93.1	2.00	5.25		
Toluene*	<0.050	0.050	06/07/2024	ND	1.86	92.9	2.00	3.65		
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	1.92	96.1	2.00	1.50		
Total Xylenes*	<0.150	0.150	06/07/2024	ND	5.59	93.1	6.00	1.49		
Total BTEX	<0.300	0.300	06/07/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/07/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	191	95.7	200	0.379	
DRO >C10-C28*	49.7	10.0	06/07/2024	ND	196	97.9	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/06/2024  
 Reported: 06/11/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/06/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BH - 19 ( 5.0' ) (H243225-03)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2024	ND	1.86	93.1	2.00	5.25	
Toluene*	<0.050	0.050	06/07/2024	ND	1.86	92.9	2.00	3.65	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	1.92	96.1	2.00	1.50	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	5.59	93.1	6.00	1.49	
Total BTEX	<0.300	0.300	06/07/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/07/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	191	95.7	200	0.379	
DRO >C10-C28*	49.4	10.0	06/07/2024	ND	196	97.9	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/06/2024	Sampling Date:	06/06/2024
Reported:	06/11/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 22 ( 5.0' ) (H243225-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/07/2024	ND	1.86	93.1	2.00	5.25		
Toluene*	<0.050	0.050	06/07/2024	ND	1.86	92.9	2.00	3.65		
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	1.92	96.1	2.00	1.50		
Total Xylenes*	<0.150	0.150	06/07/2024	ND	5.59	93.1	6.00	1.49		
Total BTEX	<0.300	0.300	06/07/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	06/07/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	191	95.7	200	0.379	
DRO >C10-C28*	<10.0	10.0	06/07/2024	ND	196	97.9	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/06/2024	Sampling Date:	06/06/2024
Reported:	06/11/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 25 ( 5.0' ) (H243225-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/07/2024	ND	1.86	93.1	2.00	5.25		
Toluene*	<0.050	0.050	06/07/2024	ND	1.86	92.9	2.00	3.65		
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	1.92	96.1	2.00	1.50		
Total Xylenes*	<0.150	0.150	06/07/2024	ND	5.59	93.1	6.00	1.49		
Total BTEX	<0.300	0.300	06/07/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	06/07/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	191	95.7	200	0.379	
DRO >C10-C28*	236	10.0	06/07/2024	ND	196	97.9	200	4.62	
EXT DRO >C28-C36	50.1	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Page 1 of 1

Page 8 of 8

Client Name: Maypick		Site Manager: Chuck Terhune	
Project Name: SEMU 126		(281) 755-8965	
Project Location: Lea County, NM		chuck.terhune@tetratech.com	
Invoice to: chuck.terhune@tetratech.com - chris.straub@tetratech.com		212C-MD-03494	
Receiving Laboratory: Cardinal Labs		Sampler Signature: Miguel A. Flores	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)
		DATE	TIME		WATER	SOIL	HCL	HNO <sub>3</sub>	ICE		
1	SW-2	6/6/2024		X				X			
2	BH-18 (5.0')	6/6/2024		X				X			
3	BH-19 (5.0')	6/6/2024		X				X			
	BH-20 (5.0') M.F. 6/6/24	6/6/2024		X				X			
4	BH-21 (5.0') M.F. 6/6/24	6/6/2024		X				X			
	BH-22 (5.0')	6/6/2024		X				X			
5	BH-25 (5.0')	6/6/2024		X				X			

Inquired by: Miguel A Flores	Date: 6/6/24	Time: 12:14	Received by: Mariana Martinez	Date: 6-6-24	Time: 12:15
Inquired by:	Date:	Time:	Received by:	Date:	Time:
Inquired by:	Date:	Time:	Received by:	Date:	Time:

[illegible]

ORIGINAL COPY



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 14, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU 126 FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 06/11/24 11:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/11/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: SW - 5 (H243354-01)**

BTX 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14	
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34	
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35	
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81	
Total BTX	<0.300	0.300	06/12/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/12/2024	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	18.5	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 97.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/11/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: SW - 7 (H243354-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/12/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 97.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.9 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/11/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 16 ( 5.0' ) (H243354-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/12/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	19.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/14/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BH - 17 ( 5.0' ) (H243354-04)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14	
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34	
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35	
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81	
Total BTEX	<0.300	0.300	06/12/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	06/12/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	64.5	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/11/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 24 ( 5.0' ) (H243354-05)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	960	16.0	06/12/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	20.5	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/11/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 26 ( 5.0' ) (H243354-06)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/12/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 96.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Page 1 of 1

Page 9 of 9

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ORIGINAL COPY



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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June 14, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU 126 FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 06/11/24 11:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/10/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 21 ( 5.0' ) (H243355-01)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14	
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34	
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35	
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81	
Total BTEX	<0.300	0.300	06/12/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	06/13/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/10/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 20 ( 5.0' ) (H243355-02)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14	
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34	
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35	
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81	
Total BTEX	<0.300	0.300	06/12/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	688	16.0	06/13/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	19.7	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/10/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 28 ( 5.0' ) (H243355-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	06/13/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	48.9	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/14/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/10/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BH - 27 ( 5.0' ) (H243355-04)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14	
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34	
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35	
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81	
Total BTEX	<0.300	0.300	06/12/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	06/13/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 95.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/14/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/10/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 4 (H243355-05)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14	
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34	
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35	
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81	
Total BTEX	<0.300	0.300	06/12/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/13/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/10/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: SW - 3 (H243355-06)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/13/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/10/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: SW - 6 (H243355-07)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/13/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 98.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/11/2024	Sampling Date:	06/10/2024
Reported:	06/14/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 30 ( 5.0' ) (H243355-08)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.07	103	2.00	5.14		
Toluene*	<0.050	0.050	06/12/2024	ND	1.96	97.9	2.00	6.34		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	1.95	97.3	2.00	6.35		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.78	96.3	6.00	5.81		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/13/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	26.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.2 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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---

### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name:						Maverick Natural Resources	Site Manager:						Chuck Terhune																					
Project Name:						Semu 126 Flow Line							281-755-8965																					
Project Location: (county, state)						Lea County, NM	Project #:						<a href="#">chuck.terhune@tetratech.com</a>																					
Invoice to:							212C-MD-03494																											
Receiving Laboratory:						Attn: Chuck Terhune Cardinal Labs	Sampler Signature:						Jorge Fernandez																					
Comments:						Include : Chris Straub Chris.Straub@tetratech.com Jorge.Fernandez@tetratech.com																												
LAB # <div>LAB USE ONLY</div>						H243385	SAMPLE IDENTIFICATION																											
						BH-21 (5.0')	DATE		TIME		WATER		SOIL		HCL		HNO <sub>3</sub>		ICE		# CONTAINERS		FILTERED (Y/N)		BTEX 8021B BTEX 8260B									
						BH-20 (5.0')	6/10/2024				X		X		X		X		X		X		X		TPH TX1005 (Ext to C35)									
						BH-28 (5.0')	6/10/2024				X		X		X		X		X		X		X		TPH 8015M ( GRO - DRO - ORO - MRO )									
						BH-27 (5.0')	6/10/2024				X		X		X		X		X		X		X		PAH 8270C									
						SW-4	6/10/2024				X		X		X		X		X		X		X		Total Metals Ag As Ba Cd Cr Pb Se Hg									
						SW-3	6/10/2024				X		X		X		X		X		X		X		TCLP Metals Ag As Ba Cd Cr Pb Se Hg									
						SW-6	6/10/2024				X		X		X		X		X		X		X		TCLP Volatiles									
						BH-30 (5.0')	6/10/2024				X		X		X		X		X		X		X		TCLP Semi Volatiles									
																									RCI									
																									GC/MS Vol. 8260B / 624									
																									GC/MS Semi. Vol. 8270C/625									
																									PCB's 8082 / 608									
																									NORM									
																									PLM (Asbestos)									
																									Chloride									
																									Chloride Sulfate TDS									
																									General Water Chemistry (see attached list)									
																									Anion/Cation Balance									
																									Hold									
Inquired by:						Date:	Time:		Date:		Time:		Received by:						Date:		Time:		Sample Temperature						REMARKS:					
Inquired by:						Date:	Time:		Date:		Time:		Received by:						Date:		Time:		#140						Standard TAT					
Inquired by:						Date:	Time:		Date:		Time:		Received by:						Date:		Time:		RUSH: Same Day 24 hr 48 hr 72 hr						Special Report Limits or TRRP Report					



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

June 13, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU 126 FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 06/12/24 13:41.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/12/2024  
 Reported: 06/13/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/12/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shari Cisneros

**Sample ID: BH - 23 ( 5.0' ) (H243407-01)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/12/2024	ND	2.05	102	2.00	0.862	
Toluene*	<0.050	0.050	06/12/2024	ND	2.02	101	2.00	1.33	
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	2.05	103	2.00	1.53	
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.94	99.1	6.00	1.71	
Total BTX	<0.300	0.300	06/12/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	06/13/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	<10.0	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 97.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	06/12/2024	Sampling Date:	06/12/2024
Reported:	06/13/2024	Sampling Type:	Soil
Project Name:	SEMU 126 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03494	Sample Received By:	Shari Cisneros
Project Location:	MAVERICK - LEA CO NM		

**Sample ID: BH - 26 ( 5.0' ) (H243407-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2024	ND	2.05	102	2.00	0.862		
Toluene*	<0.050	0.050	06/12/2024	ND	2.02	101	2.00	1.33		
Ethylbenzene*	<0.050	0.050	06/12/2024	ND	2.05	103	2.00	1.53		
Total Xylenes*	<0.150	0.150	06/12/2024	ND	5.94	99.1	6.00	1.71		
Total BTEX	<0.300	0.300	06/12/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1100	16.0	06/13/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	271	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	63.5	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 97.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.1 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/12/2024  
 Reported: 06/13/2024  
 Project Name: SEMU 126 FLOWLINE RELEASE  
 Project Number: 212C-MD-03494  
 Project Location: MAVERICK - LEA CO NM

Sampling Date: 06/12/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shari Cisneros

**Sample ID: BH - 29 ( 5.0' ) (H243407-03)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/13/2024	ND	2.05	102	2.00	0.862	
Toluene*	<0.050	0.050	06/13/2024	ND	2.02	101	2.00	1.33	
Ethylbenzene*	<0.050	0.050	06/13/2024	ND	2.05	103	2.00	1.53	
Total Xylenes*	<0.150	0.150	06/13/2024	ND	5.94	99.1	6.00	1.71	
Total BTEX	<0.300	0.300	06/13/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	06/13/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2024	ND	182	90.9	200	1.90	
DRO >C10-C28*	11.5	10.0	06/12/2024	ND	188	94.0	200	0.282	
EXT DRO >C28-C36	<10.0	10.0	06/12/2024	ND					

Surrogate: 1-Chlorooctane 98.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



---

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---

### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

## Analysis Request of Custody Record

Page 1 of 1



## Tetra Tech, Inc.

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name:

Maverick Natural Resources

Site Manager:

Chuck Terhune

Project Name:

Semu 126 Flow Line

281-755-8965

Project Location:

Lea County, NM

Project #:

212C-MD-03494

Invoice to:

Attn: Chuck Terhune

Receiving Laboratory:

Cardinal Labs

Sampler Signature:

Jorge Fernandez

Comments:

Include : Chris Straub Chris.Straub@tetratech.com Jorge.Fernandez@tetratech.com

## SAMPLE IDENTIFICATION

LAB #  
(LAB USE ONLY)

YEAR 2024	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
	6/12/2024		X			X		
	6/12/2024		X			X		
	6/12/2024		X			X		

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M ( GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

## ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by:

Date: Time: 1342

Relinquished by:

Date: Time: 1342

Relinquished by:

Date: Time:

Received by:

Date: Time: 13.44

Received by:

Date: Time: 13.44

Received by:

Date: Time: 13.44

LAB USE ONLY

REMARKS: Standard TAT

Sample Temperature

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

ORIGINAL COPY

Remediation/Reclamation Report and Closure Request  
Maverick Permian, LLC  
SEMU Permian 126 Flowline Release  
Incident ID: nAPP2401128986

July 29, 2024

## **ATTACHMENT 4 – NMSLO SEED MIXTURE**

**NMSLO Seed Mix****Sandy (S)****SANDY (S) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
<b>Grasses:</b>			
Sand bluestem	Elida, VNS, So.	2.0	F
Little bluestem	Cimarron, Pastura	3.0	F
Black grama	VNS, Southern	1.0	D
Sand dropseed	VNS, Southern	4.0	S
Plains bristlegrass	VNS, Southern	2.0	D
<b>Forbs:</b>			
Firewheel (Gaillardia)	VNS, Southern	1.0	D
Annual Sunflower	VNS, Southern	1.0	D
<b>Shrubs:</b>			
Fourwing Saltbush	VNS, Southern	1.0	F
<b>Total PLS/acre</b>		<b>16.0</b>	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box  
VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at <http://plants.usda.gov>.



**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 370011

QUESTIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:
	331199
	Action Number:
	370011
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2401128986
Incident Name	NAPP2401128986 SEMU PERMIAN 126 FLOWLINE RELEASE @ 30-025-07810
Incident Type	Oil Release
Incident Status	Reclamation Report Received
Incident Well	[30-025-07810] SEMU PERMIAN #015

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SEMU Permian 126 Flowline Release
Date Release Discovered	01/09/2024
Surface Owner	Private

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Crude Oil   Released: 13 BBL   Recovered: 0 BBL   Lost: 13 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Produced Water   Released: 2 BBL   Recovered: 0 BBL   Lost: 2 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
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)	On January 9, 2024, operations personnel identified a pinhole leak in a flowline associated with the SEMU Permian 015 well. Approximately 13 bbls of oil and 2 bbls of produced water were released into the adjacent pasture. Initial response stopped the leak, repaired the flowline, and initiated excavation of impacted soils.

**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  
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**Oil Conservation Division**  
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**Santa Fe, NM 87505**

QUESTIONS, Page 2

Action 370011

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:
	331199
	Action Number:
	370011
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

**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: Chuck Terhune Email: <a href="mailto:chuck.terhune@tetrattech.com">chuck.terhune@tetrattech.com</a> Date: 02/27/2024
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QUESTIONS, Page 3

Action 370011

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:
	331199
	Action Number:
	370011
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

**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	Attached Document
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
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	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (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 1 and 5 (mi.)
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	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**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)	1310
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	69040
GRO+DRO	(EPA SW-846 Method 8015M)	59580
BTEX	(EPA SW-846 Method 8021B or 8260B)	422
Benzene	(EPA SW-846 Method 8021B or 8260B)	32.6

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

On what estimated date will the remediation commence	05/27/2024
On what date will (or did) the final sampling or liner inspection occur	06/12/2024
On what date will (or was) the remediation complete(d)	06/19/2024
What is the estimated surface area (in square feet) that will be reclaimed	6400
What is the estimated volume (in cubic yards) that will be reclaimed	1650
What is the estimated surface area (in square feet) that will be remediated	6400
What is the estimated volume (in cubic yards) that will be remediated	1650

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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Action 370011

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:	331199
	Action Number:	370011
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**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 <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetrattech.com Date: 08/02/2024
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5  
  
Action 370011

QUESTIONS (continued)

Operator:  Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:  331199
	Action Number:  370011
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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, Page 6

Action 370011

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:	331199
	Action Number:	370011
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	351587
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/14/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	800

**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	6400
What was the total volume (cubic yards) remediated	1650
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	6400
What was the total volume (in cubic yards) reclaimed	1650
Summarize any additional remediation activities not included by answers (above)	Impacted material excavated and disposed, clean soil used to backfill, contoured to match surrounding grade, reseeded, and harrowed in.

*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: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetrattech.com Date: 08/02/2024
--	--

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Action 370011

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:	331199
	Action Number:	370011
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS****Reclamation Report**

Only answer the questions in this group if all reclamation steps have been completed.

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	6400
What was the total volume of replacement material (in cubic yards) for this site	1438

Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a 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.

Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	06/19/2024

Summarize any additional reclamation activities not included by answers (above)	None
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The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 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: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetrattech.com Date: 08/02/2024
--	--

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QUESTIONS, Page 8  
  
Action 370011

QUESTIONS (continued)

Operator:  Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:  331199
	Action Number:  370011
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

<b>Revegetation Report</b>	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS  
  
Action 370011

CONDITIONS

Operator:  Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:
	331199
	Action Number:
	370011
Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

CONDITIONS

Created By	Condition	Condition Date
amaxwell	The reclamation report has been approved pursuant to 19.15.29.13 E. NMAC. The acceptance of this 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; or if the location fails to revegetate properly. In addition, OCD approval does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	8/5/2024
amaxwell	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	8/5/2024
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	8/5/2024