



November 10, 2025

**New Mexico Oil Conservation Division**

1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Remediation Work Plan  
Tiger 14 CDP  
Incident Number: nAPP2513455553  
Eddy County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of San Mateo Black River Oil Pipeline, LLC (San Mateo), has prepared this *Remediation Work Plan (RWP)* to document assessment and soil sampling activities performed at the Tiger 14 CDP (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacted and waste-containing soil resulting from a crude oil release. San Mateo is submitting this *RWP*, describing analytical results from soil sampling and karst survey activities associated with Incident Number nAPP2513455553 and proposing to assess the current sensitive Site receptor (high karst potential) of the subject matter release prior to beginning excavation activities and prior to submitting a *Closure or Deferral Request*.

## BACKGROUND

The Site is located in Unit P, Section 14, Township 24 South, Range 28 East, in Eddy County, New Mexico (32.21113°, -104.05092°) and is associated with oil and gas exploration and production operations on private land.

On May 14, 2025, an equipment failure resulted in the release of approximately 15 barrels (bbls) of crude oil onto the pad surface; 10 bbls of crude oil were recovered, 5 bbls of crude oil were unrecoverable. San Mateo reported the release to the New Mexico Oil Conservation Division (NMOCD) via Notification of Release (NOR) on May 14, 2025, and submitted a Release Notification Form C-141 (Form C-141) on May 19, 2025. The release was assigned Incident Number nAPP2513455553.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Site Assessment/Characterization is described below.

The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well, C-04828 POD 1, located approximately 0.22 miles northeast of the Site. The well was a soil boring drilled to assess depth to groundwater beneath the Site. The soil boring was advanced to a depth of approximately 55 feet below ground surface (bgs) on June 10, 2024, and measured on June 13, 2024, to be dry. Therefore, depth to groundwater beneath the Site is estimated to be greater than 55 feet bgs. The well record and log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry wash, located approximately 2,388 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is potentially underlain by unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

On June 6, 2025, Ensolum commissioned a geophysical karst survey using a New Mexico Bureau of Land Management (BLM) approved third-party cave/karst contractor. The karst survey was conducted by Southwest Geophysical Consulting, LLC, under the supervision of Dave Decker. The findings of the report indicated there was no evidence of karst features within 200 feet of the release or beneath the Site, and one anomaly consistent with a potential sub-surface air-filled void was identified southeast of the Site, within the 200-meter survey boundary. The anomaly was identified with the non-invasive electrical resistivity (ER) survey. In addition, two surficial features identified as potential karst features were within a pipeline right-of-way and appear to be related to backfill subsidence and not karst features. Lastly, the ER survey indicated potentially chaotic and unstable geology. The karst survey report is included in Appendix B.

Based on the results of the desktop Site Characterization and assuming unstable geology is present at or near the Site, the following NMOCD Table I Closure Criteria (Closure Criteria) would apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

Absent of unstable geology, there are no other sensitive receptors present in the prescribed distances set forth in 19.15.29.12 NMAC and depth to groundwater has been reasonably estimated to be between 51 feet and 100 feet bgs, indicated the middle Closure Criteria could be appropriate for the Site.

## **SITE ASSESSMENT AND DELINEATION SOIL SAMPLING ACTIVITIES**

Beginning on May 14, 2025, Ensolum personnel were onsite to delineate the lateral and vertical extent of the release as indicated by field observations and information provided in the C-141. Four soil samples (SS01 through SS04) were collected at ground surface and 1-foot bgs to assess the lateral extent of impacted soil. Two boreholes (BH01 and BH02) were advanced via hand auger and gas-powered core drill within the release extent to assess the vertical extent of the release. Boreholes BH01 and BH02 were advanced to a depth of 4 feet bgs and 9 feet bgs, respectively.

All delineation soil samples were field screened for chloride and TPH utilizing Hach® chloride QuanTab® test strips and a PetroFLAG® Soil Analyzer System, respectively. Field screening results and observations for the boreholes were logged on lithologic soil sampling logs, which are included in Appendix C. Photographic documentation of delineation activities is included in Appendix D.

All soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech Analytical Laboratory (Envirotech) in Farmington, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-

diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results indicated:

- All COC concentrations for lateral delineation soil samples SS01 through SS04 were in compliance with the strictest Closure Criteria at the ground surface and 1-foot bgs.
- Borehole BH01 contained concentrations of TPH and/or chloride exceeding the Site Closure Criteria at the ground surface and 1-foot bgs. All COC concentrations for BH01 were in compliance with the strictest Closure Criteria at 2 feet bgs.
- Borehole BH02 contained concentrations of TPH exceeding the Site Closure Criteria at ground surface and concentrations of chloride exceeding the Site Closure Criteria from ground surface to 9 feet bgs. All COC concentrations for BH02 were in compliance with the middle Closure Criteria from the ground surface to 9 feet bgs.

Laboratory results are summarized in Table 1 and laboratory analytical reports are included in Appendix E. NMOCD correspondence can be referenced in Appendix F.

## PROPOSED REMEDIATION WORK PLAN

Absent potential unstable geology, there are no sensitive receptors present in the prescribed distances set forth in 19.15.29.12 NMAC, and depth to groundwater has been reasonably estimated to be between 51 feet and 100 feet bgs. As stated in the geophysical survey, the ER survey results are interpretations until verified by subsurface methods. As such, San Mateo intends to complete excavation activities at the Site according to the following actions:

- San Mateo intends to complete soil borings to confirm the presence of potential unstable geology and subsurface karst features at the Site prior to performing excessive remediation. The soil borings will be advanced to a depth of approximately 44 feet bgs, which is the depth the off-site anomaly was observed in the ER survey. The proposed karst assessment soil borings locations are included on Figure 3
- Upon completion of the subsurface assessment, San Mateo will re-evaluate Site Closure Criteria, then complete excavation of impacted soil. The excavation will be completed with mechanical equipment, and the possible excavation extents, dependent on the confirmed presence or absence of unstable geology, are depicted on Figures 4a and 4b. Figure 4a depicts the proposed excavation extent if no sensitive Site receptors are associated with the Site and depth to groundwater is greater than 51 feet bgs. Figure 4b depicts the proposed excavation extent utilizing the strictest Closure Criteria if unstable geology is confirmed.
- The impacted area measures 1,074 square feet (sq ft) in size and an estimated 40 cubic yards of impacted soil will require excavation, assuming no sensitive receptors are associated with the Site and depth to groundwater is confirmed to be greater than 51 feet bgs, respectively. This work will include addressing TPH impacted soil identified in borehole BH01 at ground surface, see Figure 2.
- Impacted soil will be transferred to an approved landfill facility for disposal.

San Mateo Black River Oil Pipeline, LLC  
Remediation Work Plan  
Tiger 14 CDP



- Following the removal of impacted soil, Ensolum will collect 5-point composite soil samples representing no more than 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation soil samples will be collected, handled, and analyzed following the same procedures as described above. The excavation will be backfilled and recontoured to match pre-existing conditions.
- Delineation soil sample location BH02 will be advanced to vertically delineate to the strictest Closure Criteria unless all excavation confirmation floor samples already meet those standards.
- If there are areas to be deferred on pad due to the presence of equipment and/or pipelines, such as those under the lined secondary containment, lateral delineation samples will be collected to properly quantify the residual soil impacts that will be addressed during major Site reconstruction or following plugging and abandonment of the well and reclamation of the well pad.

San Mateo believes this *RWP* and will be protective of human health, the environment, and groundwater. San Mateo requests a variance to complete the proposed assessment, excavation, and soil sampling activities within 180 days of the date of approval of this *RWP* by the NMOCD.

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or [agiovengo@ensolum.com](mailto:agiovengo@ensolum.com).

Sincerely,  
**Ensolum, LLC**

A handwritten signature in black ink, appearing to read "Chad Hamilton", with a stylized, overlapping flourish at the end.

Chad Hamilton  
Project Geologist

A handwritten signature in black ink, appearing to read "Daniel R. Moir", with a large, looped flourish at the end.

Daniel R. Moir, PG (licensed in WY & TX)  
Senior Managing Geologist

cc: Jason Touchet, San Mateo Black River Oil Pipeline, LLC

#### Appendices:

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Figure 2	Delineation Soil Sample Locations
Figure 3	Proposed Karst Assessment Locations
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FIGURES

## Site Receptor Map

San Mateo Black River Oil Pipeline, LLC

Tiger 14 CDP

Incident Number: nAPP2513455553

Unit P, Section 14, T 24S, R 28E

Eddy County, New Mexico

## FIGURE

1





## Delineation Soil Sample Locations

San Mateo Black River Oil Pipeline, LLC

Tiger 14 CDP

Incident Number: nAPP2513455553

Unit P, Section 14, T 24S, R 28E

Eddy County, New Mexico

FIGURE

2





**Proposed Karst Assessment Locations**  
San Mateo Black River Oil Pipeline, LLC  
Tiger 14 CDP  
Incident Number: nAPP2513455553  
Unit P, Section 14, T 24S, R 28E  
Eddy County, New Mexico

**FIGURE 3**



## Legend

- Proposed Excavation  
Extent Based on Closure  
Criteria Reflective of  
Depth to Groundwater  
Greater than 55 feet  
bgs



0 12.5 25 50  
Feet

Sources: Environmental Systems Research Institute (ESRI)



## Proposed Excavation Extent

San Mateo Black River Oil Pipeline, LLC

Tiger 14 CDP

Incident Number: nAPP251345553

Unit P, Section 14, T 24S, R 28E

Eddy County, New Mexico

## FIGURE

### 4a



## Legend

- Proposed Excavation
- Extent Based on Strictest Closure Criteria



0 20 40 80  
Feet

Sources: Environmental Systems Research Institute (ESRI)



## Proposed Excavation Extent

San Mateo Black River Oil Pipeline, LLC

Tiger 14 CDP

Incident Number: nAPP2513455553

Unit P, Section 14, T 24S, R 28E

Eddy County, New Mexico

FIGURE

4b





TABLES

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**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Tiger 14 CDP  
 San Mateo Black River Oil Pipeline, LLC  
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
NMOCD Table I Closure Criteria (NMAC 19.15.29) reflective of depth to groundwater greater than 55 feet bgs			10	50	NE	NE	NE	1,000	2,500	10,000
<b>Delineation Soil Samples</b>										
SS01	5/21/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	379
SS01	5/21/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	109
SS02	5/23/2025	0	<0.0250	<0.0500	<20.0	<25.0	50.4	<25.0	50.4	<20.0
SS02	5/23/2025	1	<0.0250	<0.0500	<20.0	<25.0	59.3	<25.0	59.3	278
SS03	10/17/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	236
SS04	10/17/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	117
BH01	5/22/2025	0	<0.0250	<0.0500	<20.0	6,180	3,350	6,180	<b>9,530</b>	<b>986</b>
BH01	5/22/2025	1	<0.0250	<0.0500	<20.0	205	135	205	<b>340</b>	111
BH01	6/4/2025	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH02	5/22/2025	0	<0.0250	<0.0500	<20.0	78.2	85.7	78.2	<b>164</b>	<b>1,270</b>
BH02	5/22/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>604</b>
BH02	5/22/2025	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>746</b>
BH02	5/22/2025	3	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>1,400</b>
BH02	5/22/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>742</b>
BH02	5/22/2025	5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>1,060</b>
BH02	6/4/2025	7	<0.0250	<0.0500	<20.0	27.9	<50.0	27.9	<50.0	<b>938</b>
BH02	6/4/2025	9	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>1,370</b>

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

&lt;": Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I reclamation standard where applicable.Concentrations in **red** exceed the NMOCD Table I Closure Criteria where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes



## APPENDIX A

### Well Record and Log

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# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1		WELL TAG ID NO. N/A		OSE FILE NO(S). C-04828 POD 1			
	WELL OWNER NAME(S) Matador Production Company				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS R347 N26th Rural Street 2nd Floor				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 12	SECONDS 56.0	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 104	03	00.3	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Unit E, Section 14, Township 24S, Range 28E, Eddy County, NM								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD1188		NAME OF LICENSED DRILLER John Scarborough			NAME OF WELL DRILLING COMPANY John Scarborough Drilling Inc.		
	DRILLING STARTED 06/10/2024		DRILLING ENDED 06/10/2024		DEPTH OF COMPLETED WELL (FT) 55'	BORE HOLE DEPTH (FT) 55'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER – SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	55	5.00	Soil Boring	-	-	-	-
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

<b>4. HYDROGEOLOGIC LOG OF WELL</b>	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES <b>(attach supplemental sheets to fully describe all units)</b>	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)	
	FROM	TO					
	0	10	10	Sand with Gravel, light brown to tan, fine to medium with some gravel	Y    ✓ N		
	10	20	10	Sand with Gravel, light brown to tan, fine to medium with some gravel	Y    ✓ N		
	20	30	10	Sand with Gravel, light brown to tan, fine to medium with some gravel	Y    ✓ N		
	30	40	10	Gypsum with Gravel, Clear with pink to black inclusions, fine to coarse with trace	Y    ✓ N		
	40	50	10	Gypsum with Gravel, Clear with pink to black inclusions, fine to coarse with trace	Y    ✓ N		
	50	55	5	Gypsum with Gravel, Clear with pink to black inclusions, fine to coarse with trace	Y    ✓ N		
	55	55	0	Gypsum with Gravel, Clear with pink to black inclusions, fine to coarse with trace	Y    ✓ N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):                0.00	
	<b>5. TEST; RIG SUPERVISION</b>	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION:							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
<b>6. SIGNATURE</b>	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.						
	Scott Scarborough  <small>Digitally signed by Scott Scarborough Date: 2024.06.26 07:04:55 -06'00'</small>		Scott Scarborough		06/26/2024		
SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE		

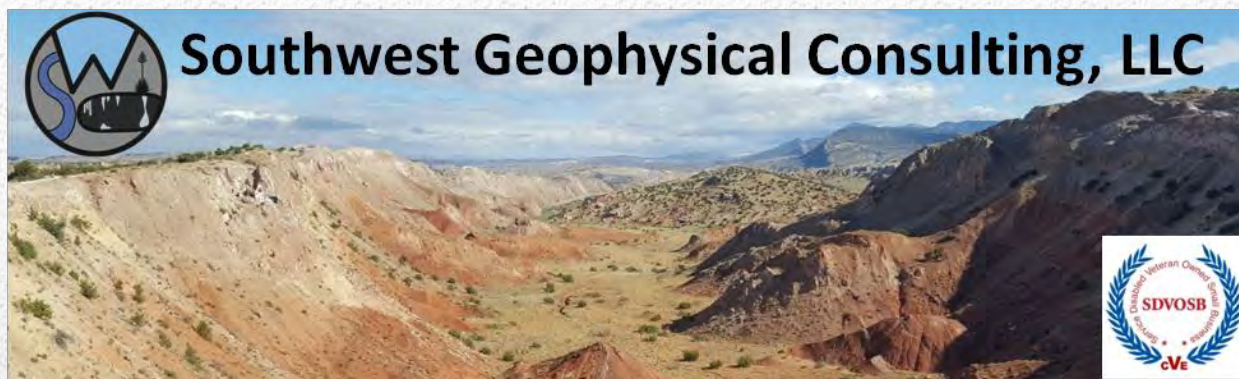


## APPENDIX B

### Karst Survey

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# **Environmental Karst Study Report Tiger 14 CDP Eddy County, New Mexico**

**Prepared For:**

**Ensolum, LLC  
3122 National Parks Highway  
Carlsbad, NM 88220**

**Within 200 feet of the spill delineation boundary:**

- ☐ Negative ☒ Positive for surface karst
- ☐ Stable ☒ Unstable Ground
- ☒ Karst Monitor Recommended

**August 6, 2025**

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## 1.0 INTRODUCTION

This report was commissioned by Ensolum, LLC (hereinafter referred to as "the client"), on May 23, 2025, for the purpose of conducting an environmental karst study within an area encompassing the Tiger 14 CDP release site (hereinafter termed "TG14") centered at N 32.211485° W 104.050900°.

### 1.1 Goals of this Study

The goals of this study are to conduct a surface karst inventory and provide the client with the location and description of any surface karst features located within 200 feet (61 meters) of the spill delineation boundary (as defined by 19.15.29.12 NMAC<sup>[1]</sup>), and to determine whether stable ground exists (as defined by 19.15.2 NMAC Definitions<sup>[2]</sup>) within 200 feet of the spill delineation boundary of the Tiger 14 CDP release as provided by the client via e-mail (**Tiger 14 CDP Release Extent.kmz**) on May 23, 2025, using electrical resistivity imaging<sup>[3]</sup>.

### 1.2 Summary of Findings

- **No surface karst features exist within 200 feet (61 meters) of the spill delineation boundary.** Two surface karst features exist within the **200-meter** survey boundary.
- **One anomaly consistent with a subsurface air-filled void is interpreted to exist within the TG14 geophysical survey area, indicating the zone beneath the geophysical survey may be subject to collapse.**
- **Chaotic stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating unstable ground within the 200-foot survey boundary.**

### 1.3 Affected Environment

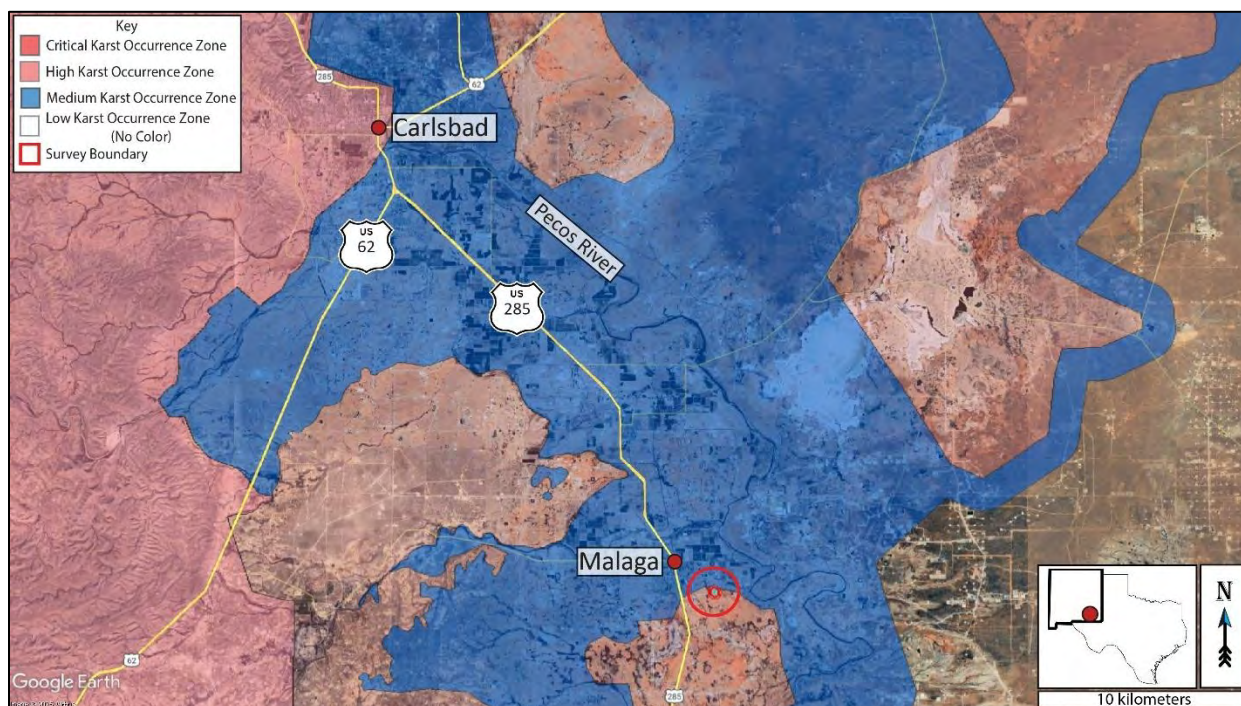
The TG14 project site is located in evaporite karst terrain, a landform that is characterized by underground drainage through solutionally enlarged conduits. Evaporite karst terrain may contain sinkholes, sinking streams, caves, and springs. Sinkholes leading to underground drainages and voids are common. These karst features, as well as occasional fissures and discontinuities in the bedrock, provide the primary sources for rapid recharge of the groundwater aquifers of the region. Additionally, karst may develop by hypogene processes involving dissolution by upwelling fluids from depth independent of recharge from the overlying or immediately adjacent surface. Hypogene karst systems may not be connected to the surface and can remain undiscovered unless encountered during drilling or excavation.

Karst features are delicate resources that are often of geological, hydrological, biological, and archeological importance, and should be protected. The four primary concerns in these types of terrain are environmental issues, worker safety, equipment damage, and infrastructure integrity.

The Bureau of Land Management (BLM) categorizes all areas within the Carlsbad Field Office (CFO) zone of responsibility as having either low, medium, high, or critical cave potential based on geology, occurrence of known caves, density of karst features, and potential impacts to freshwater aquifers<sup>[4]</sup>. These designations are also recognized by the New Mexico State Land Office (NMSLO). This project occurs within a **HIGH** karst occurrence zone (HKOZ)<sup>[5]</sup> (**Figure 1**).

A high karst occurrence zone is defined as an area in known soluble rock types that contains a high frequency of significant caves and karst features such as sinkholes, bedrock fractures that provide rapid recharge of karst aquifers, and springs that provide riparian habitat<sup>[4]</sup>.

**Due to the rapidity with which evaporite karst develops, each location within a BLM-CFO designated critical or high karst occurrence zone must be assessed on an individual basis to determine the existence of surface karst features and the possibility of sub-surface karst development each time a release occurs.**



**Figure 1: Karst occurrence zone overview. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.**



#### **1.4 Limitations of Report**

This report should be read in full. No responsibility is accepted for the use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

This report has been prepared for the use of Ensolum, LLC, in accordance with generally accepted consulting practices. Every effort has been made to ensure the information in this report is accurate as of the time of its writing. This report has not been prepared for use by parties other than the client, their contracting party, and their respective consulting advisors. It may not contain sufficient information for the purposes of other parties or for other uses.

This report was prepared upon completion of the associated fieldwork using a standard template prepared by Southwest Geophysical Consulting and is based on information collected prior to fieldwork, conditions encountered on site, and data collected during the fieldwork and reviewed at the time of preparation. Southwest Geophysical Consulting disclaims responsibility for any changes that might have occurred at the site after this time. The interpreted results, locations, and depths noted in this report (if applicable) should be taken as an interpretation only and no decision should be based solely on this information. Physical verification of aerial imagery analysis results should be conducted in the field prior to using this information for remediation planning. Physical verification of geophysical results using geotechnical methods should be conducted.

To the best of our knowledge, the information contained in this report is accurate at the date of issue. Due to the nature of karst terrain, the information in this report shall not be used beyond two years past the date of the field work provided in section **2.3 Description of Survey**. Large weather events can shorten this time period as areas subject to karst development can rapidly form new features subsequent to these events.

## 2.0 LOCATION AND DESCRIPTION OF STUDY AREA

### 2.1 Description of Site

The site is located 2.5 kilometers (1.6 miles) southeast of Malaga, New Mexico, east of U.S. Highway 285 and west of the Pecos River. The release area is located within the SE ¼ section of section 14, NM T24S R28E<sup>[6]</sup> (**Figure 1** and **Figure 2**). The region has flat terrain with karstification occurring in the gypsite soils and underlying gypsum and dolomite bedrock<sup>[7]</sup> (see section **2.2 Local Geology Summary** for further information). The climate in this area of southeast New Mexico is semi-arid with an average annual precipitation of approximately 13 inches, of which about two-thirds falls as rain during summer thunderstorms from June to October. Summers are hot and sunny while winters are generally mild, with an average maximum temperature of 96°F in July and an average minimum temperature of 28°F in January<sup>[8]</sup>. This area is within the Chihuahuan Desert Thornscrub as defined by the Southwestern Regional ReGAP Vegetation map<sup>[9]</sup> and the vegetation consists mostly of areas of blue grama, nine-awned pappus grass, burro grass and low scrub including yucca. The spill delineation boundary is located within an HKOZ<sup>[5]</sup> (**Figure 1**) and within privately managed land<sup>[10]</sup> (**Figure 2**).

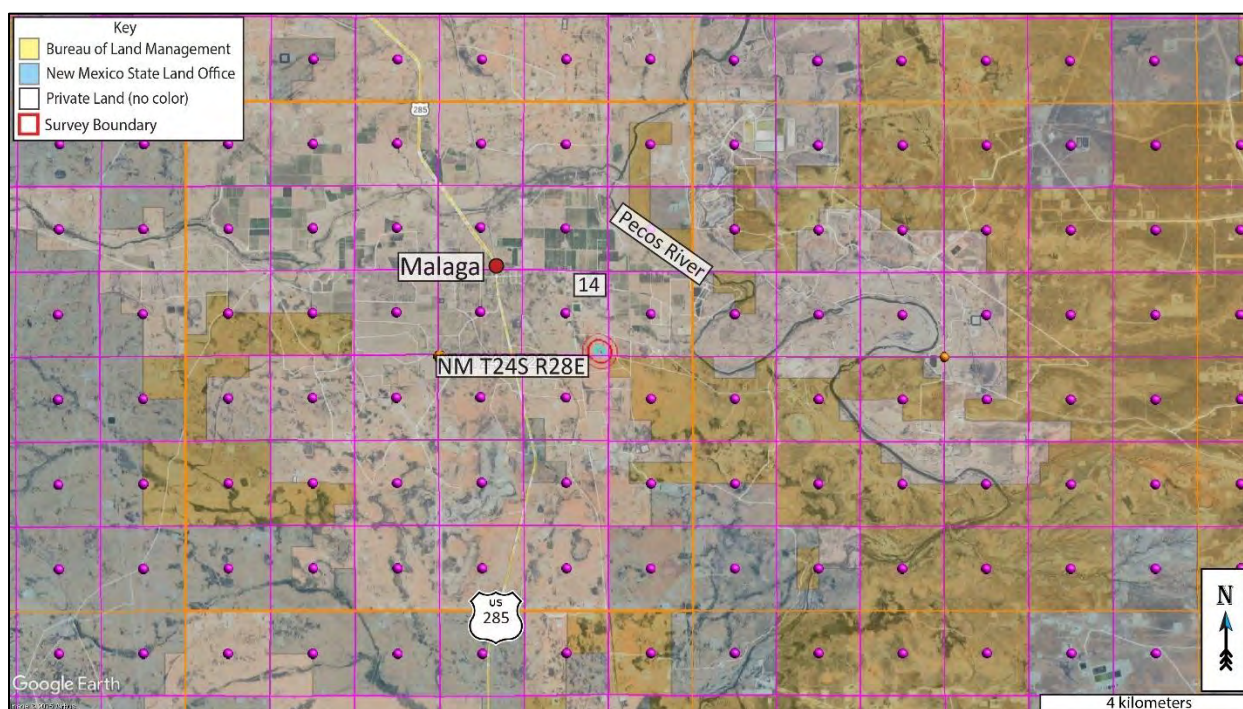


Figure 2: Land ownership and PLSS overview. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.

## 2.2 Local Geology Summary

The site for the TG14 survey is located at an elevation of 904 meters (2,965 feet),  $\pm$  3 meters (9.8 feet). This region is entirely underlain by the Permian Rustler Formation (Pru). The area is mantled by thin gypsiferous soils (gypsite), Quaternary alluvial piedmont (Qp), eolian deposits (Qe), and alluvium (Qal)<sup>[11]</sup> up to 5 meters in depth (**Figure 3**).

The Rustler Formation is an evaporite facies composed mainly of thin siltstones and sandstones interbedded with claystones, dolomite, and gypsum, and contains both karst-forming strata (the Forty-niner and Tamarisk members) and two shallow aquifers (the Magenta and Culebra Dolomite members)<sup>[12]</sup>.

The Pru overlies the Permian Salado Formation (Psl), a layer of extremely soluble halite which can readily dissolve to create caves, sinkholes, and other karst features; however, due to its extremely soluble nature, only non-soluble silt and sand remain from the dissolution of this layer at the surface<sup>[12]</sup>. The Rustler Formation may be subject to collapse if a void has developed beneath it in the Salado Formation<sup>[13]</sup>.

The survey area is covered by the easily accessible Geologic Map of New Mexico (2003) at 1:500,000 scale<sup>[14]</sup> and the Digital Geologic Map of New Mexico in ARC/INFO Format<sup>[11]</sup>.



**Figure 3: Geology overview.** Geology map credit: The Digital Geologic Map of New Mexico in ARC/INFO Format. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.



## 2.3 Description of Survey

### 2.3.1 Surface Karst Survey

Southwest Geophysical Consulting, in partnership with SWCA Environmental Consultants, provides surface karst surveys using small, uncrewed aerial systems (sUAS) that are flown by qualified, FAA licensed drone pilots and that meet the stringent Bureau of Land Management – Carlsbad Field Office requirements for both pedestrian and aerial karst surveys.

The surface karst survey includes a desk study prior to the flight which allows us to provide client feedback in the event of any previously known karst features in the area. The desk study is performed out to 305 meters (1,000 feet) from the spill delineation boundary per New Mexico Oil Conservation Division guidance<sup>[1]</sup> (**Figure 4**). The study was performed using satellite and aerial imagery from Google Earth Pro dated July 13, 2024 (please note features less than one meter in diameter are generally not visible using this method); the Southwest Geophysical Cave and Karst Database dated July 5, 2025<sup>[15]</sup>; the Angel Draw, NM, 1:24,000 quad, 1985, USGS topographic map; and the latest lidar imagery from CalTopo.com. Please note that we use older topographic maps because newer maps have had caves removed from them. These searches and queries returned no results within the survey boundary.

Surface karst surveys are conducted by sUAS at low elevation within 200 meters of the spill delineation boundary<sup>[4]</sup> (**Figure 4**) following a preplanned raster pattern flightpath designed for the purpose of generating at least 75% imagery overlap. The collected high-resolution, georeferenced imagery is stitched together to develop orthomosaic imagery which is further developed into a digital elevation model (DEM); the DEM is then processed into a local relief model (LRM) (**Figure 6**). This LRM is color coded to enhance differences in elevation of as little as five centimeters. The orthoimagery, DEM, and LRM are uploaded to a server where they are analyzed by an experienced karst geologist. Finally, the data is reviewed by a senior karst geologist for quality assurance and downloaded into a table for inclusion in a written report<sup>[16]</sup>.

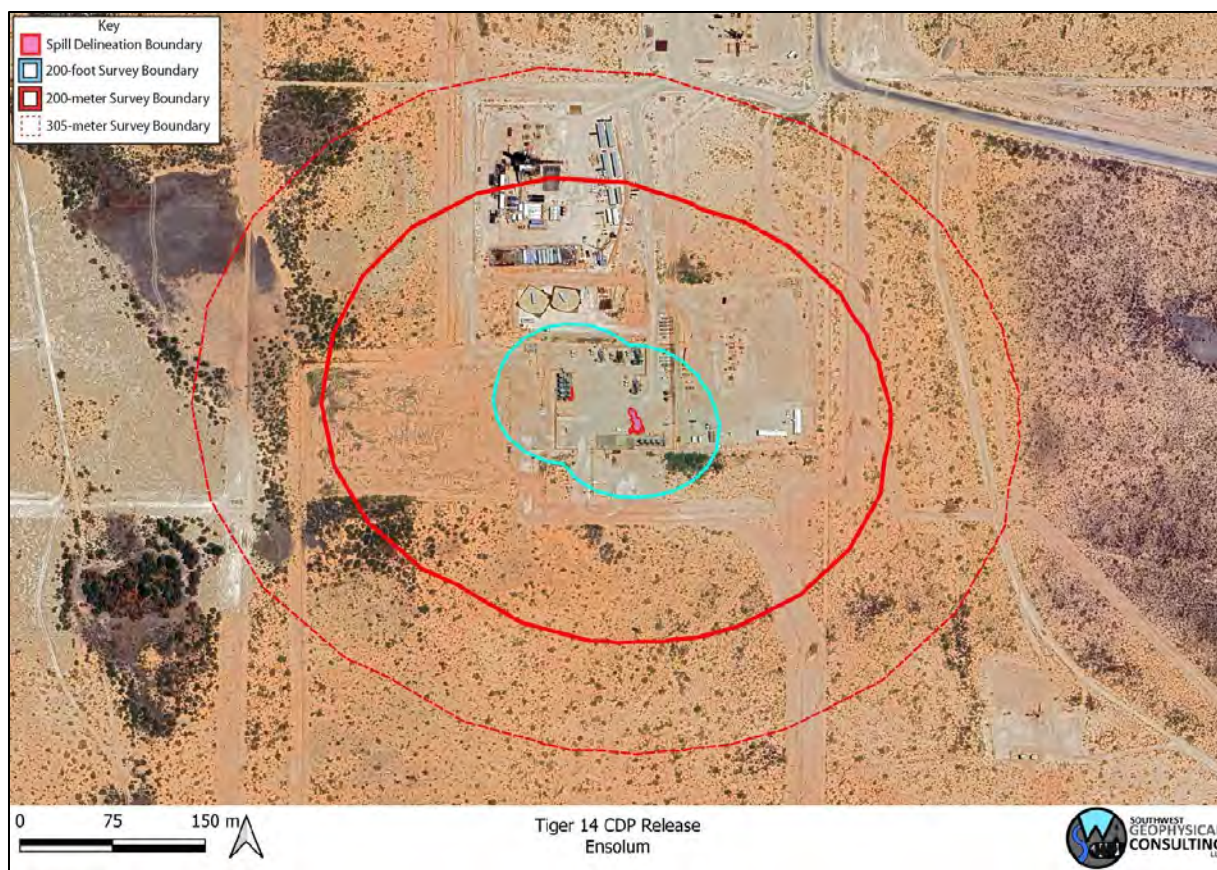


Figure 4: Surface survey overview. Background image credit: Google Earth. Image date: July 13, 2024. Datum: WGS-84.

The resolution of the orthoimagery is clear enough that features as small as 10 centimeters can be positively identified in most circumstances. Occasionally there are ambiguous features identified during an aerial survey that will need to be checked in the field if they are impacted by the proposed remediation efforts. Specifically, it is difficult to tell the difference between solution tubes, abandoned uncased well bores, and some burrows in drone imagery. If an ambiguous feature is located during imagery analysis, it is marked with a yellow dot in **Figure 6**. If a feature of any likelihood is subsequently verified in the field prior to publication of the report, the dot will be changed to a red triangle if confirmed as a karst feature or deleted if not.

The imagery for this study was collected via aerial survey by Pat Lagodney of SWCA on June 12, 2025. Surface karst features may have developed after this date and will not be noted in this report. Imagery analysis was completed by Kat Knight of Southwest Geophysical Consulting on June 14, 2025.



### 2.3.2 Geophysical Survey

For this survey, a Guideline Geo Terrameter LS 2 and a 28-electrode array of 40-centimeter-long electrodes were used to image the subsurface. This survey consisted of three resistivity lines in a dipole-dipole configuration laid out in north to south (TG1401), west to east (TG1402), and south to north (TG1403) arrays. These lines consisted of 28 electrodes at 5-meter spacing, resulting in three arrays of 135 meters (**Figure 5, Table 1**). A preconfigured protocol file was used to run the data collection (DipoleDipole2x14). This electrode configuration provided a depth of investigation of 27 meters (89 feet) and a resolution of 2.5 to 3.0 meters (8.2 to 9.8 feet) within the first 5 to 8 meters (16 to 26 feet) from the surface. A Leica GS18 GPS was used to record electrode locations and elevations.

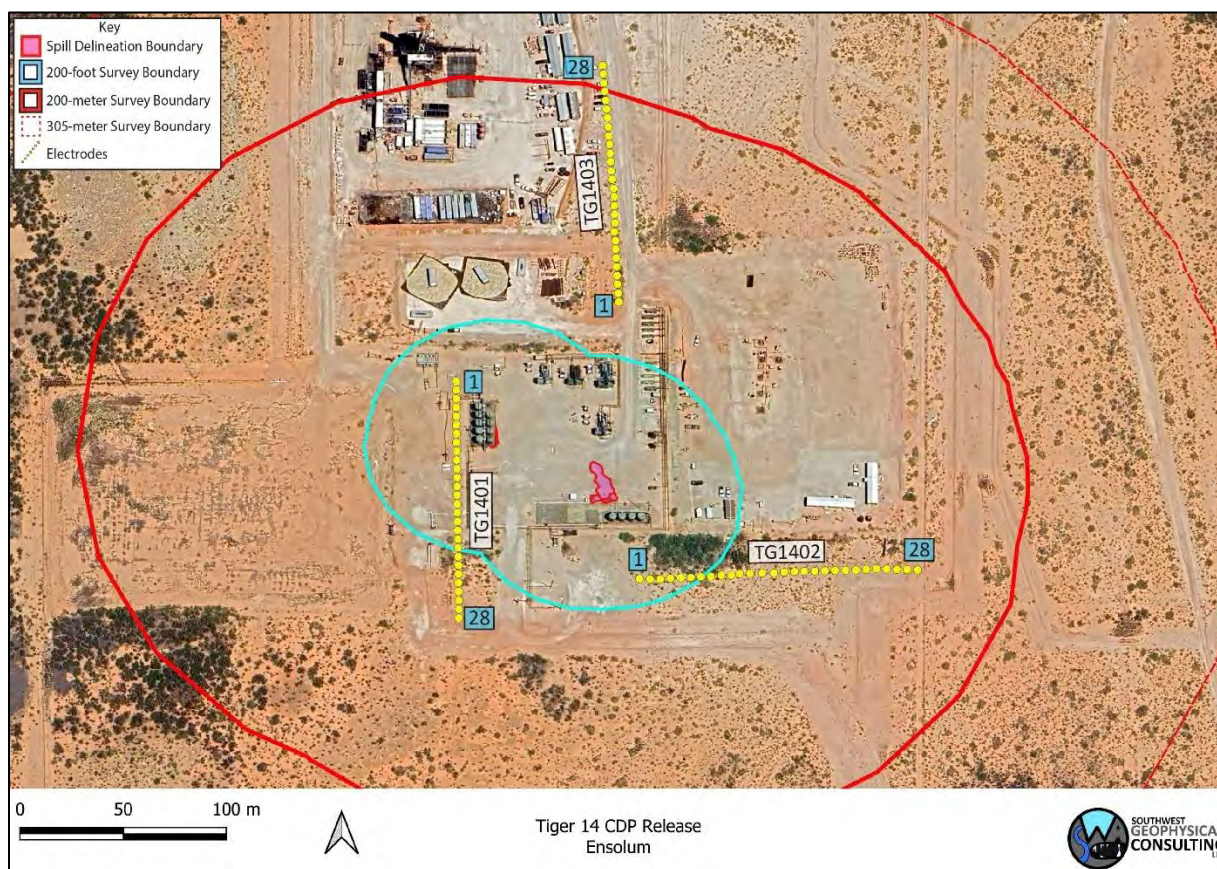


Figure 5: Geophysical survey overview. Three survey lines were conducted with 28 electrodes each at 5-meter spacing (yellow dots denoted with blue numbers). Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.



**Table 1** provides basic line data. Detailed information including electrode number, location in latitude/longitude (decimal degree format), and elevation in meters can be found in the accompanying data files.

**Table 1: Survey Line Data Table.** The .kmz file contains all the points for the survey line listed in the file name. These data are available in the accompanying files TG14\_ERI\_Points.xlsx and ENS-012-20250617\_TG14\_Data\_Files.kmz.

File Name:	Completed By:	Date:
TG1401.kmz TG1402.kmz TG1403.kmz	Steven Kesler – Field Geologist Britt Bommer – Field Geologist Michael Jones – Field Geologist	6/23/2025

EarthImager™ 2D software was used to download and process the data and to provide the model used to make our interpretations. The design of the survey and the orientation of each of the lines provides the information necessary to make the determination of “stable” or “unstable” ground at this site.

A typical starting model was used for the data processing due to the two-layer model of the geology in the area; specifically, generally high-resistivity gypsum and dolomite at the surface and low-resistivity saturated gypsum and dolomite bedrock at depth. The starting model used was “average apparent resistivity” and a default inversion setting of “surface,” with a minimum apparent resistivity set to 0.1 Ohm-meters (Ohm-m or  $\Omega$ -m) and a max apparent resistivity set to 100,000  $\Omega$ -m (**Table 2**).

**Table 2: Software Information and Settings**

Software Name:	EarthImager™ 2D
Version:	2.4.4.649
Starting Model:	Average Apparent Resistivity
Default Inversion Settings:	Surface
Changes to Default Inversion Settings:	Max Apparent Resistivity = 100 k $\Omega$ -m Min Apparent Resistivity = 0.1 $\Omega$ -m

**Note:** Raw data files (.dat files for EarthImager™ 2D) and processed data (.trn files, terrain files for surface correction in EarthImager™ 2D and .out files, the processed .dat files) are available upon request.

All field work, including setup, stow, and travel, was completed by Steven Kesler, Britt Bommer, and Michael Jones on June 23, 2025.

### 3.0 RESULTS

#### 3.1 Surface Karst Survey

The desk study and surface karst survey showed two medium-likelihood surface karst features located within the 200-meter (656-foot) survey boundary, but outside of the 200-foot (61-meter)<sup>[1]</sup> survey area surrounding the spill delineation boundary (Table 3, Figure 6). These features were field checked while on site for the geophysical work and confirmed to be subsidence related to the pipeline trench (Figure 7). Due to the location within a locally enclosed depression, and the fact that we could not see beneath the pipeline, we can't fully rule these features out as simply soil settling but must assume they are due to soil raveling into subsurface voids until proven otherwise by exposing the pipeline by excavation. The locally enclosed depression was confirmed to extend into the 200-foot survey boundary via historical imagery.

No springs exist within the 305-meter (1,000-foot)<sup>[1]</sup> survey boundary (Figure 6). A recognized karst feature exists just outside of the 305-meter (1,000-foot) survey boundary.



Figure 6: Surface karst survey results. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.



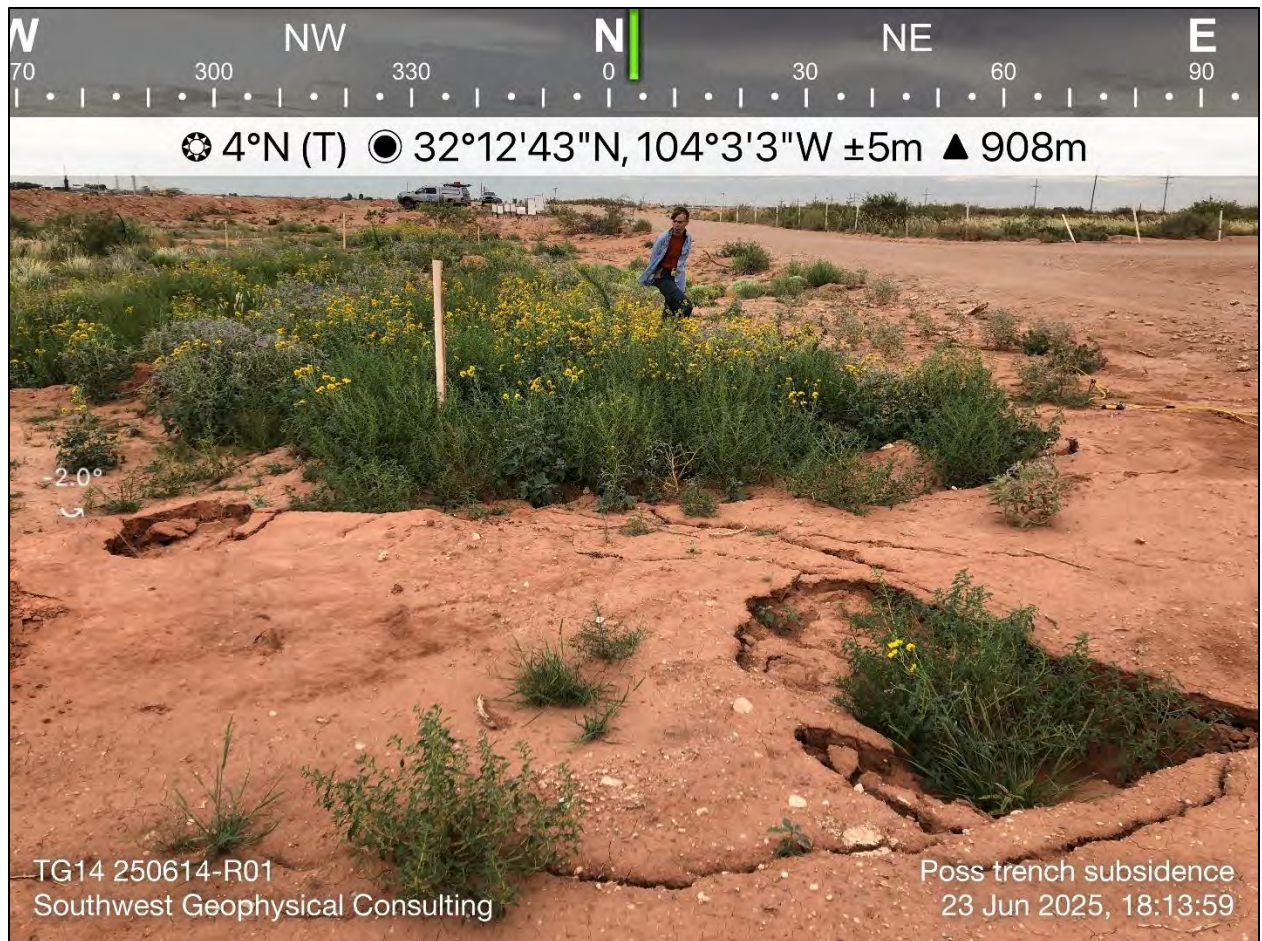
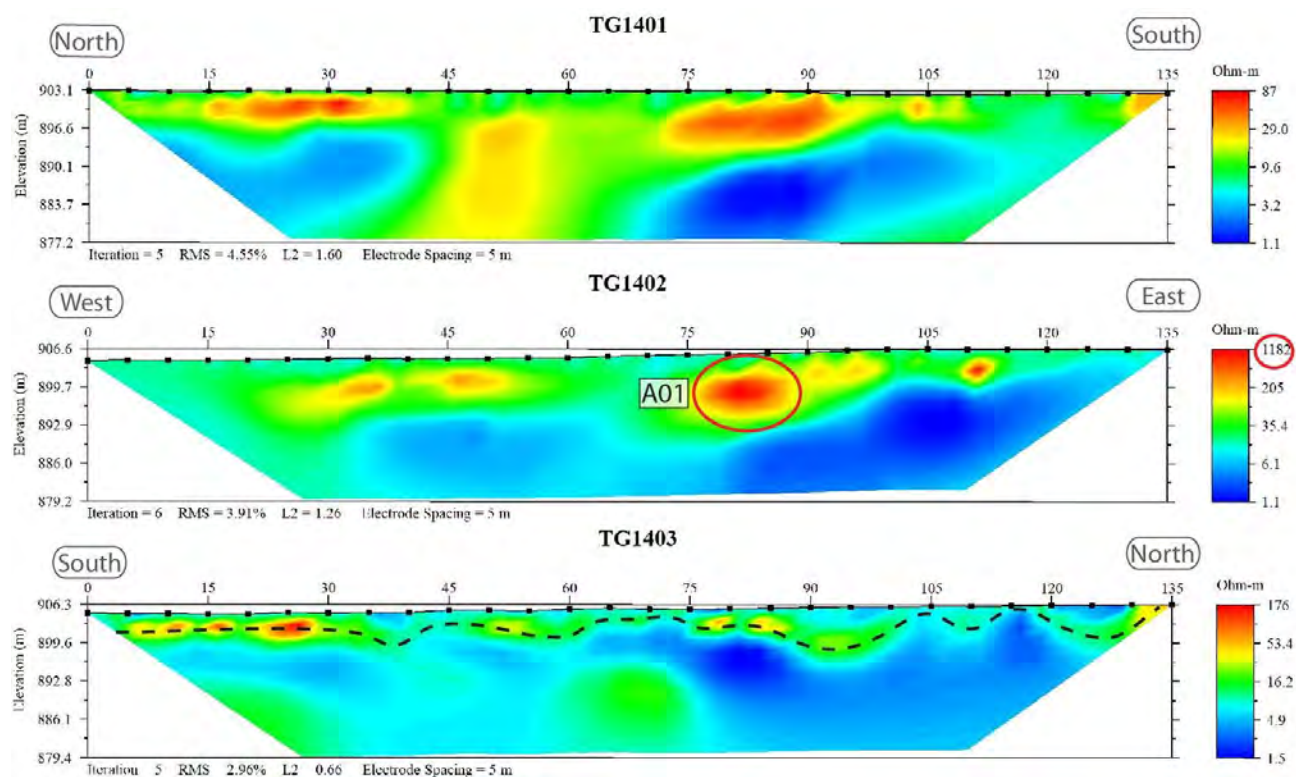


Figure 7: Feature 250614-R01. Soil subsidence within a trench.

### 3.2 Geophysical Survey

Electrical resistivity tomography forms images of the subsurface by causing a current to flow through the rock and soil and then measuring the resistance of these materials as the current flows through them. This measurement is taken many times and the resulting data, once processed, is used to produce a model of the subsurface (**Figure 8**). This model is produced using "non-unique" solutions, which means that there are many models and interpretations which will satisfy the data. Using experience and knowledge of the local geology, a high-confidence model can be established and used to develop an accurate understanding of what lies below the surface. This survey was conducted with the express purpose of locating subsurface voids and does not purport to find paleokarst (old, non-active karst features that have been filled in with sand and sediment) or nascent karst features below the resolution limit of the survey.

The results of this study indicate a chaotic geologic system with resistivities between 1.1 and ~200 Ohm-m (**Figure 8**). One higher-than-average subsurface anomaly (A01 at 1,182 Ohm-m) exists along line TG1402. This anomaly is outside of the 200-foot (61-meter) survey boundary. Areas of disjointed higher zones of resistivity and areas of curved higher resistivity exist.



**Figure 8: 2D inverted resistivity sections. Red ellipse highlights high-resistivity anomaly. Black-dashed line indicates areas of possible instability. Reds and oranges indicate higher resistivity values. Yellows and greens are medium-resistivity values. Blues are low-resistivity values. Please note that the color scale is relative.**

Please keep in mind when viewing the 2D inverted resistivity sections that color maps can be widely different for each view. Always check the color map located on the right side of the image when viewing the 2D images to ensure you understand the range of resistivities presented. Distances along the top and depths along the left side are in meters. The color map along the right side is in Ohm-m. Due to the nature of the survey, shallower zones have higher resolution between electrodes than deeper zones; therefore, small features at depth will not be visible.

**Table 3** contains a list of features identified during the surface karst survey and subsequent imagery analysis. Each feature is identified with a feature identification number (Feature ID), the type of feature, estimated size (in meters), recommended buffer (in meters), the likelihood of this feature being a surface karst feature (modifiers H/M for high or medium likelihood, V for field verified, R for resistivity anomaly), and its location in WGS-84/UTM-13 (EPSG: 32613).

**Table 3: Karst Feature Data Table**

KF Status	Feature ID	Type	Size (m)	Buffer (m)	Mod	Easting	Northing
PKF	250614-R01	Possible subsurface karst development	16.4	50	M	589442.576	3564345.508
PKF	250614-R02	Possible subsurface karst development	20.4	59	M	589433.893	3564373.034
<b>RKF</b>	<b>250617-D02</b>	<b>Swallet</b>	<b>2</b>	<b>50</b>	<b>V</b>	<b>589110.532</b>	<b>3564117.418</b>
PKF	250806-D01	Subsurface anomaly (7-8 meters depth)	5	10	R	589542.834	3564191.104

**NOTE:** Location data provided in WGS-84/UTM 13N. PKF – possible karst feature. RKF – recognized karst feature.

## 4.0 DISCUSSION

No surface karst features and no anomalies consistent with air-filled subsurface voids are found within 200 feet (61 meters) of the TG14 spill delineation boundary. Two medium-likelihood features that could not be confirmed as karst in the field (but also could not be ruled out) and one subsurface anomaly interpreted as possibly karst related exist outside of the 200-foot boundary, but within the 200-meter survey boundary. No springs exist within the 305-meter survey boundary; however one recognized karst feature (a swallet) exists just outside of the 305-meter survey boundary. Small solutionally enlarged voids or fractures at or near the resolution limit of the survey (2.5 – 3.0 meters) may also be present.

Areas of higher resistivity (reds, yellows, and greens) near the surface are interpreted as dry gypsite soils and gypsum or dolomite bedrock of the Rustler Formation<sup>[17]</sup> (**Figure 8** and **Figure 9**). These areas exhibit chaotic and disjointed characteristics indicating bedrock subsidence or collapse into possible paleokarst features. These features provide easy routes for meteoric water into the subsurface and allow for rapid dissolution of gypsum bedrock suggesting unstable ground may exist at this location. Very low-resistivity areas between 1.1 – 15 Ohm-m may either represent fluid from the brine release, surface-to-subsurface hydrologic pathways, or a layer of either clays and halite lenses or moist or saturated layers within the Rustler Formation (**Figure 8**).

Please remember that these are interpretations made from knowledge of the local subsurface materials and experience. **They remain interpretations until verified by geotechnical methods.** Employing a BLM-CFO approved karst monitor on site during any drilling and/or remediation activities is recommended.

Fracture sets within the subsurface can act as hydrologic pathways to the water table. Rapid dissolution of gypsum can occur along these pathways creating solution-enlarged fractures, and in some cases, voids within months to years. For this reason, this survey is valid only for this remediation event.

Within karst terrains like the project site, small air- or sediment-filled voids and/or brecciated zones and solutionally enlarged fractures that are below the resolution limit of the survey (2.5–3.0 meters) may exist; these may be encountered during excavation, and if so, should be evaluated by a karst specialist prior to continued work.



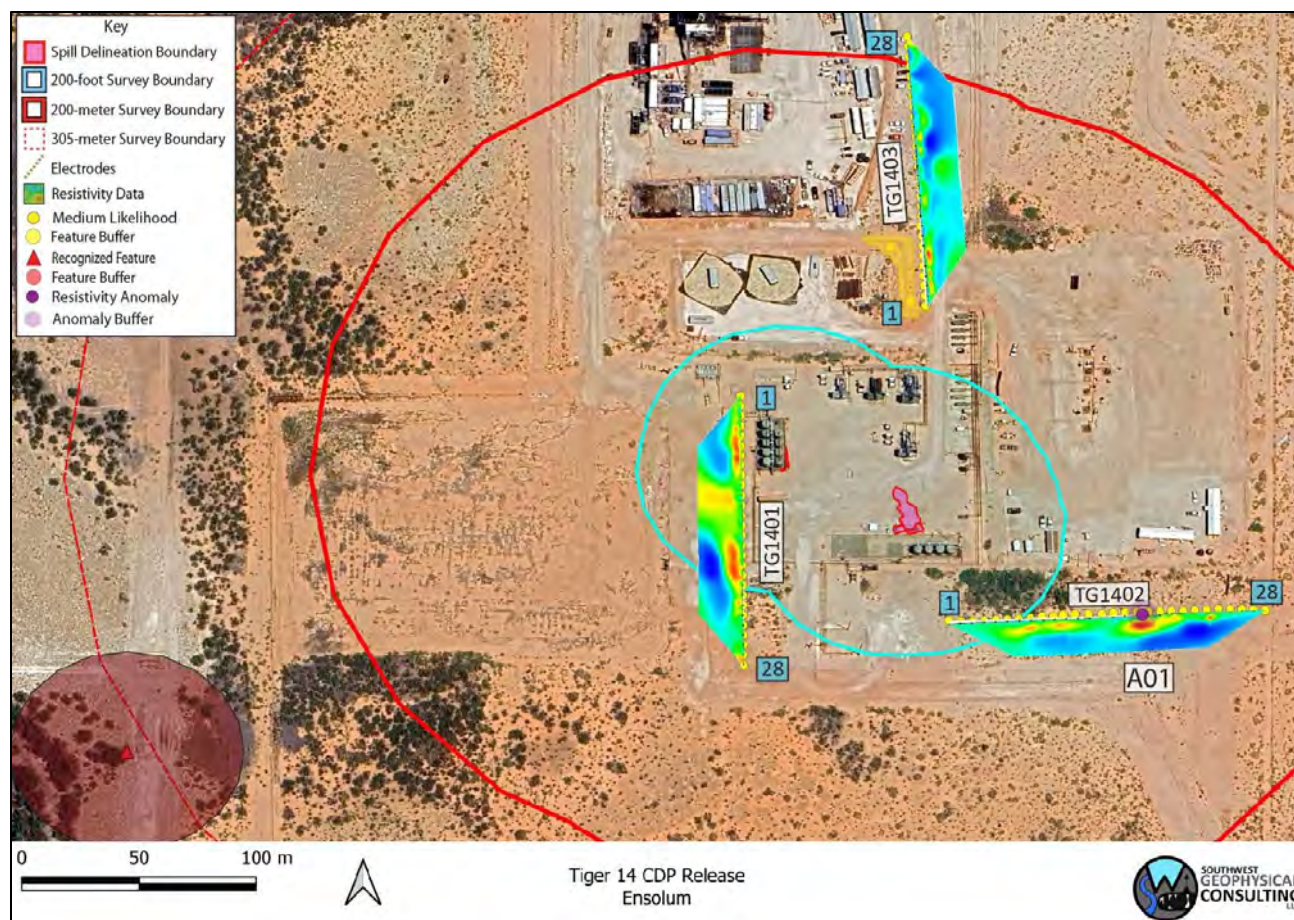


Figure 9: Data overlay. Colored trapezoids are the 2D inverted resistivity lines. Background image credit: Google Earth. Image date: July 13, 2024.

## 5.0 SUMMARY

- **No surface karst features exist within 200 feet (61 meters) of the spill delineation boundary.**  
Two surface karst features exist within the **200-meter** survey boundary.
- **One anomaly consistent with a subsurface air-filled void is interpreted to exist within the TG14 geophysical survey area, indicating the zone beneath the geophysical survey may be subject to collapse.**
- **Chaotic stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating unstable ground within the 200-foot survey boundary.**
- When conducting any remediation activities in this area, employing a BLM-CFO approved karst monitor on site is recommended.

## 6.0 DISCLOSURE STATEMENT

Karst occurrence zones are prone to rapid karst formation and warrant careful planning and engineering to mitigate karst-forming processes that could be accelerated by removal of surface cover or the vibrations associated with heavy equipment used in the remediation process.

Mitigation measures for any karst features revealed during excavation shall be approved by the Bureau of Land Management – Carlsbad Field Office and follow the Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment, Code 527, or the Bureau of Land Management Cave and Karst Management Handbook, H-8380-1.

Vigilance during remediation activities is paramount. If voids are encountered during excavation, contact the Bureau of Land Management Karst Division at (575) 234-5972, the New Mexico State Land Office Surface Resources Division at (505) 827-5768, or a BLM-CFO approved karst contractor and request an on-site investigation from a karst expert if one is not already on site. A karst consultant can generally be available in Eddy County within five hours.

Approved karst monitors should have karst feature identification training, at least two years of supervised experience identifying karst features, wilderness first aid training, SRT training, confined space training, gas monitor training, and a minimum of SPAR cave rescue training through NCRC. They should have with them the proper gear and be prepared both physically and mentally to enter a collapse feature within minutes to perform a rescue if needed. Monitoring services with qualified karst monitors, as well as cave surveys and geophysical surveys, are available from Southwest Geophysical Consulting.

Under no circumstances should an untrained, inexperienced person enter a cave, pit, sinkhole, or collapse feature. All field employees of Southwest Geophysical Consulting have extensive caving experience and the ability to determine whether entry into a karst feature is safe or presents a hazard. In the event it is necessary to enter a karst feature, Southwest Geophysical Consulting can provide these services on request.



Cave and karst resource inventory reports, karst feature investigations, and geophysical reports (along with the associated data files) commissioned at the request of the land manager should be submitted to BLM-CFO at [blm\\_nm\\_karst@blm.gov](mailto:blm_nm_karst@blm.gov).

Cave and karst resource inventory reports for the NMSLO should be submitted to the respective project manager.

Environmental karst reports should be submitted to the appropriate project manager at the New Mexico Oil Conservation Division.

## 7.0 REFERENCES

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**8.0 GLOSSARY OF TERMS**

AGI	Advanced Geosciences Inc.
BLM-CFO	Bureau of Land Management - Carlsbad Field Office
brecciated	Fractured rock caused by faulting or collapse.
caprock-collapse sinkhole	Collapse of roof-spanning rock into a cave or void.
cave	Natural opening at the surface large enough for a person to enter.
cover-collapse sinkhole	Collapse of roof-spanning soil or clay ground cover into a subsurface void.
ERI	Electrical Resistivity Imaging
GPS	Global Positioning System
grike	A solutionally enlarged, vertical, or sub-vertical joint or fracture.
(H)	High confidence modifier for a PKF. This is typically reserved for a feature that is definitely karst but has not been confirmed in the field.
HKOZ	High Karst Occurrence Zone
karst	A landscape containing solutional features such as caves, sinkholes, swallets, and springs.
(L)	Low confidence modifier for a PKF. This is typically a feature that cannot be ruled out as karst but is most likely NOT karst related. This modifier may also be used for pseudokarst features.
(M)	Medium confidence modifier for PKF. This is an ambiguous feature that can't be positively identified as karst without a field visit (e.g., burrows, abandoned unlined wells, solution tubes, pseudokarst).
MKOZ	Medium Karst Occurrence Zone
NCRC	National Cave Rescue Commission
NKF	Non-karst feature. Used for features originally identified as PKF that have been subsequently identified in the field as non-karst related. This term may also be used for pseudokarst features.
NMSLO	New Mexico State Land Office
Ohm-m	Ohm-meter, a unit of measurement for resistivity. Sometimes abbreviated $\Omega$ -m.
paleokarst	Previously formed karst features that have been filled in by erosion and/or deposition of minerals.
Pat	Permian Artesia Group
Pc	Permian Capitan Formation
Pcs	Permian Castile Formation
Pdl	Permian Dewey Lake Formation
PKF	Possible karst feature. This term is reserved for features identified in satellite or aerial imagery that have NOT been visited in the field. Further modifiers include (H) for high confidence, (M) for medium confidence, and (L) for low confidence. These confidence levels are based on field experience.
PLSS	Public Land Survey System
Pqg	Permian Queen/Greyburg Formation
Pru	Permian Rustler Formation

pseudokarst	Karst-like features (sinkholes, conduits, voids etc.) that are not formed by dissolution. These types of features include soil piping, lava tubes, and some cover-collapse and suffosion sinkholes.
Psl	Permian Salado Formation
Psr	Permian Seven Rivers Formation
Pt	Permian Tansill Formation
Py	Permian Yates Formation
Qal	Quaternary alluvium
Qe	Quaternary eolian deposits
Qp	Quaternary piedmont deposits
Qpl	Quaternary playa lake deposits
RKF	Recognized karst feature. This term is reserved for karst features that have been physically verified in the field.
SPAR	Small Party Assisted Rescue
sUAS	Small, uncrewed aerial system
suffosion sinkhole	Raveling of soil into a pre-existing void or fracture.
swallet	A natural opening in the surface, too small for a person, that drains water to an aquifer. Some are "open," meaning a void can be seen below; some are "closed," meaning they are full of sediment.
SWG	Southwest Geophysical Consulting, LLC
UTM	Universal Transverse Mercator (projected coordinates)
(V)	Field verified modifier for a RKF. This indicates that the feature has been visited by a qualified karst professional in the field and fully identified
WGS	World Geodetic System (geographic coordinates)

## 9.0 ATTESTATION

### David D. Decker, PhD, PG, CPG

Chief Executive Officer, Principal Geologist  
Southwest Geophysical Consulting, LLC  
5117 Fairfax Dr. NW  
Albuquerque, NM 87114  
[dave@swgeophys.com](mailto:dave@swgeophys.com)  
(505) 585-2550

## CERTIFICATE OF AUTHOR

I, David D. Decker, a Licensed Professional Geologist and a Certified Professional Geologist, do certify that:

- I am currently employed as a consulting geologist in the specialty of caves and karst with an office address of 5117 Fairfax Dr. NW, Albuquerque, NM, USA, 87114.
- I graduated with a Master of Science in Applied Physics with a specialization in Sensor Systems from the Naval Post Graduate School in Monterey, California, in 2003, and a Doctor of Philosophy in Earth and Planetary Sciences from the University of New Mexico, Albuquerque, New Mexico, in 2018.
- I am a Licensed Professional Geologist in the State of Texas, USA (PG-15242) and have been since 2021. I am a Certified Professional Geologist through the American Institute of Professional Geologists (CPG-12123) and have been since 2021.
- I have been employed as a geologist continuously since 2016. I was previously employed as a Fire Controlman, Naval Flight Officer, and Aerospace Engineering Duty Officer in the U.S. Navy and operated, maintained, and installed various sensor systems including magnetic, electromagnetic, radar, communications, and acoustic systems in various capacities from 1986 through 2010.
- I have been involved in various aspects of cave and karst studies continuously since 1985, including exploration, mapping, and scientific studies.
- I have read the definition of “qualified karst professional” set out in the ASTM Standard Practice for Preliminary Karst Terrain Assessment for Site Development (ASTM E-1527). I meet the definition of “qualified professional” for the purposes of this standard.
- I am responsible for the content, compilation, and editing of all sections of report number ENS-017-20250523 entitled, “Environmental Karst Study Report, Tiger 14 CDP, Eddy County, New Mexico.” I or a duly authorized and qualified representative of Southwest Geophysical Consulting, LLC, have personally visited this site and/or reviewed the aerial imagery on the date or dates mentioned in section **2.3 Description of Survey**.



- I have no prior involvement nor monetary interest in the described property or project, save for my fee for conducting this investigation and providing the report.

Dated in Albuquerque, New Mexico, August 6, 2025.



David D. Decker

PhD, CPG-12123







## APPENDIX C

### Lithologic Soil Sampling Logs

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 <b>ENSOLUM</b>		Sample Name: BH01		Date: 6/4/2025				
		Site Name: Tiger 14 CDP						
		Incident Number: nAPP2513455553						
		Job Number: 03A2270101						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Coordinates: 32.211165, -104.050873			Logged By: Jenna Hinkle		Method: Auger/Core Drill			
			Hole Diameter 2"		Total Depth: 4'			
Comments: Field screening conducted with HACH Chloride Test Strips and Petroflag® for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 20% correction factor is included.								
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D			Y	BH01		0		Pad Caliche - White to very light brown, fine to coarse with small to large gravel, Moist, Non-Plastic, Noncohesive, Well graded
D	190		N	BH01	1	1		
D	<168	8	N	BH01	2	2	CCHE	
D	<168		N	BH01	3	3		Caliche - White to very light brown, Moderately consolidated, Fine to medium grained, Carbonate and sand grains in carbonate matrix, Massive, Well graded
D	<168		N	BH01	4	4		
Total Depth @ 4 feet bgs.								

 <b>ENSOLUM</b>		Sample Name: BH02		Date: 6/4/2025				
		Site Name: Tiger 14 CDP						
		Incident Number: nAPP2513455553						
		Job Number: 03A2270101						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Coordinates: 32.211272, -104.050948			Logged By: Jenna Hinkle		Method: Auger/Core Drill			
			Hole Diameter: 2"		Total Depth: 9'			
Comments: Field screening conducted with HACH Chloride Test Strips and Petroflag® for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 20% correction factor is included.								
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1114		Y	BH02	0	0	CCHE	Pad Caliche - White to very light brown, fine to coarse with small to large gravel, Moist, Non-Plastic, Noncohesive, Well graded
D	482	98	N	BH02	1	1		
D	722		N	BH02	2	2	SW-SC	Sand with clay w/ trace gypsum - Medium to light brown, Very fine to coarse grained, Moist, Low Plasticity, Cohesive, Well graded
D	1299		N	BH02	3	3		
D	868		N	BH02	4	4	SW-SM	Sand with Silt w/ trace Gypsum - Light brown to white, Very fine to coarse grained, Moist, Non-plastic, Noncohesive, Well graded
D	1204		N	BH02	5	5		
D	795			BH02	5.5			
D	722		N	BH02	6	6		
D	431		N	BH02	7	7	CH	Fat Clay w/ trace Gypsum - Red to medium brown, Very fine grained, moist, Medium plasticity, Cohesive, Massive, Poorly graded
D	593		N	BH02	8	8		
D	336	63	N	BH02	9	9		
Total Depth @ 9 feet bgs.								





## APPENDIX D

### Photographic Log

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# Photographic Log

San Mateo Black River Oil Pipeline, LLC

Tiger 14 CDP

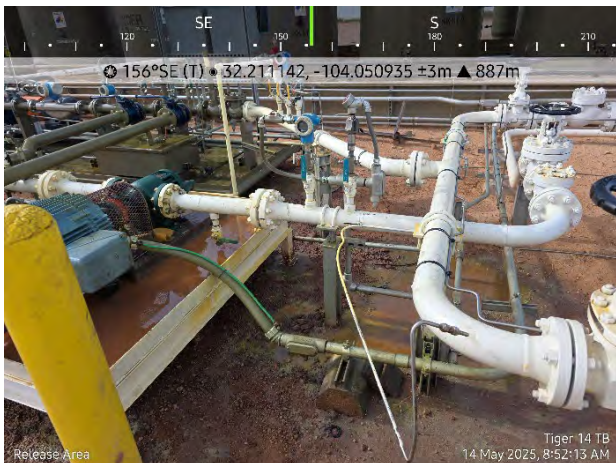
nAPP2513455553



Photograph 1  
Description: Lease Sign  
View: South  
Date: 5/14/2025



Photograph 2  
Description: Release Area  
View: West  
Date: 5/14/2025



Photograph 3  
Description: Release Area  
View: Southeast  
Date: 5/14/2025



Photograph 4  
Description: Release Area  
View: West  
Date: 5/14/2025





### Photographic Log

San Mateo Black River Oil Pipeline, LLC

Tiger 14 CDP

nAPP2513455553



Photograph 5  
Date: 5/22/2025  
Description: Delineation (BH01)  
View: South



Photograph 6  
Date: 5/22/2025  
Description: Delineation (BH02)  
View: South



Photograph 7  
Date: 6/4/2025  
Description: Delineation (BH01)  
View: East



Photograph 8  
Date: 6/4/2025  
Description: Delineation (BH02)  
View: Northeast



## APPENDIX E

### Laboratory Analytical Reports & Chain-of-Custody Documentation

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Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

San Mateo Stebbins Water  
Management, LLC

Project Name: Tiger 14 CDP

Work Order: E505262

Job Number: 23003-0002

Received: 5/23/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 5/30/25

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Tiger 14 CDP  
Workorder: E505262  
Date Received: 5/23/2025 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/23/2025 7:30:00AM, under the Project Name: Tiger 14 CDP.

The analytical test results summarized in this report with the Project Name: Tiger 14 CDP apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported: 05/30/25 11:18
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01-0'	E505262-01A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
SS01-1'	E505262-02A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:18:25AM

**SS01-0'**

**E505262-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/24/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/24/25	
Toluene	ND	0.0250	1	05/23/25	05/24/25	
o-Xylene	ND	0.0250	1	05/23/25	05/24/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/24/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/24/25	
<i>Surrogate: Bromofluorobenzene</i>		99.2 %	70-130	05/23/25	05/24/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.6 %	70-130	05/23/25	05/24/25	
<i>Surrogate: Toluene-d8</i>		99.5 %	70-130	05/23/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/24/25	
<i>Surrogate: Bromofluorobenzene</i>		99.2 %	70-130	05/23/25	05/24/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.6 %	70-130	05/23/25	05/24/25	
<i>Surrogate: Toluene-d8</i>		99.5 %	70-130	05/23/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>		110 %	61-141	05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522015
Chloride	379	40.0	2	05/27/25	05/27/25	



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:18:25AM

SS01-1'

E505262-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/24/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/24/25	
Toluene	ND	0.0250	1	05/23/25	05/24/25	
o-Xylene	ND	0.0250	1	05/23/25	05/24/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/24/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/24/25	
Surrogate: Bromofluorobenzene	98.2 %	70-130		05/23/25	05/24/25	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		05/23/25	05/24/25	
Surrogate: Toluene-d8	101 %	70-130		05/23/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/24/25	
Surrogate: Bromofluorobenzene	98.2 %	70-130		05/23/25	05/24/25	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		05/23/25	05/24/25	
Surrogate: Toluene-d8	101 %	70-130		05/23/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
Surrogate: n-Nonane	111 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522015
Chloride	109	20.0	1	05/27/25	05/27/25	



## QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	5/30/2025 11:18:25AM

## Volatile Organic Compounds by EPA 8260B

Analyst: SL

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

## Blank (2521128-BLK1)

Prepared: 05/23/25 Analyzed: 05/29/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

## LCS (2521128-BS1)

Prepared: 05/23/25 Analyzed: 05/29/25

Benzene	2.52	0.0250	2.50		101	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.1	70-130			
Toluene	2.38	0.0250	2.50		95.3	70-130			
o-Xylene	2.25	0.0250	2.50		89.9	70-130			
p,m-Xylene	4.56	0.0500	5.00		91.1	70-130			
Total Xylenes	6.81	0.0250	7.50		90.7	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.7	70-130			

## Matrix Spike (2521128-MS1)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Benzene	2.49	0.0250	2.50	ND	99.7	48-131			
Ethylbenzene	2.54	0.0250	2.50	ND	101	45-135			
Toluene	2.43	0.0250	2.50	ND	97.3	48-130			
o-Xylene	2.39	0.0250	2.50	ND	95.5	43-135			
p,m-Xylene	4.80	0.0500	5.00	ND	96.0	43-135			
Total Xylenes	7.19	0.0250	7.50	ND	95.8	43-135			
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			

## Matrix Spike Dup (2521128-MSD1)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Benzene	2.50	0.0250	2.50	ND	100	48-131	0.440	23	
Ethylbenzene	2.54	0.0250	2.50	ND	101	45-135	0.0197	27	
Toluene	2.45	0.0250	2.50	ND	98.0	48-130	0.696	24	
o-Xylene	2.46	0.0250	2.50	ND	98.3	43-135	2.91	27	
p,m-Xylene	4.95	0.0500	5.00	ND	98.9	43-135	3.00	27	
Total Xylenes	7.40	0.0250	7.50	ND	98.7	43-135	2.97	27	
Surrogate: Bromofluorobenzene	0.512		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.1	70-130			





## QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	<b>Reported:</b>
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	5/30/2025 11:18:25AM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2521128-BLK1)

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

## LCS (2521128-BS2)

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	45.8	20.0	50.0		91.6	70-130			
Surrogate: Bromofluorobenzene	0.500		0.500		99.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.508		0.500		102	70-130			

## Matrix Spike (2521128-MS2)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	50.7	20.0	50.0	ND	101	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.516		0.500		103	70-130			

## Matrix Spike Dup (2521128-MSD2)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	54.8	20.0	50.0	ND	110	70-130	7.80	20	
Surrogate: Bromofluorobenzene	0.510		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.7	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	5/30/2025 11:18:25AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: HM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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<b>Blank (2522007-BLK1)</b>					Prepared: 05/27/25 Analyzed: 05/27/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.5		50.0		113	61-141			

<b>LCS (2522007-BS1)</b>					Prepared: 05/27/25 Analyzed: 05/27/25				
Diesel Range Organics (C10-C28)	286	25.0	250		114	66-144			
Surrogate: n-Nonane	55.2		50.0		110	61-141			

<b>Matrix Spike (2522007-MS1)</b>					<b>Source: E505259-22</b>		Prepared: 05/27/25 Analyzed: 05/27/25		
Diesel Range Organics (C10-C28)	297	25.0	250	ND	119	56-156			
Surrogate: n-Nonane	55.6		50.0		111	61-141			

<b>Matrix Spike Dup (2522007-MSD1)</b>					<b>Source: E505259-22</b>		Prepared: 05/27/25 Analyzed: 05/27/25		
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	56-156	2.11	20	
Surrogate: n-Nonane	55.0		50.0		110	61-141			



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	5/30/2025 11:18:25AM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522015-BLK1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Chloride	ND	20.0							
LCS (2522015-BS1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2522015-MS1)					Source: E505260-05		Prepared: 05/27/25 Analyzed: 05/27/25		
Chloride	419	20.0	250	112	123	80-120			M2
Matrix Spike Dup (2522015-MSD1)					Source: E505260-05		Prepared: 05/27/25 Analyzed: 05/27/25		
Chloride	449	20.0	250	112	134	80-120	6.75	20	M2

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



Definitions and Notes

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	05/30/25 11:18

- M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.





## Page 1 of 1



## Envirotech Analytical Laboratory

Printed: 5/23/2025 8:48:20AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	San Mateo Stebbins Water Management, LLC	Date Received:	05/23/25 07:30	Work Order ID:	E505262
Phone:	(972) 371-5200	Date Logged In:	05/22/25 15:37	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	05/30/25 17:00 (4 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

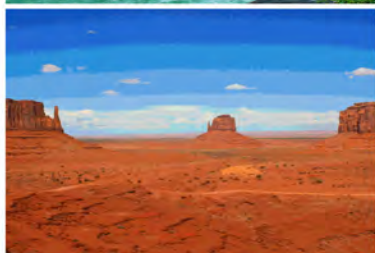
Date



envirotech Inc.

Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

### San Mateo Stebbins Water Management, LLC

Project Name: Tiger 14 CDP

Work Order: E505278

Job Number: 23003-0002

Received: 5/27/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/2/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 6/2/25

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Tiger 14 CDP  
Workorder: E505278  
Date Received: 5/27/2025 7:15:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/27/2025 7:15:00AM, under the Project Name: Tiger 14 CDP.

The analytical test results summarized in this report with the Project Name: Tiger 14 CDP apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

**Walter Hinchman**  
Laboratory Director  
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Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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## Sample Summary

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	<b>Reported:</b> 06/02/25 11:16
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 - 0'	E505278-01A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.
BH01 - 1'	E505278-02A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.
BH02 - 0'	E505278-03A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.
BH02 - 1'	E505278-04A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.
BH02 - 2'	E505278-05A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.
BH02 - 3'	E505278-06A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.
BH02 - 4'	E505278-07A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.
BH02 - 5'	E505278-08A	Soil	05/22/25	05/27/25	Glass Jar, 2 oz.



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

**BH01 - 0'**

**E505278-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Benzene	ND	0.0250	1	05/28/25	05/29/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/29/25	
Toluene	ND	0.0250	1	05/28/25	05/29/25	
o-Xylene	ND	0.0250	1	05/28/25	05/29/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/29/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/29/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/29/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		105 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2522055	
Diesel Range Organics (C10-C28)	6180	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	3350	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
		100 %	61-141	05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522054	
Chloride	986	40.0	2	05/28/25	05/28/25	



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

## BH01 - 1'

## E505278-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2522038
Benzene	ND	0.0250	1	05/28/25	05/29/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/29/25	
Toluene	ND	0.0250	1	05/28/25	05/29/25	
o-Xylene	ND	0.0250	1	05/28/25	05/29/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/29/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/29/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		118 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2522038
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/29/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		106 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522055
Diesel Range Organics (C10-C28)	205	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	135	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
		103 %	61-141	05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2522054
Chloride	111	20.0	1	05/28/25	05/28/25	





## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

BH02 - 0'

E505278-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Benzene	ND	0.0250	1	05/28/25	05/29/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/29/25	
Toluene	ND	0.0250	1	05/28/25	05/29/25	
o-Xylene	ND	0.0250	1	05/28/25	05/29/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/29/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/29/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/29/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		108 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2522055	
Diesel Range Organics (C10-C28)	78.2	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	85.7	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
		105 %	61-141	05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522054	
Chloride	1270	200	10	05/28/25	05/28/25	



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

## BH02 - 1'

## E505278-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2522038
Benzene	ND	0.0250	1	05/28/25	05/29/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/29/25	
Toluene	ND	0.0250	1	05/28/25	05/29/25	
o-Xylene	ND	0.0250	1	05/28/25	05/29/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/29/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/29/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2522038
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/29/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		109 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522055
Diesel Range Organics (C10-C28)	ND	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
		106 %	61-141	05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2522054
Chloride	604	200	10	05/28/25	05/28/25	



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

BH02 - 2'

E505278-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Benzene	ND	0.0250	1	05/28/25	05/29/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/29/25	
Toluene	ND	0.0250	1	05/28/25	05/29/25	
o-Xylene	ND	0.0250	1	05/28/25	05/29/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/29/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/29/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.0 %	70-130		05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/29/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	110 %	70-130		05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2522055	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
	105 %	61-141		05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522054	
Chloride	746	200	10	05/28/25	05/28/25	



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

## BH02 - 3'

## E505278-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Benzene	ND	0.0250	1	05/28/25	05/29/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/29/25	
Toluene	ND	0.0250	1	05/28/25	05/29/25	
o-Xylene	ND	0.0250	1	05/28/25	05/29/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/29/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/29/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/29/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		105 %	70-130	05/28/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2522055	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
		104 %	61-141	05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522054	
Chloride	1400	40.0	2	05/28/25	05/28/25	





## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

BH02 - 4'

E505278-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Benzene	ND	0.0250	1	05/28/25	05/30/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/30/25	
Toluene	ND	0.0250	1	05/28/25	05/30/25	
o-Xylene	ND	0.0250	1	05/28/25	05/30/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/30/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/30/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.8 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/30/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	111 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2522055	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
	106 %	61-141		05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522054	
Chloride	742	100	5	05/28/25	05/28/25	



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/2/2025 11:16:22AM

BH02 - 5'

E505278-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Benzene	ND	0.0250	1	05/28/25	05/30/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/30/25	
Toluene	ND	0.0250	1	05/28/25	05/30/25	
o-Xylene	ND	0.0250	1	05/28/25	05/30/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/30/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/30/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2522038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/30/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	111 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2522055	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/28/25	05/29/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/28/25	05/29/25	
<i>Surrogate: n-Nonane</i>						
	107 %	61-141		05/28/25	05/29/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522054	
Chloride	1060	200	10	05/28/25	05/29/25	



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/2/2025 11:16:22AM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522038-BLK1) Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.12		8.00		101	70-130			

LCS (2522038-BS1) Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	4.87	0.0250	5.00		97.3	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.1	70-130			
Toluene	4.86	0.0250	5.00		97.2	70-130			
o-Xylene	4.87	0.0250	5.00		97.3	70-130			
p,m-Xylene	9.86	0.0500	10.0		98.6	70-130			
Total Xylenes	14.7	0.0250	15.0		98.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.32		8.00		104	70-130			

Matrix Spike (2522038-MS1) Source: E505278-06 Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	5.30	0.0250	5.00	ND	106	70-130			
Ethylbenzene	5.28	0.0250	5.00	ND	106	70-130			
Toluene	5.30	0.0250	5.00	ND	106	70-130			
o-Xylene	5.28	0.0250	5.00	ND	106	70-130			
p,m-Xylene	10.7	0.0500	10.0	ND	107	70-130			
Total Xylenes	16.0	0.0250	15.0	ND	107	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.20		8.00		103	70-130			

Matrix Spike Dup (2522038-MSD1) Source: E505278-06 Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	6.06	0.0250	5.00	ND	121	70-130	13.3	27	
Ethylbenzene	6.05	0.0250	5.00	ND	121	70-130	13.6	26	
Toluene	6.06	0.0250	5.00	ND	121	70-130	13.4	20	
o-Xylene	6.02	0.0250	5.00	ND	120	70-130	13.0	25	
p,m-Xylene	12.2	0.0500	10.0	ND	122	70-130	13.2	23	
Total Xylenes	18.2	0.0250	15.0	ND	122	70-130	13.1	26	
Surrogate: 4-Bromochlorobenzene-PID	8.20		8.00		103	70-130			



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/2/2025 11:16:22AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522038-BLK1) Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.37		8.00		105	70-130			

LCS (2522038-BS2) Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	45.0	20.0	50.0		90.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.51		8.00		106	70-130			

Matrix Spike (2522038-MS2) Source: E505278-06 Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	48.0	20.0	50.0	ND	96.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.50		8.00		106	70-130			

Matrix Spike Dup (2522038-MSD2) Source: E505278-06 Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	57.6	20.0	50.0	ND	115	70-130	18.3	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.90		8.00		111	70-130			



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/2/2025 11:16:22AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: HM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522055-BLK1)					Prepared: 05/28/25 Analyzed: 05/28/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.2		50.0		104	61-141			

LCS (2522055-BS1)					Prepared: 05/28/25 Analyzed: 05/28/25				
Diesel Range Organics (C10-C28)	274	25.0	250		110	66-144			
Surrogate: n-Nonane	51.3		50.0		103	61-141			

Matrix Spike (2522055-MS1)					Source: E505297-01		Prepared: 05/28/25 Analyzed: 05/28/25		
Diesel Range Organics (C10-C28)	1970	25.0	250	1770	79.2	56-156			
Surrogate: n-Nonane	344		50.0		689	61-141			S5

Matrix Spike Dup (2522055-MSD1)					Source: E505297-01		Prepared: 05/28/25 Analyzed: 05/28/25		
Diesel Range Organics (C10-C28)	1790	25.0	250	1770	9.33	56-156	9.27	20	M4
Surrogate: n-Nonane	368		50.0		736	61-141			S5





QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/2/2025 11:16:22AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522054-BLK1)					Prepared: 05/28/25 Analyzed: 05/28/25				
Chloride	ND	20.0							
LCS (2522054-BS1)					Prepared: 05/28/25 Analyzed: 05/28/25				
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2522054-MS1)					Source: E505241-05		Prepared: 05/28/25 Analyzed: 05/28/25		
Chloride	1680	40.0	250	1460	90.1	80-120			
Matrix Spike Dup (2522054-MSD1)					Source: E505241-05		Prepared: 05/28/25 Analyzed: 05/28/25		
Chloride	1680	40.0	250	1460	90.2	80-120	0.0126	20	

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



Definitions and Notes

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	06/02/25 11:16

- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



## Chain of Custody

<b>Client Information</b>				<b>Invoice Information</b>						<b>Lab Use Only</b>								<b>TAT</b>				<b>State</b>							
Client: San Mateo				Company: Ensolum LLC						Lab WO# E505278				Job Number 23003-000Z				1D		2D		3D		Std		NM	CO	UT	TX
Project: Tiger 14 CDP				Address: 3122 National Parks Hwy																				X					
Project Manager: Ashley Giovenego				City, State, Zip: Carlsbad NM, 88220																									
Address: 3122 National Parks Hwy				Phone: 575-988-0055																									
City, State, Zip: Carlsbad NM, 88220				Email: agiovenego@ensolum.com																									
Phone: 575-988-0055				Miscellaneous:																									
Email: agiovenego@ensolum.com																													
Sample Information										Analysis and Method										EPA Program									
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA												
12:03	5/22/2025	S	1	BH01-0'		1						X																	
12:10	5/22/2025	S	1	BH01-1'		2						X																	
13:08	5/22/2025	S	1	BH02-0		3						X																	
13:12	5/22/2025	S	1	BH02-1'		4						X																	
13:15	5/22/2025	S	1	BH02-2'		5						X																	
13:18	5/22/2025	S	1	BH02-3'		6						X																	
14:11	5/22/2025	S	1	BH02-4'		7						X																	
14:16	5/22/2025	S	1	BH02-5'		8						X																	
Additional Instructions: Please CC: cburton@ensolum.com, agiovenego@ensolum.com, chamilton@ensolum.com, iestrella@ensoulm.com, bsimmons@ensolum.com, igonzalez@ensolum.com, bmoir@ensolum.com, oaderinto@ensolum.com I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																													
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. <b>Lab Use Only</b> Received on ice: Y / N T1 T2 T3 AVG Temp °C																													
Sample Matrix: S - Soil, sd - Solid, sg - Sludge, A - Aqueous, O - Other Container type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																													
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																													

## Envirotech Analytical Laboratory

Printed: 5/27/2025 9:45:02AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	San Mateo Stebbins Water Management, LLC	Date Received:	05/27/25 07:15	Work Order ID:	E505278
Phone:	(972) 371-5200	Date Logged In:	05/23/25 16:43	Logged In By:	Noe Soto
Email:	agiovento@ensolum.com	Due Date:	06/02/25 17:00 (4 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

San Mateo Stebbins Water  
Management, LLC

Project Name: Tiger 14 CDP

Work Order: E505293

Job Number: 23003-0002

Received: 5/28/2025

Revision: 2

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/3/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 6/3/25

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Tiger 14 CDP  
Workorder: E505293  
Date Received: 5/28/2025 6:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/28/2025 6:30:00AM, under the Project Name: Tiger 14 CDP.

The analytical test results summarized in this report with the Project Name: Tiger 14 CDP apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
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[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

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[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:  06/03/25 15:17
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS02-0'	E505293-01A	Soil	05/23/25	05/28/25	Glass Jar, 2 oz.
SS02-1'	E505293-02A	Soil	05/23/25	05/28/25	Glass Jar, 2 oz.



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/3/2025 3:17:30PM

**SS02-0'**

**E505293-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2522040	
Benzene	ND	0.0250	1	05/28/25	05/30/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/30/25	
Toluene	ND	0.0250	1	05/28/25	05/30/25	
o-Xylene	ND	0.0250	1	05/28/25	05/30/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/30/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/30/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.9 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2522040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/30/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	98.0 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522065	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/29/25	05/30/25	
Oil Range Organics (C28-C36)	50.4	50.0	1	05/29/25	05/30/25	
<i>Surrogate: n-Nonane</i>	103 %	61-141		05/29/25	05/30/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2522057	
Chloride	ND	100	5	05/28/25	05/29/25	



## Sample Data

San Mateo Stebbins Water Management, LLC  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/3/2025 3:17:30PM

SS02-1'

E505293-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2522040	
Benzene	ND	0.0250	1	05/28/25	05/30/25	
Ethylbenzene	ND	0.0250	1	05/28/25	05/30/25	
Toluene	ND	0.0250	1	05/28/25	05/30/25	
o-Xylene	ND	0.0250	1	05/28/25	05/30/25	
p,m-Xylene	ND	0.0500	1	05/28/25	05/30/25	
Total Xylenes	ND	0.0250	1	05/28/25	05/30/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.3 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2522040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/28/25	05/30/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	97.6 %	70-130		05/28/25	05/30/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522065	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/29/25	05/30/25	
Oil Range Organics (C28-C36)	59.3	50.0	1	05/29/25	05/30/25	
<i>Surrogate: n-Nonane</i>	101 %	61-141		05/29/25	05/30/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2522057	
Chloride	278	100	5	05/28/25	05/29/25	





## QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	<b>Reported:</b>
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/3/2025 3:17:30PM

## Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2522040-BLK1)

Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.05		8.00		101	70-130			

## LCS (2522040-BS1)

Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	5.46	0.0250	5.00		109	70-130			
Ethylbenzene	5.40	0.0250	5.00		108	70-130			
Toluene	5.45	0.0250	5.00		109	70-130			
o-Xylene	5.31	0.0250	5.00		106	70-130			
p,m-Xylene	10.8	0.0500	10.0		108	70-130			
Total Xylenes	16.2	0.0250	15.0		108	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.04		8.00		101	70-130			

## Matrix Spike (2522040-MS1)

Source: E505292-22

Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	5.54	0.0250	5.00	ND	111	70-130			
Ethylbenzene	5.46	0.0250	5.00	ND	109	70-130			
Toluene	5.52	0.0250	5.00	ND	110	70-130			
o-Xylene	5.38	0.0250	5.00	ND	108	70-130			
p,m-Xylene	11.0	0.0500	10.0	ND	110	70-130			
Total Xylenes	16.4	0.0250	15.0	ND	109	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.94		8.00		99.2	70-130			

## Matrix Spike Dup (2522040-MSD1)

Source: E505292-22

Prepared: 05/28/25 Analyzed: 05/29/25

Benzene	4.98	0.0250	5.00	ND	99.6	70-130	10.6	27	
Ethylbenzene	4.91	0.0250	5.00	ND	98.2	70-130	10.6	26	
Toluene	4.96	0.0250	5.00	ND	99.3	70-130	10.7	20	
o-Xylene	4.82	0.0250	5.00	ND	96.5	70-130	10.8	25	
p,m-Xylene	9.88	0.0500	10.0	ND	98.8	70-130	10.4	23	
Total Xylenes	14.7	0.0250	15.0	ND	98.1	70-130	10.6	26	
Surrogate: 4-Bromochlorobenzene-PID	7.86		8.00		98.2	70-130			



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/3/2025 3:17:30PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522040-BLK1) Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.85		8.00		98.1	70-130			

LCS (2522040-BS2) Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	45.7	20.0	50.0		91.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.01		8.00		100	70-130			

Matrix Spike (2522040-MS2) Source: E505292-22 Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	49.5	20.0	50.0	ND	99.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.87		8.00		98.4	70-130			

Matrix Spike Dup (2522040-MSD2) Source: E505292-22 Prepared: 05/28/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	49.2	20.0	50.0	ND	98.3	70-130	0.786	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.93		8.00		99.1	70-130			



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/3/2025 3:17:30PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522065-BLK1)					Prepared: 05/29/25 Analyzed: 05/29/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.5		50.0		107	61-141			

LCS (2522065-BS1)					Prepared: 05/29/25 Analyzed: 05/29/25				
Diesel Range Organics (C10-C28)	277	25.0	250		111	66-144			
Surrogate: n-Nonane	51.1		50.0		102	61-141			

Matrix Spike (2522065-MS1)					Source: E505281-02		Prepared: 05/29/25 Analyzed: 06/03/25		
Diesel Range Organics (C10-C28)	7200	500	250	7430	NR	56-156			M4
Surrogate: n-Nonane	84.3		50.0		169	61-141			S5

Matrix Spike Dup (2522065-MSD1)					Source: E505281-02		Prepared: 05/29/25 Analyzed: 06/03/25		
Diesel Range Organics (C10-C28)	7940	500	250	7430	204	56-156	9.79	20	M4
Surrogate: n-Nonane	88.5		50.0		177	61-141			S5



QC Summary Data

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/3/2025 3:17:30PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522057-BLK1)					Prepared: 05/28/25 Analyzed: 05/29/25				
Chloride	ND	20.0							
LCS (2522057-BS1)					Prepared: 05/28/25 Analyzed: 05/29/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2522057-MS1)					Source: E505292-22		Prepared: 05/28/25 Analyzed: 05/29/25		
Chloride	304	20.0	250	50.9	101	80-120			
Matrix Spike Dup (2522057-MSD1)					Source: E505292-22		Prepared: 05/28/25 Analyzed: 05/29/25		
Chloride	305	20.0	250	50.9	102	80-120	0.357	20	

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

Definitions and Notes

San Mateo Stebbins Water Management, LLC	Project Name:	Tiger 14 CDP	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	06/03/25 15:17

- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.





## Chain of Custody

Page 1 of 1

Client Information				Invoice Information				Lab Use Only				TAT				State			
Client: San Mateo				Company: Ensolum LLC				Lab WO#		Job Number		1D	2D	3D	Std	NM	CO	UT	TX
Project: Tiger 14 CDP				Address: 3122 National Parks Hwy				E05293		23003-002					X	X			
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220															
Address: 3122 National Parks Hwy				Phone: 575-988-0055															
City, State, Zip: Carlsbad NM, 88220				Email: agiovengo@ensolum.com															
Phone: 575-988-0055				Miscellaneous:															
Email: agiovengo@ensolum.com																			

Sample Information							DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 3000	BGDOC - NM	TCEQ 1005 - T	RCRA 8 Metals					Remarks
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number													
9:57	5/23/2025	S	1	SS02-0'		1						X							2.9
10:14	5/23/2025	S	1	SS02-1'		2						X							2.8

Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, chamilton@ensolum.com, iestrella@ensoulm.com, bsimmons@ensolum.com, igonzalez@ensolum.com, bmoir@ensolum.com, oaderinto@ensolum.com

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

Sampled by: AK; OA

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.  Lab Use Only Received on ice: (Y) N  T1 T2 T3  AVG Temp °C
Michelle Gonzales	5-27-25	7:11	Michelle Gonzales	5-27-23	6:11	
Michelle Gonzales	5-27-25	1700	Richard Gonzalez	5-27-23	1700	
Richard Gonzalez	5-27-25	23:30	Michelle Gonzales	5-28-25	6:30	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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

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

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



envirotech

## Envirotech Analytical Laboratory

Printed: 5/28/2025 8:11:37AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	San Mateo Stebbins Water Management, LLC	Date Received:	05/28/25 06:30	Work Order ID:	E505293
Phone:	(972) 371-5200	Date Logged In:	05/27/25 15:42	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	06/03/25 17:00 (4 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Matador Resources, LLC.

Project Name: Tiger 14 CDP

Work Order: E506038

Job Number: 23003-0002

Received: 6/6/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/11/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 6/11/25

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Tiger 14 CDP  
Workorder: E506038  
Date Received: 6/6/2025 6:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/6/2025 6:45:00AM, under the Project Name: Tiger 14 CDP.

The analytical test results summarized in this report with the Project Name: Tiger 14 CDP apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
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**Southern New Mexico Area**

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Tiger 14 CDP Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 06/11/25 12:13
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01-2'	E506038-01A	Soil	06/04/25	06/06/25	Glass Jar, 2 oz.
BH02-7'	E506038-02A	Soil	06/04/25	06/06/25	Glass Jar, 2 oz.
BH02-9'	E506038-03A	Soil	06/04/25	06/06/25	Glass Jar, 2 oz.



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/11/2025 12:13:38PM

**BH01-2'**

**E506038-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2523141	
Benzene	ND	0.0250	1	06/06/25	06/07/25	
Ethylbenzene	ND	0.0250	1	06/06/25	06/07/25	
Toluene	ND	0.0250	1	06/06/25	06/07/25	
o-Xylene	ND	0.0250	1	06/06/25	06/07/25	
p,m-Xylene	ND	0.0500	1	06/06/25	06/07/25	
Total Xylenes	ND	0.0250	1	06/06/25	06/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		90.5 %	70-130	06/06/25	06/07/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2523141	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/06/25	06/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	06/06/25	06/07/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: HM		Batch: 2523139	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/06/25	06/10/25	
Oil Range Organics (C28-C36)	ND	50.0	1	06/06/25	06/10/25	
<i>Surrogate: n-Nonane</i>		120 %	61-141	06/06/25	06/10/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2523140	
Chloride	ND	20.0	1	06/06/25	06/06/25	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/11/2025 12:13:38PM

BH02-7'

E506038-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2523141	
Benzene	ND	0.0250	1	06/06/25	06/07/25	
Ethylbenzene	ND	0.0250	1	06/06/25	06/07/25	
Toluene	ND	0.0250	1	06/06/25	06/07/25	
o-Xylene	ND	0.0250	1	06/06/25	06/07/25	
p,m-Xylene	ND	0.0500	1	06/06/25	06/07/25	
Total Xylenes	ND	0.0250	1	06/06/25	06/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.5 %	70-130		06/06/25	06/07/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2523141	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/06/25	06/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	101 %	70-130		06/06/25	06/07/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2523139	
Diesel Range Organics (C10-C28)	27.9	25.0	1	06/06/25	06/10/25	
Oil Range Organics (C28-C36)	ND	50.0	1	06/06/25	06/10/25	
<i>Surrogate: n-Nonane</i>						
	121 %	61-141		06/06/25	06/10/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2523140	
Chloride	938	200	10	06/06/25	06/06/25	



## Sample Data

Matador Resources, LLC.  
5400 LBJ Freeway, Suite 1500  
Dallas TX, 75240

Project Name: Tiger 14 CDP  
Project Number: 23003-0002  
Project Manager: Ashley Giovengo

**Reported:**  
6/11/2025 12:13:38PM

BH02-9'

E506038-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2523141	
Benzene	ND	0.0250	1	06/06/25	06/07/25	
Ethylbenzene	ND	0.0250	1	06/06/25	06/07/25	
Toluene	ND	0.0250	1	06/06/25	06/07/25	
o-Xylene	ND	0.0250	1	06/06/25	06/07/25	
p,m-Xylene	ND	0.0500	1	06/06/25	06/07/25	
Total Xylenes	ND	0.0250	1	06/06/25	06/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.9 %	70-130		06/06/25	06/07/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2523141	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/06/25	06/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	101 %	70-130		06/06/25	06/07/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2523139	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/06/25	06/10/25	
Oil Range Organics (C28-C36)	ND	50.0	1	06/06/25	06/10/25	
<i>Surrogate: n-Nonane</i>						
	123 %	61-141		06/06/25	06/10/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2523140	
Chloride	1370	200	10	06/06/25	06/06/25	



## QC Summary Data

Matador Resources, LLC.	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/11/2025 12:13:38PM

## Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2523141-BLK1)

Prepared: 06/06/25 Analyzed: 06/06/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.11		8.00		88.9	70-130			

## LCS (2523141-BS1)

Prepared: 06/06/25 Analyzed: 06/06/25

Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.98	0.0250	5.00		99.6	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.99	0.0250	5.00		99.8	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.52		8.00		94.0	70-130			

## Matrix Spike (2523141-MS1)

Source: E506032-03

Prepared: 06/06/25 Analyzed: 06/06/25

Benzene	5.20	0.0250	5.00	ND	104	70-130			
Ethylbenzene	5.13	0.0250	5.00	ND	103	70-130			
Toluene	5.18	0.0250	5.00	ND	104	70-130			
o-Xylene	5.10	0.0250	5.00	ND	102	70-130			
p,m-Xylene	10.4	0.0500	10.0	ND	104	70-130			
Total Xylenes	15.5	0.0250	15.0	ND	103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.32		8.00		91.5	70-130			

## Matrix Spike Dup (2523141-MSD1)

Source: E506032-03

Prepared: 06/06/25 Analyzed: 06/06/25

Benzene	5.90	0.0250	5.00	ND	118	70-130	12.5	27	
Ethylbenzene	5.82	0.0250	5.00	ND	116	70-130	12.6	26	
Toluene	5.87	0.0250	5.00	ND	117	70-130	12.5	20	
o-Xylene	5.78	0.0250	5.00	ND	116	70-130	12.4	25	
p,m-Xylene	11.8	0.0500	10.0	ND	118	70-130	12.4	23	
Total Xylenes	17.5	0.0250	15.0	ND	117	70-130	12.4	26	
Surrogate: 4-Bromochlorobenzene-PID	7.36		8.00		92.0	70-130			





QC Summary Data

Matador Resources, LLC.	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/11/2025 12:13:38PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2523141-BLK1) Prepared: 06/06/25 Analyzed: 06/06/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61		8.00		95.1	70-130			

LCS (2523141-BS2) Prepared: 06/06/25 Analyzed: 06/06/25

Gasoline Range Organics (C6-C10)	50.2	20.0	50.0		100	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.81		8.00		97.6	70-130			

Matrix Spike (2523141-MS2) Source: E506032-03 Prepared: 06/06/25 Analyzed: 06/06/25

Gasoline Range Organics (C6-C10)	48.0	20.0	50.0	ND	96.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.77		8.00		97.1	70-130			

Matrix Spike Dup (2523141-MSD2) Source: E506032-03 Prepared: 06/06/25 Analyzed: 06/06/25

Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.3	70-130	3.98	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.83		8.00		97.8	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/11/2025 12:13:38PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: HM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2523139-BLK1)					Prepared: 06/06/25 Analyzed: 06/09/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	59.0		50.0		118	61-141			

LCS (2523139-BS1)					Prepared: 06/06/25 Analyzed: 06/09/25				
Diesel Range Organics (C10-C28)	307	25.0	250		123	66-144			
Surrogate: n-Nonane	59.1		50.0		118	61-141			

Matrix Spike (2523139-MS1)					Source: E506036-07		Prepared: 06/06/25 Analyzed: 06/10/25		
Diesel Range Organics (C10-C28)	784	25.0	250	532	101	56-156			
Surrogate: n-Nonane	60.8		50.0		122	61-141			

Matrix Spike Dup (2523139-MSD1)					Source: E506036-07		Prepared: 06/06/25 Analyzed: 06/10/25		
Diesel Range Organics (C10-C28)	830	25.0	250	532	119	56-156	5.71	20	
Surrogate: n-Nonane	58.8		50.0		118	61-141			



QC Summary Data

Matador Resources, LLC.	Project Name:	Tiger 14 CDP	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	6/11/2025 12:13:38PM

Anions by EPA 300.0/9056A

Analyst: DT

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

Blank (2523140-BLK1)					Prepared: 06/06/25 Analyzed: 06/06/25				
Chloride	ND	20.0							
LCS (2523140-BS1)					Prepared: 06/06/25 Analyzed: 06/06/25				
Chloride	256	20.0	250		102	90-110			
Matrix Spike (2523140-MS1)					Source: E506031-02		Prepared: 06/06/25 Analyzed: 06/06/25		
Chloride	259	20.0	250	ND	104	80-120			
Matrix Spike Dup (2523140-MSD1)					Source: E506031-02		Prepared: 06/06/25 Analyzed: 06/06/25		
Chloride	259	20.0	250	ND	104	80-120	0.180	20	

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

Definitions and Notes

Matador Resources, LLC.	Project Name:	Tiger 14 CDP	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	06/11/25 12:13

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client Information				Invoice Information		Lab Use Only		TAT		State									
Client: Matador Production Company				Company: Ensolum LLC		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX				
Project Name: Tiger 14 COP				Address: 3122 National Parks Hwy		E506038	23003-0002				x	x							
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220															
Address: 3122 National Parks Hwy				Phone: 575-988-0055															
City, State, Zip: Carlsbad NM, 88220				Email: agiovengo@ensolum.com															
Phone: 575-988-0055				Miscellaneous:															
Email: agiovengo@ensolum.com																			
Sample Information						Analysis and Method								EPA Program					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TCEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA	
1259	6/4/2025	Soil	1	BH01-2'		1								+					
1054	6/4/2025	Soil	1	BH02-7'		2								+					
1153	6/4/2025	Soil	1	BH02-9'		3								+					
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, iestrella@ensolum.com, chamilton@ensolum.com, bmoir@ensolum.com, jhinkle@ensolum.com, akone@ensolum.com, igonzales@ensolum.com,																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																			
Sampled by: Jenna Hinkle																			
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days. Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N											
Jenna Hinkle		6/5/2025	7:00	Michelle Gonzales		6-5-25	0700												
Michelle Gonzales		6-5-25	1615	[Signature]		6-5-25	1615												
[Signature]		6-5-25	2330	Noe Soto		6-6-25	0645												
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time												
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																			
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																			
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																			



## Envirotech Analytical Laboratory

Printed: 6/6/2025 9:36:28AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Matador Resources, LLC.	Date Received:	06/06/25 06:45	Work Order ID:	E506038
Phone:	(972) 371-5200	Date Logged In:	06/05/25 15:19	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	06/12/25 17:00 (4 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



## APPENDIX F

### NMOCD Correspondence

---

**From:** [Velez, Nelson, EMNRD](#)  
**To:** [Chad Hamilton](#)  
**Cc:** [Ashley Giovengo](#); [Jason Touchet](#); [Bratcher, Michael, EMNRD](#); [Rodgers, Scott, EMNRD](#); [Wells, Shelly, EMNRD](#)  
**Subject:** Re: [EXTERNAL] FW: Extension Request - San Mateo Black River Oil Pipeline, LLC - Tiger 14 CDP - nAPP251345553  
**Date:** Thursday, August 14, 2025 2:59:46 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[Outlook-zwocn4rn.png](#)

---

[ \*\*EXTERNAL EMAIL\*\* ]

Good afternoon Chad,

Thank you for your correspondence. Your 90-day time extension is approved.  
Remediation Due date has been updated to November 10, 2025.

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

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

**Nelson Velez** • Environmental Specialist - Adv  
Environmental Bureau | EMNRD - Oil Conservation Division  
1000 Rio Brazos Road | Aztec, NM 87410  
(505) 469-6146 | [nelson.velez@emnrd.nm.gov](mailto:nelson.velez@emnrd.nm.gov)  
<http://www.emnrd.nm.gov/oecd>



---

**From:** Chad Hamilton <[chamilton@ensolum.com](mailto:chamilton@ensolum.com)>  
**Sent:** Thursday, August 14, 2025 2:36 PM  
**To:** Wells, Shelly, EMNRD <[Shelly.Wells@emnrd.nm.gov](mailto:Shelly.Wells@emnrd.nm.gov)>; Ashley Giovengo <[agiovengo@ensolum.com](mailto:agiovengo@ensolum.com)>  
**Cc:** Jason Touchet <[jason.touchet@matadorresources.com](mailto:jason.touchet@matadorresources.com)>; Velez, Nelson, EMNRD <[Nelson.Velez@emnrd.nm.gov](mailto:Nelson.Velez@emnrd.nm.gov)>; Rodgers, Scott, EMNRD <[Scott.Rodgers@emnrd.nm.gov](mailto:Scott.Rodgers@emnrd.nm.gov)>

Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

**Subject:** RE: [EXTERNAL] FW: Extension Request - San Mateo Black River Oil Pipeline, LLC - Tiger 14 CDP - nAPP2513455553

Shelly,

I have been attempting to email Scott and Nelson for a couple of days now and neither are getting any emails from me. There are two releases at the Tiger 14 CDP. One is under Scott and the other is under Nelson. I guess I had mixed up which release went to their respective approver and told Ashley to forward to the wrong person. If you don't mind could you have Nelson reach out to me as I have still not been able to get a hold of him either via email or phone.

Thanks for the help.

---

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

**Sent:** Thursday, August 14, 2025 2:29 PM

**To:** Ashley Giovengo <agiovengo@ensolum.com>

**Cc:** Jason Touchet <jason.touchet@matadorresources.com>; Chad Hamilton <chamilton@ensolum.com>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

**Subject:** RE: [EXTERNAL] FW: Extension Request - San Mateo Black River Oil Pipeline, LLC - Tiger 14 CDP - nAPP2513455553

[ \*\*EXTERNAL EMAIL\*\* ]

Good afternoon Ashley,

Nelson Velez is the reviewer of this incident so I am cc'ing him on this email.

Kind regards,

Shelly

Shelly Wells \* Environmental Specialist-Advanced  
Environmental Bureau  
EMNRD-Oil Conservation Division  
1220 S. St. Francis Drive|Santa Fe, NM 87505  
(505)469-7520 [Shelly.Wells@emnrd.nm.gov](mailto:Shelly.Wells@emnrd.nm.gov)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Ashley Giovengo <[agiovengo@ensolum.com](mailto:agiovengo@ensolum.com)>  
**Sent:** Thursday, August 14, 2025 2:09 PM  
**To:** Rodgers, Scott, EMNRD <[Scott.Rodgers@emnrd.nm.gov](mailto:Scott.Rodgers@emnrd.nm.gov)>; Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Jason Touchet <[jason.touchet@matadorresources.com](mailto:jason.touchet@matadorresources.com)>; Chad Hamilton <[chamilton@ensolum.com](mailto:chamilton@ensolum.com)>  
**Subject:** [EXTERNAL] FW: Extension Request - San Mateo Black River Oil Pipeline, LLC - Tiger 14 CDP - nAPP2513455553

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

Scott,

Please see the forwarded correspondence below.

Thanks,



**Ashley Giovengo**

Associate Principal

575-988-0055

**Ensolum, LLC**

**in f X**

"Your authenticity is your superpower." – Unknown

---

**From:** Chad Hamilton <[chamilton@ensolum.com](mailto:chamilton@ensolum.com)>  
**Sent:** Wednesday, August 13, 2025 9:25 AM  
**To:** Rodgers, Scott, EMNRD <[scott.rodgers@emnrd.nm.gov](mailto:scott.rodgers@emnrd.nm.gov)>; Ashley Giovengo <[agiovengo@ensolum.com](mailto:agiovengo@ensolum.com)>; Jason Touchet <[jason.touchet@matadorresources.com](mailto:jason.touchet@matadorresources.com)>  
**Subject:** RE: Extension Request - San Mateo Black River Oil Pipeline, LLC - Tiger 14 CDP - nAPP2513455553

Scott,

I just wanted to touch base with you and make sure that you received the extension request that I sent yesterday afternoon for the Tiger 14 CDP.

Thanks,

---

**From:** Chad Hamilton  
**Sent:** Tuesday, August 12, 2025 3:13 PM  
**To:** Rodgers, Scott, EMNRD <[scott.rodgers@emnrd.nm.gov](mailto:scott.rodgers@emnrd.nm.gov)>; Enviro, OCD, EMNRD



<[ocd.enviro@emnrd.nm.gov](mailto:ocd.enviro@emnrd.nm.gov)>; Ashley Giovengo <[agiovengo@ensolum.com](mailto:agiovengo@ensolum.com)>; Jason Touchet <[jason.touchet@matadorresources.com](mailto:jason.touchet@matadorresources.com)>

**Subject:** Extension Request - San Mateo Black River Oil Pipeline, LLC - Tiger 14 CDP - nAPP2513455553

Hello all,

San Mateo Black River Oil Pipeline, LLC (San Mateo) is requesting an extension of the current deadline of August 12, 2025, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Tiger 14 CDP (Site) (Incident Number nAPP2513455553). The release occurred on May 14, 2025, and 15 barrels (bbls) of crude oil were released; 10 bbls of crude oil were recovered. The release impacted an area on-pad approximately 1,695 square feet in size on Private Land. Lateral and vertical delineation soil sampling in accordance with the strictest Closure Criteria per NMOCD Table I criteria is currently on-going. San Mateo commissioned Southwest Geophysical Consulting, LLC to complete a karst survey on July 9, 2025. Excavation of the subject matter release will begin once delineation soil sampling activities have been completed at the Site. Matador intends to submit a remediation work plan or closure report upon receiving final laboratory analytical data from confirmation sampling activities. Matador respectfully requests a 90-day extension until November 10, 2025. Please let me know if you have any further questions regarding this site.

Thanks

Sent from my Verizon, Samsung Galaxy smartphone  
Get [Outlook for Android](#)

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 462437

**QUESTIONS**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 462437
	Action Type: [NOTIFY] Notification Of Release (NOR)

**QUESTIONS**

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	Tiger 14 CDP
Date Release Discovered	05/14/2025
Surface Owner	Private

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Cause: Equipment Failure   Pump   Crude Oil   Released: 15 BBL   Recovered: 10 BBL   Lost: 5 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	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)	LACT Pump Seal failed resulting in unexpected release of Crude Oil.

Sante Fe Main Office  
Phone: (505) 476-3441

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<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 2

Action 462437

**QUESTIONS (continued)**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 462437
	Action Type: [NOTIFY] Notification Of Release (NOR)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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 19.15.29.11(A)(5)(a) NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

ACKNOWLEDGMENTS

Action 462437

**ACKNOWLEDGMENTS**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 462437
	Action Type: [NOTIFY] Notification Of Release (NOR)

**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit notification of a release on behalf of my operator.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	I acknowledge the fact that 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.
<input checked="" type="checkbox"/>	I acknowledge the fact that, 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.

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CONDITIONS

Action 462437

CONDITIONS

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 462437
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
j_touchet	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	5/14/2025



<b>Impacted Soil On-Pad</b>	
Saturated Soil (inches)	
	1.75
Area (sq. ft.)	
	1306
<b>Standing fluids</b>	
inches of standing fluid	
	0.25
bbl estimate of standing fluids	
barrels recovered (if known)	
	10
<b>Soil type</b>	
	pad caliche
<b>Spill type</b>	
	oil(crude)
<b>Barrel estimate in soil</b>	
	4.5
Barrel estimate (standing fluids/ recovered+in soil)	
	14.5

<b>Impacted Soil On-Pad</b>	
Saturated Soil (inches)	
	0.25
Area (sq. ft.)	
	390
<b>Standing fluids</b>	
inches of standing fluid	
	0
bbl estimate of standing fluids	
barrels recovered (if known)	
	0
<b>Soil type</b>	
	pad caliche
<b>Spill type</b>	
	oil(crude)
<b>Barrel estimate in soil</b>	
	0.2
Barrel estimate (standing fluids/ recovered+in soil)	
	0.2

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QUESTIONS

Action 464842

QUESTIONS

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 464842
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2513455553
Incident Name	NAPP2513455553 TIGER 14 CDP @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Tiger 14 CDP
Date Release Discovered	05/14/2025
Surface Owner	Private

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Equipment Failure   Pump   Crude Oil   Released: 15 BBL   Recovered: 10 BBL   Lost: 5 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	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)	LACT Pump Seal failed resulting in unexpected release of Crude Oil.

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QUESTIONS, Page 2

Action 464842

**QUESTIONS (continued)**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 464842
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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: Jason Touchet Title: EHS Field Rep Email: jason.touchet@matadorresources.com Date: 05/19/2025
--	--

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QUESTIONS, Page 3

Action 464842

**QUESTIONS (continued)**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 464842
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**QUESTIONS**

<b>Site Characterization</b>	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Not answered.
What method was used to determine the depth to ground water	Not answered.
Did this release impact groundwater or surface water	Not answered.
<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	Not answered.
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Not answered.
An occupied permanent residence, school, hospital, institution, or church	Not answered.
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Not answered.
Any other fresh water well or spring	Not answered.
Incorporated municipal boundaries or a defined municipal fresh water well field	Not answered.
A wetland	Not answered.
A subsurface mine	Not answered.
An (non-karst) unstable area	Not answered.
Categorize the risk of this well / site being in a karst geology	Not answered.
A 100-year floodplain	Not answered.
Did the release impact areas not on an exploration, development, production, or storage site	Not answered.

<b>Remediation Plan</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	No
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	



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CONDITIONS

Action 464842

CONDITIONS

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 464842
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
nvez	None	5/20/2025

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QUESTIONS

Action 524776

**QUESTIONS**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 524776
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2513455553
Incident Name	NAPP2513455553 TIGER 14 CDP @ P-14-24S-28E
Incident Type	Oil Release
Incident Status	Remediation Plan Received

**Location of Release Source**

Please answer all the questions in this group.

Site Name	Tiger 14 CDP
Date Release Discovered	05/14/2025
Surface Owner	Private

**Incident Details**

Please answer all the questions in this group.

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

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Pump   Crude Oil   Released: 15 BBL   Recovered: 10 BBL   Lost: 5 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	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)	LACT Pump Seal failed resulting in unexpected release of Crude Oil.

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QUESTIONS, Page 2

Action 524776

**QUESTIONS (continued)**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 524776
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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: Jason Touchet Title: EHS Field Rep Email: <a href="mailto:jason.touchet@matadorresources.com">jason.touchet@matadorresources.com</a> Date: 11/10/2025
--	--

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QUESTIONS, Page 3

Action 524776

**QUESTIONS (continued)**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 524776
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Site Characterization</b>	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
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 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 500 and 1000 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Between 1000 (ft.) and ½ (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 500 and 1000 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

<b>Remediation Plan</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>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.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	1400
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	9530
GRO+DRO (EPA SW-846 Method 8015M)	6180
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	12/15/2025
On what date will (or did) the final sampling or liner inspection occur	05/23/2025
On what date will (or was) the remediation complete(d)	01/15/2026
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	1694
What is the estimated volume (in cubic yards) that will be remediated	63
<i>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.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 4

Action 524776

**QUESTIONS (continued)**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 524776
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	<b>Yes</b>
Which OCD approved facility will be used for <b>off-site</b> disposal	<i>Not answered.</i>
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	<i>Not answered.</i>
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	<i>Not answered.</i>
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	<b>Yes</b>
What is the name of the NMED facility	Lea Land Disposal
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<i>Not answered.</i>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	<i>Not answered.</i>
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Jason Touchet Title: EHS Field Rep Email: <a href="mailto:jason.touchet@matadorresources.com">jason.touchet@matadorresources.com</a> Date: 11/10/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5  
  
Action 524776

QUESTIONS (continued)

Operator:  San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID:  329461
	Action Number:  524776
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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



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QUESTIONS, Page 6  
  
Action 524776

QUESTIONS (continued)

Operator:  San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID:  329461
	Action Number:  524776
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 524776

**CONDITIONS**

Operator: San Mateo Black River Oil Pipeline, LLC 5400 LBJ Freeway Dallas, TX 75240	OGRID: 329461
	Action Number: 524776
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
nvez	Remediation plan is approved with the following conditions; 1. San Mateo Black River Oil Pipeline, LLC (San Mateo) must complete the excavation and removal of impacted soils until confirmation samples collected from the bottom and sidewalls of the excavation report NMOCD Closure Criteria per 19.15.29.12 NMAC has been achieved. 2. Prior to backfilling the open excavation per 19.15.29.12D (2) NMAC, San Mateo must collect a minimum of one (1) 5pcs from the media being used as backfill to verify that it meets 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. This is especially important for the material being used within the top four (4) feet from the ground surface. 3. San Mateo has 90-days (April 7, 2026) to submit to OCD its appropriate or final remediation closure report.	1/7/2026