



November 25, 2025

New Mexico Oil Conservation Division

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

**Re: Remediation Work Plan
Bill Wilshusen 201H Well Pad
Incident Number: nAPP2506233274
Eddy County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Matador Production Company (Matador), has prepared this *Remediation Work Plan (RWP)* to document assessment and soil sampling activities performed at the Bill Wilshusen 201H Well Pad (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 drilling mud/fluid release. Matador is submitting this *RWP*, describing analytical results from soil sampling and karst survey activities associated with Incident Number nAPP2506233274, and proposing to address the current sensitive Site receptor (depth to water ground water) 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 H, Section 22, Township 21 South, Range 27 East, in Eddy County, New Mexico (32.46782°, -104.170200001°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management (BLM).

On March 3, 2025, an overflow of a drilling mud storage tank resulted in the release of approximately 10 barrels (bbls) of drilling mud onto the pad surface; 9 bbls of drilling mud were recovered, 1 bbl of drilling mud were unrecoverable. Matador reported the release to the New Mexico Oil Conservation Division (NMOCD) via Notification of Release (NOR) on March 3, 2025, and submitted a Release Notification Form C-141 (Form C-141) on March 4, 2025. The release was assigned Incident Number nAPP2506233274.

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-03690 POD 1, located approximately 1.64 miles north of the Site. The soil boring was advanced to a depth of approximately 200 feet below ground surface (bgs) and a reported depth to groundwater of greater than 200 feet bgs. The well record and log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is the Lone Tree Draw, located approximately 9,517 feet east 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 August 22, 2025, Ensolum commissioned a geophysical karst survey using a New Mexico 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 low-resistivity anomaly was identified at the Site that was interpreted as a response of nearby pad infrastructure. The anomaly was identified with the non-invasive electrical resistivity (ER) survey. Lastly, the ER survey indicated stable geology beneath the Site. The karst survey report is included in Appendix B.

Based on the results of the desktop Site Characterization 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

SITE ASSESSMENT AND DELINEATION SOIL SAMPLING ACTIVITIES

On July 8, 2025, completion operations concluded and Ensolum personnel mobilized to the Site. Between July 8, 2025, and August 13, 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. Six soil samples (SS01 through SS06) were collected at ground surface and 1-foot bgs to assess the lateral extent of impacted soil. Three boreholes (BH01 through BH03) were advanced via hand auger and backhoe within the release extent to assess the vertical extent of the release. Boreholes BH01 and BH02 were advanced to a terminal depth of 3 feet bgs and borehole BH03 was advanced to a terminal depth of 2 feet bgs.

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 constituents 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 SS06 were in compliance with the strictest Closure Criteria at the ground surface and 1-foot bgs.
- Boreholes BH01 and BH02 contained concentrations of TPH and/or chloride exceeding the Site Closure Criteria at the ground surface, 1-foot bgs, and 2 feet bgs. All COC concentrations for BH01 and BH02 were in compliance with the strictest Closure Criteria at 3 feet bgs.
- Borehole BH03 contained concentrations of chloride exceeding the Site Closure Criteria at 1-foot bgs. All COC concentrations for BH03 were in compliance with the strictest Closure Criteria at 2 feet bgs.

Laboratory results are summarized in Table 1 and laboratory analytical reports are included in Appendix E.

PROPOSED REMEDIATION WORK PLAN

Matador intends to complete excavation activities at the Site according to the following actions:

- Matador intends to complete a depth to water soil boring to establish depth to groundwater within a 1/2-mile radius of the Site. The soil boring will be advanced to a depth of approximately 101 feet bgs and install temporary casing. The soil boring will be left open for at least 72 hours to allow for potential ground water to equilibrate within the casing and measured utilizing a water interface probe.
- Upon completion of the depth to water boring and confirming groundwater beneath the Site is greater than 51 feet bgs or greater than 101 feet bgs, excavate impacted and waste containing soil to a depth determined by the re-evaluated Site Closure Criteria based solely on determination of depth to groundwater and the absence of any other sensitive receptor related to the Site. Matador believes these actions will be equally protective of human health, the environment, and groundwater.
- The excavation will be completed with mechanical equipment, and the proposed excavation extent and depths are depicted on Figures 3a and 3b. Figure 3a 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 3b depicts the proposed excavation extent if sensitive Site receptors are found at the Site (groundwater depth less than 50 feet bgs), utilizing the strictest Closure Criteria.
- Additional assessment soil samples will be collected beginning at the edge of the proposed excavation area; Assessment soil samples will be collected every 15 feet until the strictest Closure Criteria is met, or until the current lateral definition (SS01 through SS06) is met, to confirm areas outside of the mapped release extent are in compliance with the proposed Site Closure Criteria.
- The release extent measures 2,334 square feet (sq ft) in size and an estimated 44 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 101 feet bgs, respectively. This work will include addressing TPH impacts and waste containing soil identified in boreholes BH01 and BH02 at ground surface, see Figure 2.

Matador Production Company
Remediation Work Plan
Bill Wilshusen 201H Well Pad



- Impacted soil will be transferred to an approved landfill facility for disposal.
- 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.
- 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.

Matador believes this *RWP* and will be protective of human health, the environment, and groundwater. Matador 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.

Sincerely,
Ensolum, LLC

Chad Hamilton
Project Geologist

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

cc: Jason Touchet, Matador Production Company
BLM

Appendices:

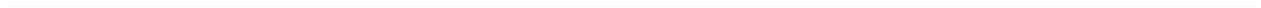
- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3a Proposed Excavation Area
- Figure 3b Proposed Excavation Area

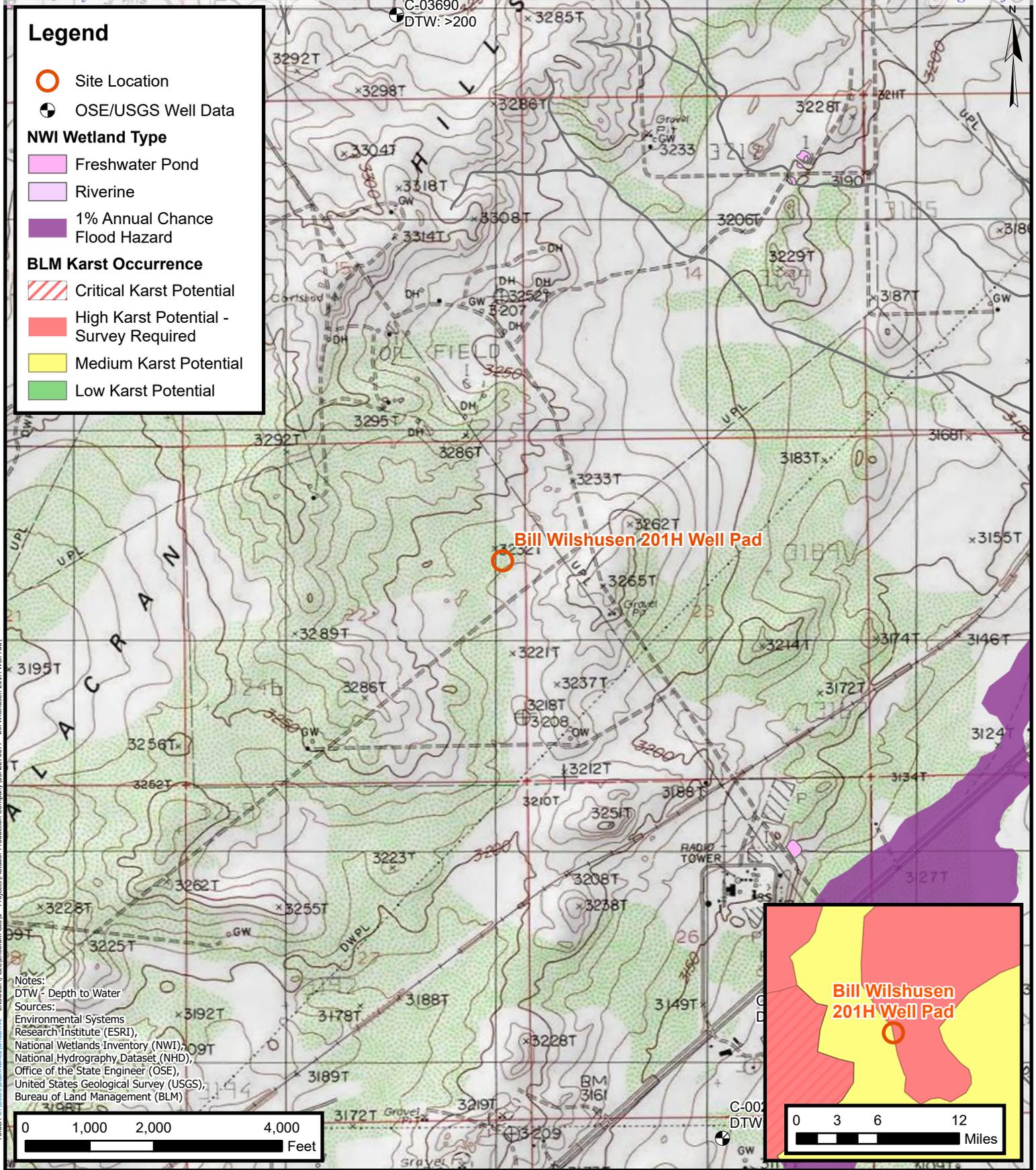
- Table 1 Soil Sample Analytical Results

- Appendix A Well Record and Log
- Appendix B Karst Survey
- Appendix C Lithologic Soil Sampling Logs
- Appendix D Photographic Log
- Appendix E Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix F NMOCD Correspondence



FIGURES





Folder: C:\Users\Leanne\OneDrive - ENSOLUM, LLC\Ensolium GIS\0 - Projects\Matador Production Company\03627007 - Bill Wilshusen 201H Well Pad



Site Receptor Map
 Matador Production Company
 Bill Wilshusen 201H Well Pad
 Incident Number: nAPP2506233274
 Unit H, Section 22, T 21S, R 27E
 Eddy County, New Mexico

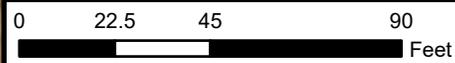
FIGURE
1

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- Pad Boundary
- Release Extent



Notes:
 Sample ID @ Depth Below Ground Surface.



Sources: Environmental Systems Research Institute (ESRI)



Delineation Soil Sample Locations

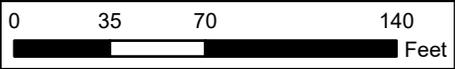
Matador Production Company
 Bill Wilshusen 201H Well Pad
 Incident Number: nAPP2506233274
 Unit H, Section 22, T 21S, R 27E
 Eddy County, New Mexico

FIGURE

2

Legend

-  Pad Boundary
-  Proposed Excavation Extent Based on Closure Criteria Reflective of Depth to Groundwater Greater Than 101 feet bgs



Sources: Environmental Systems Research Institute (ESRI)



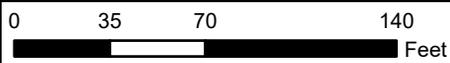
Proposed Excavation Area

Matador Production Company
 Bill Wilshusen 201H Well Pad
 Incident Number: nAPP2506233274
 Unit H, Section 22, T 21S, R 27E
 Eddy County, New Mexico

FIGURE
3a

Legend

-  Pad Boundary
-  Excavation Extent Based on Strictest Closure Criteria



Sources: Environmental Systems Research Institute (ESRI)

Proposed Excavation Area

Matador Production Company
 Bill Wilshusen 201H Well Pad
 Incident Number: nAPP2506233274
 Unit H, Section 22, T 21S, R 27E
 Eddy County, New Mexico

**FIGURE
3b**





TABLES

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Bill Wilshusen 201H Well Pad
 Matador Production Company
 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)
NMOCDC Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
SS01	7/8/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS01	7/8/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	88.2
SS02	7/8/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	250
SS02	7/8/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	232
SS03	7/8/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	49.0
SS03	7/8/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS04	7/8/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	99.7
SS04	7/8/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	330
SS05	8/13/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	179
SS05	8/13/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS06	8/13/2025	0	<0.0250	<0.0500	<20.0	25.7	<50.0	25.7	25.7	371
SS06	8/13/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	104
BH01	7/14/2025	0	<0.0250	<0.0500	<20.0	797	173	797	970	971
BH01	7/14/2025	1	<0.0250	<0.0500	<20.0	33.3	<50.0	33.3	33.3	1,170
BH01	7/23/2025	2	<0.0250	<0.0500	<20.0	35.4	<50.0	35.4	35.4	1,220
BH01	7/23/2025	3	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	148
BH02	7/14/2025	0	<0.0250	<0.0500	<20.0	135	162	135	297	340
BH02	7/14/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,900
BH02	7/14/2025	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,860
BH02	7/14/2025	3	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	102
BH03	7/14/2025	0	<0.0250	<0.0500	<20.0	78.3	<50.0	78.3	78.3	379
BH03	7/14/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,750
BH03	7/22/2025	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	401

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCDC: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

"<": Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCDC Table I Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon



APPENDIX A

Well Record and Log



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL

NOV 19 A 2:13

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) POD 1			OSE FILE NUMBER(S) C-3690		
	WELL OWNER NAME(S) Winston Ballard			PHONE (OPTIONAL) 575-513-9366		
	WELL OWNER MAILING ADDRESS 1819-2 N. Canal			CITY Carlsbad	STATE NM	ZIP 88220
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 23	SECONDS 17.0	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND
	LONGITUDE 104	10	18.4	W	* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE						

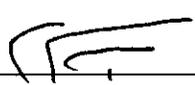
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1348	NAME OF LICENSED DRILLER Clinton E Taylor			NAME OF WELL DRILLING COMPANY Taylor Water Well Service			
	DRILLING STARTED 11/10/2013	DRILLING ENDED 11/11/2013	DEPTH OF COMPLETED WELL (FT) Plugged	BORE HOLE DEPTH (FT) 200	DEPTH WATER FIRST ENCOUNTERED (FT) None			
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT)			
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> 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	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						

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				

FOR OSE INTERNAL USE			WR-20 WELL RECORD & LOG (Version 06/08/2012)		
FILE NUMBER	C-3690	POD NUMBER	1	TRN NUMBER	534022
LOCATION	215.27E.10.414				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO				
	0	5	5	Sandy Soil	<input type="radio"/> Y <input checked="" type="radio"/> N	
	5	44	39	Clay: rd,sndy	<input type="radio"/> Y <input checked="" type="radio"/> N	
	44	66	22	Sandstone: rd,clr,fn-med grn,wl conisl,sme conglomerate,yel brn,lmy	<input type="radio"/> Y <input checked="" type="radio"/> N	
	66	81	15	Clay: blu gry,gry,sme siltstone	<input type="radio"/> Y <input checked="" type="radio"/> N	
	81	95	14	Dolomite: dk brn,vfn-fn xln,vugular porosity	<input type="radio"/> Y <input checked="" type="radio"/> N	
	95	102	7	Siltstone: brn-gry,sme rd clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	102	150	48	Clay: rd,sndy	<input type="radio"/> Y <input checked="" type="radio"/> N	
	150	200	50	Clay: rd,smth,stky	<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
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					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:						

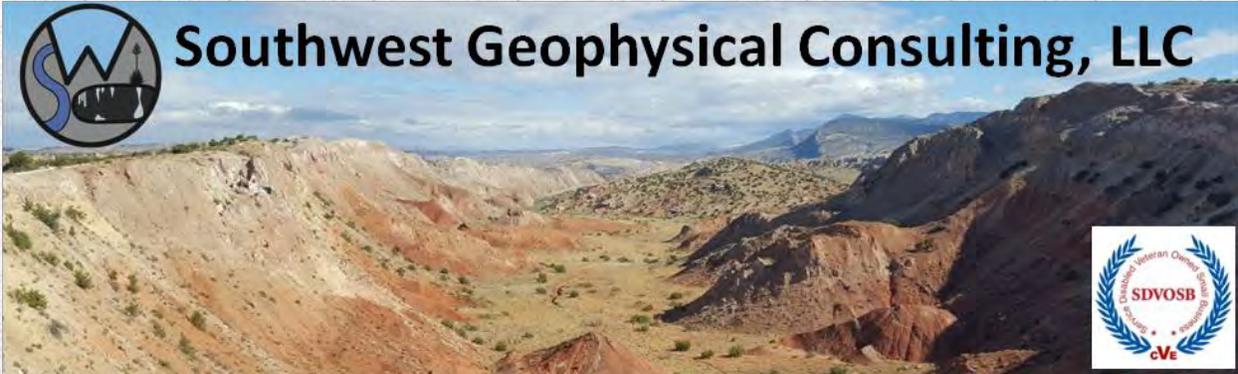
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: No water was found. Plugged well.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 CE Taylor SIGNATURE OF DRILLER / PRINT SIGNEE NAME	11/18/12 DATE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	C-3690	POD NUMBER	1
LOCATION		TRN NUMBER	
			PAGE 2 OF 2



APPENDIX B
Karst Survey



**Environmental Karst Study Report
Matador Bill Wilshusen 201 H Well Pad
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

September 22, 2025

ENS-023-20250822

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MMXXV

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1.0 INTRODUCTION

This report was commissioned by Ensolum, LLC (hereinafter referred to as "the client"), on August 22, 2025, for the purpose of conducting an environmental karst study within an area encompassing the Matador Bill Wilshusen 201 H Well Pad release site (hereinafter termed "BW201") centered at N 32.467915° W 104.170320°.

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^[1]), and to determine whether stable ground exists (as defined by 19.15.2 NMAC Definitions^[2]) within 200 feet of the spill delineation boundary of the Matador Bill Wilshusen 201 H Well Pad release as provided by the client via e-mail (**Bill Wilshusen 201H Well Pad.kmz**) on August 22, 2025, using electrical resistivity imaging^[3].

1.2 Summary of Findings

- **No surface karst features exist within 200 feet (61 meters) of the spill delineation boundary.**
- **No anomalies consistent with subsurface air- or water-filled voids were found within the BW201 geophysical survey area, indicating the zone beneath the geophysical survey is not subject to collapse.**
- **Well-layered stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating stable ground within the 200-foot survey boundary.**

1.3 Affected Environment

The BW201 project 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. 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 that need to be considered 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^[4]. These designations are also recognized by the New Mexico State Land Office (NMSLO). This project occurs within a **HIGH** karst occurrence zone (HKOZ)^[5] (**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^[4].

Due to the rapidity with which evaporite karst develops, each location within a BLM-CFO designated 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.

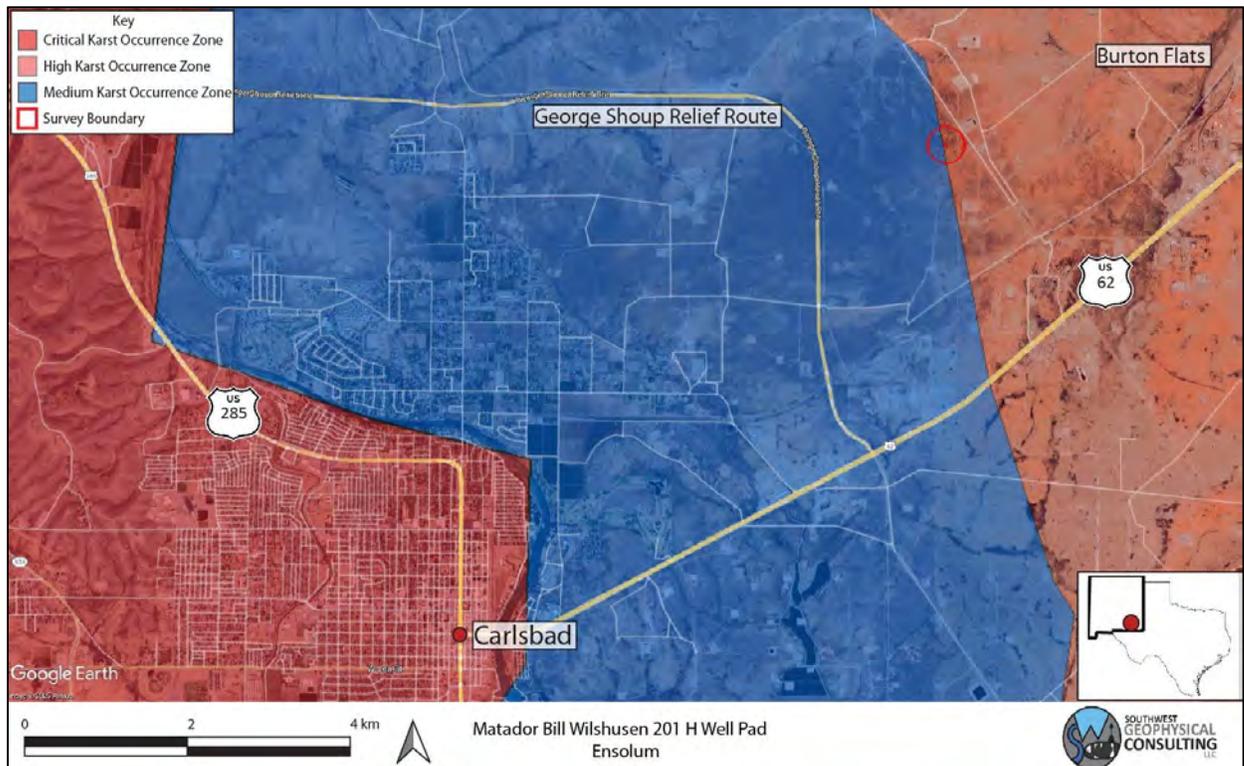


Figure 1: Karst occurrence zone overview. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.

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 7.8 kilometers (4.9 miles) northeast of Carlsbad, New Mexico, north of US Highway 62 and east of the George Shoup Relief Route. The release area is located within the NE ¼ section of section 22, NM T21S R27E^[6] (**Figure 1** and **Figure 2**). The region has rolling terrain with karstification occurring in the gypsite soils and underlying gypsum and dolomite bedrock^[7] (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^[8]. This area is within the Chihuahuan Desert Thornscrub as defined by the Southwestern Regional ReGAP Vegetation map^[9] 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^[5] (**Figure 1**) and within BLM-CFO managed land^[10] (**Figure 2**).

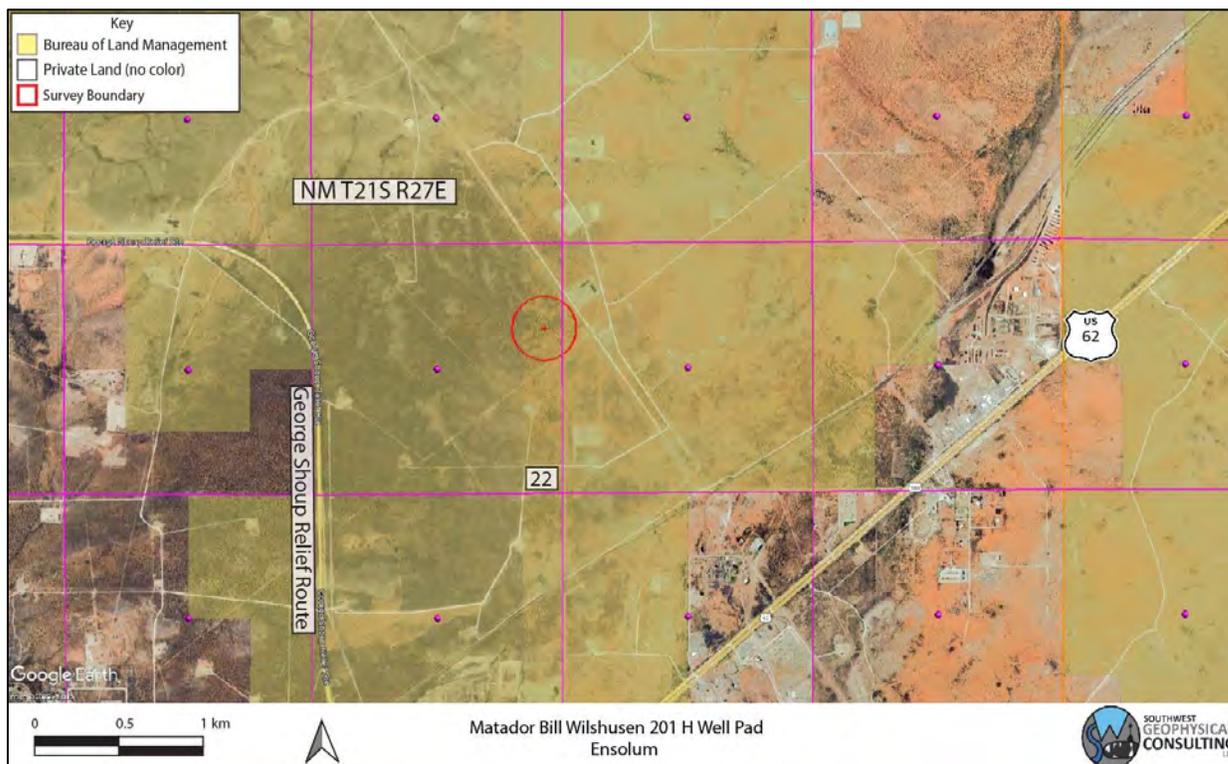


Figure 2: Land ownership and PLSS overview. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.

2.2 Local Geology Summary

The site for the BW201 survey is located at an elevation of 987 meters (3,238 feet), ± 2 meters (6.6 feet). This region is entirely underlain by the Permian Salado Formation (Psl). The area is mantled by thin gypsiferous soils (gypsite), Quaternary alluvium (Qal), eolian (Qe), and piedmont deposits (Qp)^[11] up to 5 meters in depth (**Figure 3**).

The Permian Salado Formation is 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^[12]. The overlying Rustler Formation (Pru – not shown) may be subject to collapse if a void has developed beneath it in the Salado Formation^[13].

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

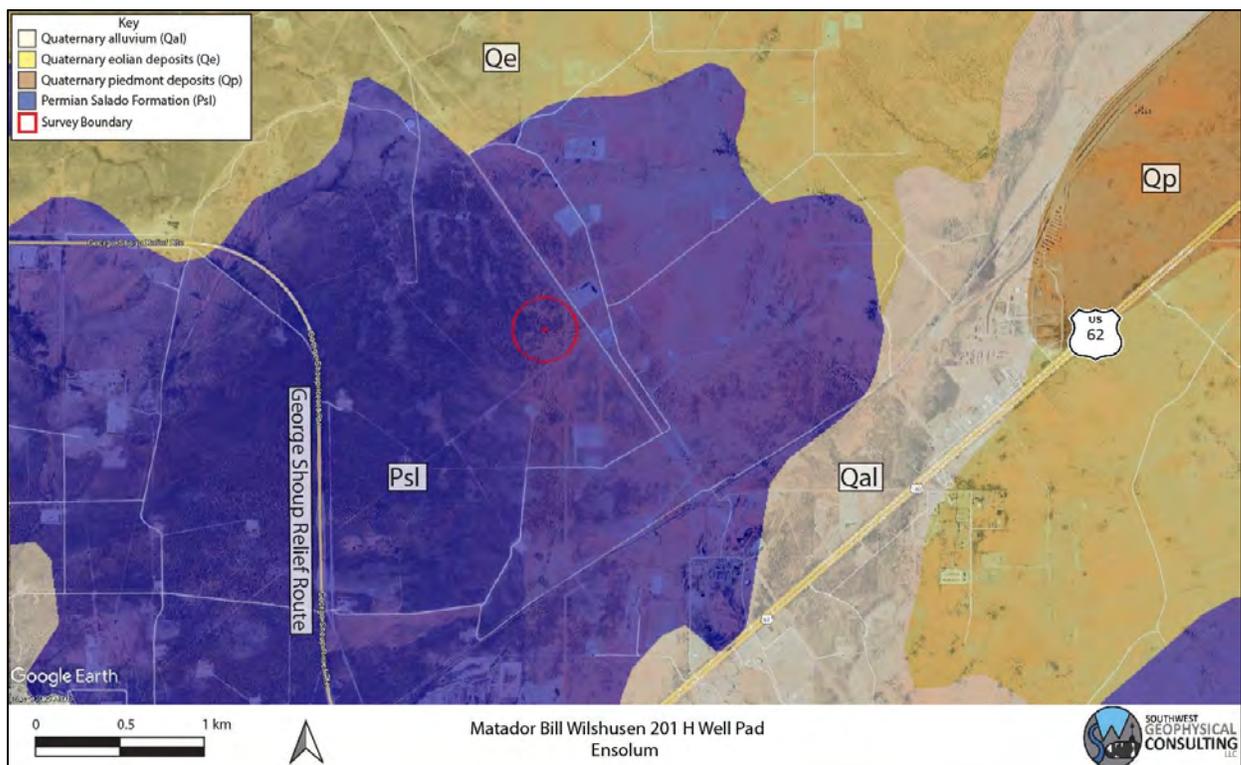


Figure 3: Geology overview. Geology map credit: The Digital Geologic Map of New Mexico in ARC/INFO Format. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.

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^[1] (**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 August 10, 2025^[15]; the Carlsbad East, 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^[4] (**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^[16].



Figure 4: Surface survey overview. Background image credit: Google Earth. Image date: July 13, 2024. Datum: WGS-84. Orthoimagery is shown overlying the background image as the well pad is not yet on Google aerial/satellite imagery

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 August 29, 2025. Surface karst features may have developed after this date and will not be noted in this report. Imagery analysis was completed by Britt Bommer of Southwest Geophysical Consulting on September 4, 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 two resistivity lines in a dipole-dipole configuration; line BW20101 is laid out west to east, while line BW20102 is laid out south to north. Both lines consisted of 28 electrodes at 5-meter spacing, resulting in 135-meter-long arrays (**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.

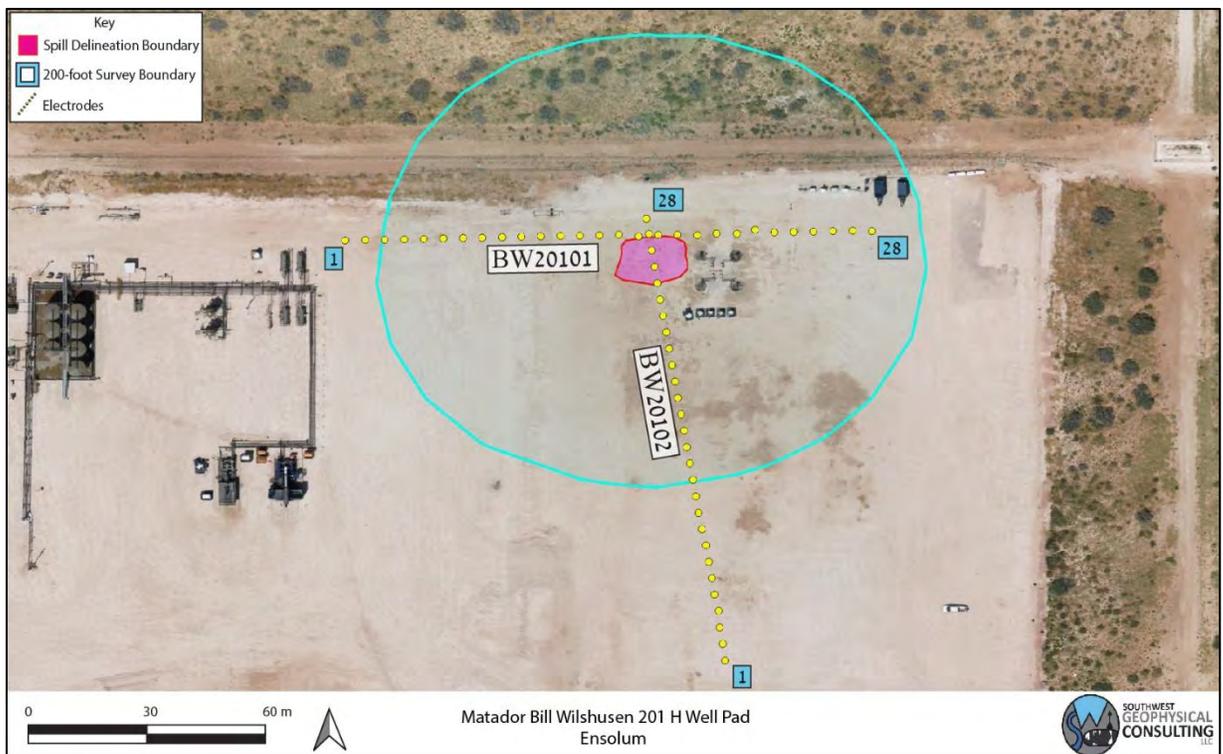


Figure 5: Geophysical survey overview. Two survey lines were conducted with 28 electrodes each at 5-meter spacing (yellow dots denoted with blue numbers). Orthoimagery is shown as the well pad is not yet on Google aerial/satellite imagery.

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 BW201_ERI_Points.xlsx and ENS-023-20250822_BW201_Data_Files.kmz.

File Name:	Completed By:	Date:
BW20101.kmz	Garrett Jorgensen Olague – Senior Field Geologist Britt Bommer – Field Geologist Aaron Beirl – Field Geologist Ryan Palmer – GIS Specialist	9/9/2025
BW20102.kmz		

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 Ω -m) and a max apparent resistivity set to 100,000 Ω -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 Ω -m Min Apparent Resistivity = 0.1 Ω -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 Garrett Jorgensen Olague, Britt Bommer, Aaron Beirl, and Ryan Palmer on September 9, 2025.

3.0 RESULTS

3.1 Surface Karst Survey

The desk study and surface karst survey showed no surface karst features within 305 meters (1,000 feet)^[1] of the spill delineation boundary (Figure 6).

No springs exist within the 305-meter (1,000-foot)^[1] survey boundary (Figure 6).

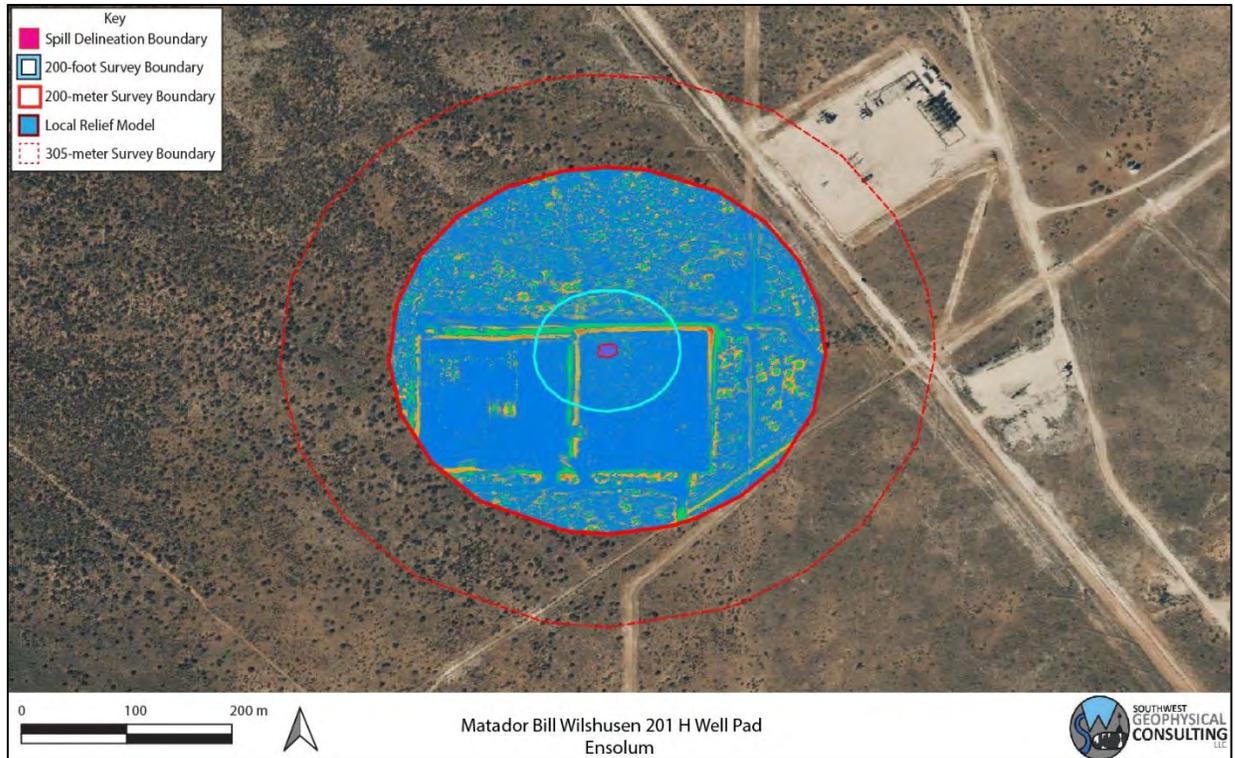


Figure 6: Surface karst survey results. Background image credit: Google Earth. Image date: July 13, 2024. Image datum: WGS-84.

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 7**). 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 moderately well-layered geologic system with resistivities between 5.0 and 1,000 Ohm-m with occasional areas of up to 8,629 Ohm-m. A low-resistivity area with values of 1.6 – 5.0 Ohm-m is seen across both resistivity sections (**Figure 7**). 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.

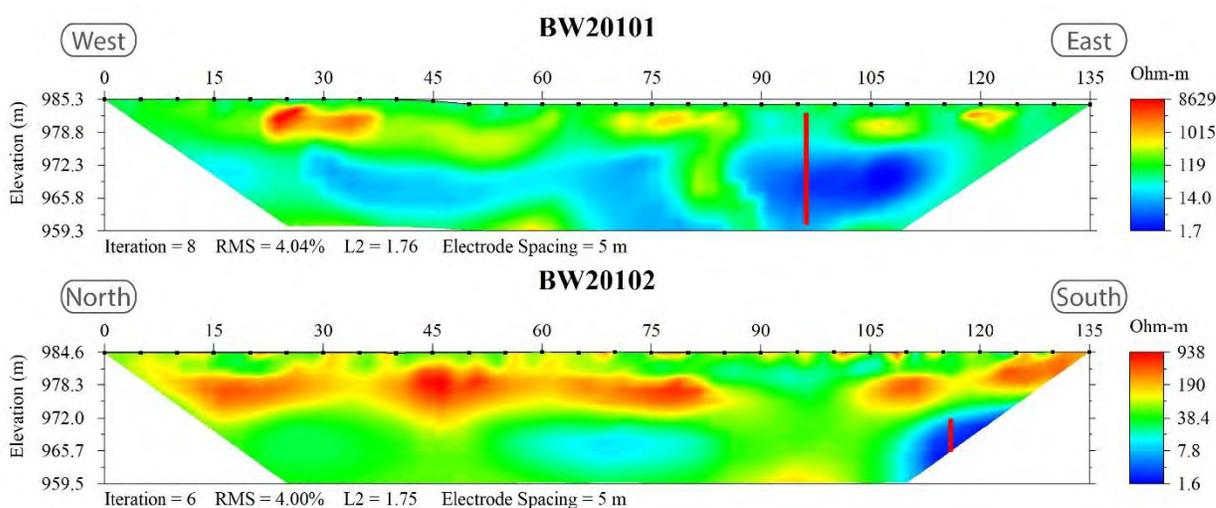


Figure 7: 2D inverted resistivity section. Reds and oranges indicate higher resistivity values. Yellows and greens are medium-resistivity values. Blues are low-resistivity values. Red vertical lines highlight possible drill column or cased well. Please note that the color scale is relative.

4.0 DISCUSSION

No surface karst features and no anomalies consistent with air-filled subsurface voids are found within the BW201 survey area. However, small solutionally enlarged voids or fractures at or near the resolution limit of the survey (2.5 – 3.0 meters) may be present. A low-resistivity anomaly is observed on both resistivity sections at a depth of approximately 1 – 27 meters beneath the surface and is interpreted as a response of nearby pad infrastructure, most likely a drill column or well casing.

Areas of higher resistivity (reds, yellows, and greens) near the surface are interpreted as dry gypsum soils or Quaternary sediments^[17]. Low-resistivity areas between 5 – 20 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 Salado Formation (**Figure 7** and **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 that require excavation below four feet in depth should be considered.

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.

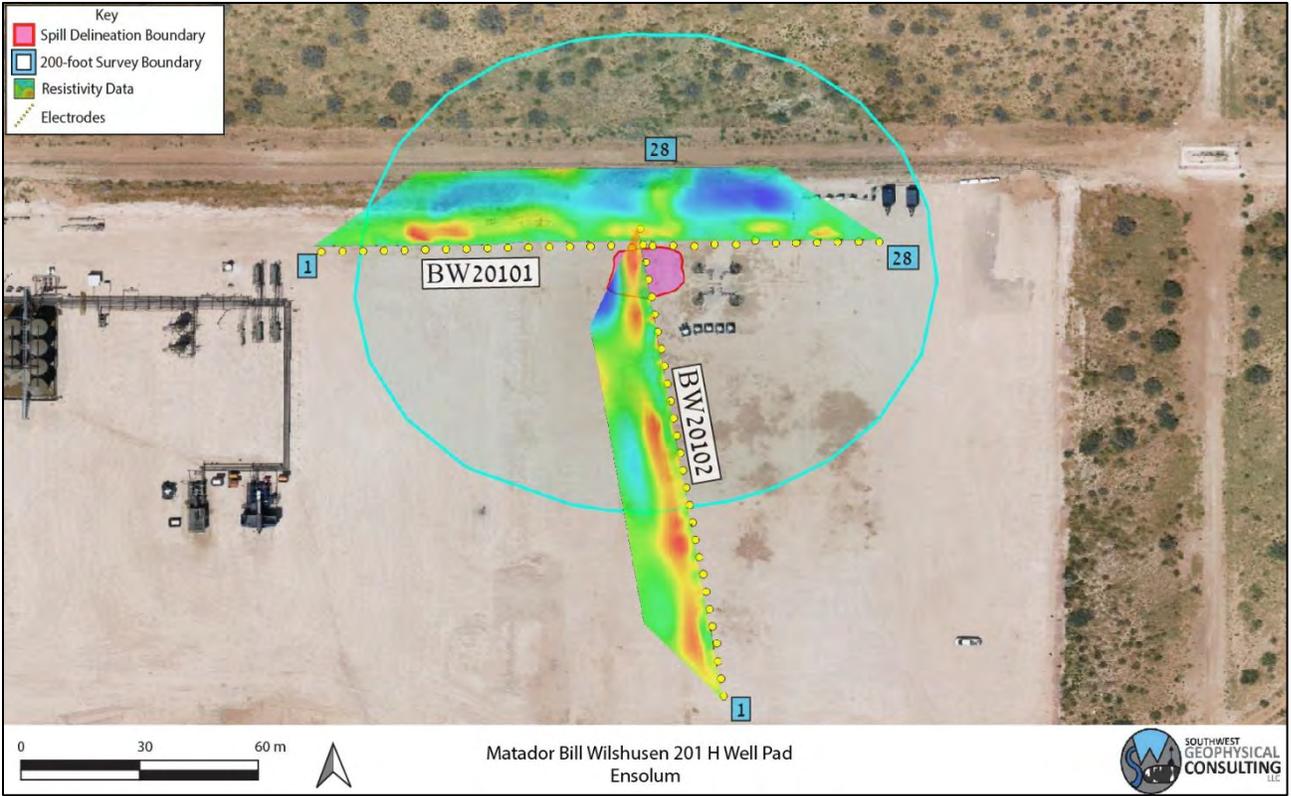


Figure 8: Data overlay. Colored trapezoid is the 2D inverted resistivity lines. Orthoimagery is shown as the well pad is not yet on Google aerial/satellite imagery.

5.0 SUMMARY

- **The BW201 survey contains no surface karst features within 200 feet (61 meters) of the spill delineation boundary.**
- **No shallow anomalies interpreted as large voids or related karst features that would present a danger to equipment operators are located within the geophysical survey area.**
- Intercepting a void during remediation is unlikely, but still possible. Small voids or solutionally enlarged fractures below the resolution limit of the survey may be encountered.
- **Well-layered stratigraphy is interpreted to exist beneath the geophysical survey line, indicating stable ground in the area of the subsurface investigation.**
- When conducting any remediation activities in this area, employing a BLM-CFO approved karst monitor on site should be considered.

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.

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

- 1 Division, O. C. *Title 19, Chapter 15, Part 29* (Oil Conservation Division, 2018).
- 2 NMSLO.(ed Oil Conservation Division) (New Mexico State Land Office, Santa Fe, NM, 2018).
- 3 Decker, D. & Jorgensen, G. L. *Environmental Karst Surveys White Paper* (Southwest Geophysical Consulting, LLC, 2024).
- 4 Goodbar, J. R. Vol. BLM Management Handbook H-8380-1 (ed Carlsbad Field Office) 59 (Bureau of Land Management, Denver, CO, 2015).
- 5 Decker, D., Trautner, E. & Palmer, R. (Bureau of Land Management - Carlsbad Field Office, 2025).
- 6 Earthpoint. *Earthpoint Tools for Google Earth*, <<https://www.earthpoint.us/Townships.aspx>> (2022).
- 7 Decker, D. D., Land, L. & Luke, B. Characterization of Playa Lakes in the Gypsum Karst of Southeastern New Mexico and West Texas, USA. *Oklahoma Geological Survey Circular 113 113* (2021).
- 8 W.R.C.C. *National Climate Data Center 1981-2010 Normal Climate Summary for Carlsbad, New Mexico (291469)*, 2010).
- 9 Whitehead, W. & Flynn, C. *Plant Utilization in Southeastern New Mexico: Botany, Ethnobotany, and Archaeology*. (Bureau of Land Management, Carlsbad Field Office, 2017).
- 10 NMSLO. Digital overlay (KML) of the surface land ownership in New Mexico (New Mexico State Land Office, Santa Fe, NM, 2024).
- 11 Green, G. N. & Jones, G. E. *The Digital Geologic Map of New Mexico in ARC/INFO Format*, <<https://mrddata.usgs.gov/geology/state/state.php?state=NM>> (1997).
- 12 Austin, G. S. *Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas*. Vol. Circular 159 (New Mexico Bureau of Mines and Mineral Resources, 1978).
- 13 Johnson, K. S. Evaporite Karst in the United States. *Carbonates and Evaporites* **12**, 2-14 (1997).
- 14 Scholle, P. A. *Geologic Map of New Mexico*. (2003).
- 15 Decker, D. D., Jorgensen, G. L. & Palmer, R. in *Southwest Geophysical Cave and Karst Database* (ed LLC Southwest Geophysical Consulting) (Albuquerque, NM, 2025).

- 16 Whitehead, W., Bandy, M. & Decker, D. Protocol for Using UAV Photography for Rapid Assessment of Karst Features in Southeast New Mexico. *Proceedings of the 2022 Cave and Karst Management Symposium* (2022).
- 17 Hill, C. A. *Geology of the Delaware Basin, Guadalupe, Apache and Glass Mountains, New Mexico and West Texas*. Vol. 96-39 (Permian Basin Section - SEPM, 1996).

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 Ω -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

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Albuquerque, NM 87114

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-023-20250822 entitled, “Environmental Karst Study Report, Matador Bill Wilshusen 201 H Well Pad, 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, September 25, 2025.



David D. Decker
PhD, CPG-12123





APPENDIX C

Lithologic Soil Sampling Logs

					Sample Name: BH01		Date: 7/14/25-7/23/25	
					Site Name: Bill Wilshusen 201H Well Pad			
					Incident Number: nAPP2506233274			
					Job Number: 03A2270077			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Israel Estrella		Back Hoe	
Coordinates: 32.467913, -104.170335					Hole Diameter: 2'		Total Depth: 3'	
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 40% correction factor included.								
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D			V	BH01	0	0	CCHE	Caliche Pad - White to medium brown, medium to fine grained with some gravel, Dry, Non-plastic, Noncohesive
D	1,293		Y	BH01	1	1	CCHE	
D	856		N	BH01	2	2	CCHE	Caliche - White to grey, medium to fine grained with some gravel, Dry, Non-plastic, Noncohesive, Massive, Well graded
	296	169			2.5			
D	ND	54	N	BH01	3	3	CCHE	
Total Depth @ 3ft bgs.								

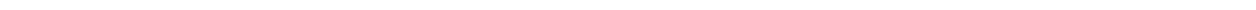
					Sample Name: BH02		Date: 7/14/25	
					Site Name: Bill Wilshusen 201H Well Pad			
					Incident Number: nAPP2506233274			
					Job Number: 03A2270077			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Israel Estrella		Hand Auger	
Coordinates: 32.467890, -104.170252					Hole Diameter: 3"		Total Depth: 3'	
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 40% correction factor included.								
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D			Y	BH02	0	0	CCHE	Caliche Pad - White to very light brown, medium to fine grained with some gravel, Dry, Non-plastic, Noncohesive
	3,343		N	BH02	1	1		Caliche - White to grey, medium to fine grained with some gravel, Dry, Non-plastic, Noncohesive, Massive, Well graded
	2,100		N	BH02	2	2		
	ND	50	N	BH02	3	3		
Total Depth @ 3ft bgs.								

					Sample Name: BH03		Date: 7/14/25-7/22/25	
					Site Name: Bill Wilshusen 201H Well Pad			
					Incident Number: nAPP2506233274			
					Job Number: 03A2270077			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Israel Estrella		Back Hoe	
Coordinates: 32.467844, -104.170361					Hole Diameter: 2'		Total Depth: 2'	
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 40% correction factor included.								
Moisture Content	Chloride (ppm)	TPH (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	515	97	Y	BH03	0	0	CCHE	Caliche Pad - White to very light brown, medium to fine grained with some gravel, Dry, Non-plastic, Noncohesive
			Y	BH03	1	1		
			N	BH03	2	2	SP-SM	Silty Sand - Med Brn, Med to f grn, D, Non-P, Non-C
Total Depth @ 2 feet bgs.								



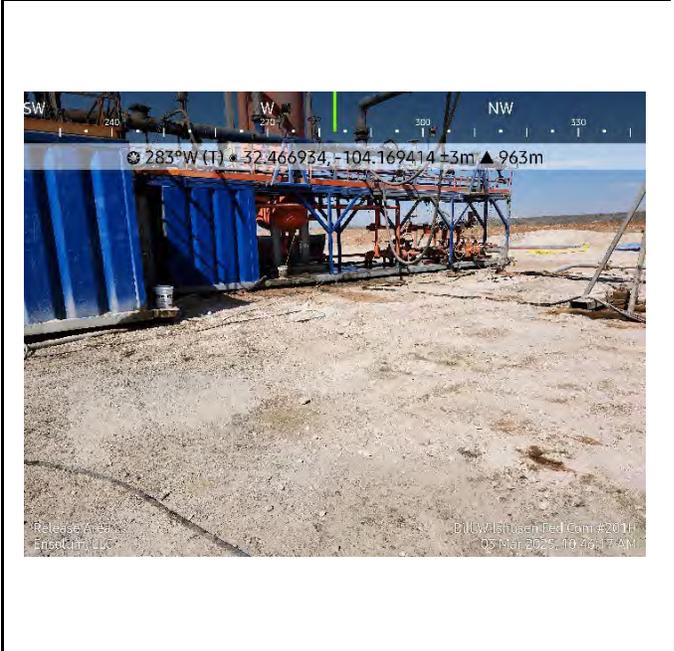
APPENDIX D

Photographic Log



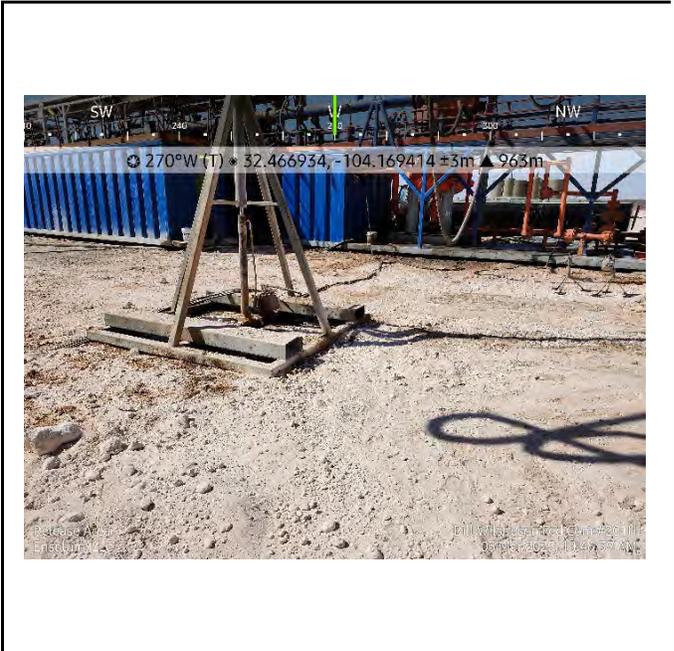
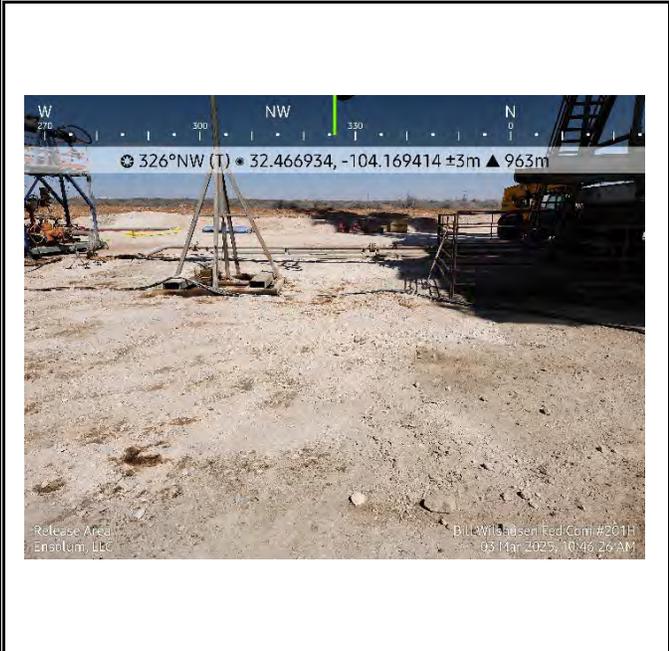


Photographic Log
Matador Production Company
Bill Wilshusen 201H Well Pad
nAPP2506233274



Photograph 1 Date: 3/3/2025
Description: Lease Signage
View: North

Photograph 2 Date: 3/3/2025
Description: Release Area
View: West



Photograph 3 Date: 3/3/2025
Description: Release Area
View: Northwest

Photograph 4 Date: 3/3/2025
Description: Release Area
View: West



Photographic Log

Matador Production Company
Bill Wilshusen 201H Well Pad
nAPP2506233274



Photograph 5 Date: 7/8/2025
Description: Delineation (SS01)
View: South



Photograph 6 Date: 7/8/2025
Description: Delineation (SS03)
View: North



Photograph 7 Date: 7/14/2025
Description: Delineation (BH01)
View: East



Photograph 8 Date: 7/14/2025
Description: Delineation (BH02)
View: East

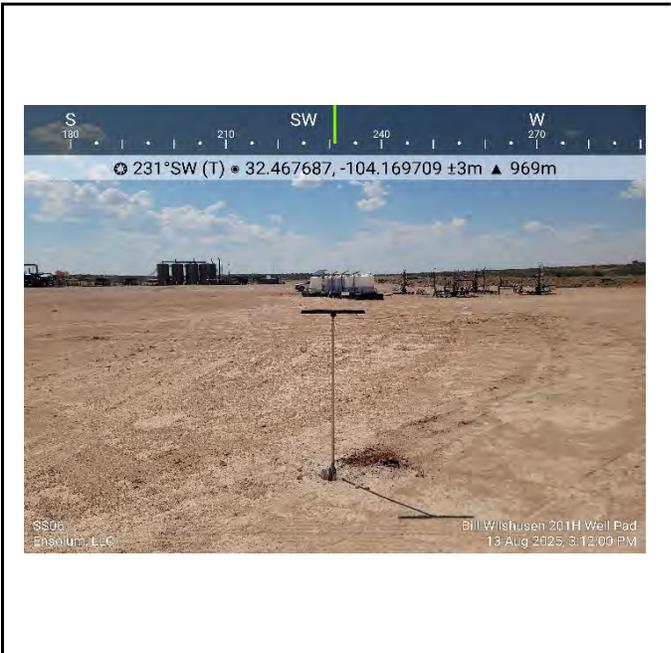
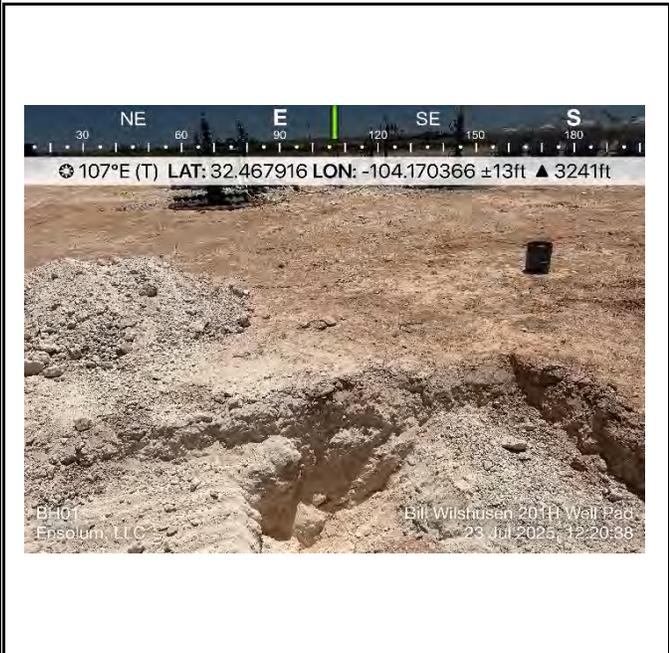


Photographic Log
Matador Production Company
Bill Wilshusen 201H Well Pad
nAPP2506233274



Photograph 9 Date: 7/14/2025
Description: Delineation (BH03)
View: East

Photograph 10 Date: 7/22/2025
Description: Delineation (BH01)
View: North



Photograph 11 Date: 7/23/2025
Description: Delineation (BH01)
View: East

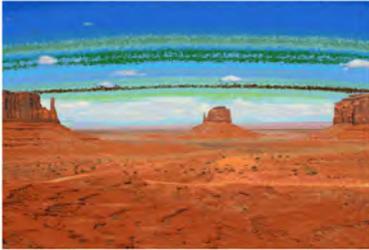
Photograph 12 Date: 8/13/2025
Description: Delineation (SS06)
View: Southwest



APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation

Report to:
Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Matador Resources, LLC.

Project Name: Bill Wilshusen 201H Well Pad

Work Order: E507088

Job Number: 23003-0002

Received: 7/10/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/16/25

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: 7/16/25

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



Project Name: Bill Wilshusen 201H Well Pad
Workorder: E507088
Date Received: 7/10/2025 7:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/10/2025 7:00:00AM, under the Project Name: Bill Wilshusen 201H Well Pad.

The analytical test results summarized in this report with the Project Name: Bill Wilshusen 201H Well Pad 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

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/16/25 15:57
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 - 0'	E507088-01A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.
SS01 - 1'	E507088-02A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.
SS02 - 0'	E507088-03A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.
SS02 - 1'	E507088-04A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.
SS03 - 0'	E507088-05A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.
SS03 - 1'	E507088-06A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.
SS04 - 0'	E507088-07A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.
SS04 - 1'	E507088-08A	Soil	07/08/25	07/10/25	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS01 - 0'
E507088-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
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Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS		Batch: 2528156	
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	

<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.1 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	

Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2528156	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.1 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	

Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH		Batch: 2528180	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		104 %	61-141	07/11/25	07/13/25	

Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2528148	
Chloride	ND	20.0	1	07/09/25	07/12/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS01 - 1'

E507088-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.9 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.9 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2528180
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		98.9 %	61-141	07/11/25	07/13/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2528148
Chloride	88.2	20.0	1	07/09/25	07/12/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS02 - 0'

E507088-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.3 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.3 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2528180
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		106 %	61-141	07/11/25	07/13/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2528148
Chloride	250	20.0	1	07/09/25	07/12/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS02 - 1'

E507088-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		113 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.9 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		109 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		113 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.9 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		109 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2528180
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		102 %	61-141	07/11/25	07/13/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2528148
Chloride	232	20.0	1	07/09/25	07/12/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS03 - 0'

E507088-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		113 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.7 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		113 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.7 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2528180
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		103 %	61-141	07/11/25	07/13/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2528148
Chloride	49.0	20.0	1	07/09/25	07/12/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS03 - 1'

E507088-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		113 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		113 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2528180
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		103 %	61-141	07/11/25	07/13/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2528148
Chloride	ND	20.0	1	07/09/25	07/12/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS04 - 0'

E507088-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.7 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.7 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2528180
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		105 %	61-141	07/11/25	07/13/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2528148
Chloride	99.7	20.0	1	07/09/25	07/12/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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SS04 - 1'

E507088-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Benzene	ND	0.0250	1	07/10/25	07/14/25	
Ethylbenzene	ND	0.0250	1	07/10/25	07/14/25	
Toluene	ND	0.0250	1	07/10/25	07/14/25	
o-Xylene	ND	0.0250	1	07/10/25	07/14/25	
p,m-Xylene	ND	0.0500	1	07/10/25	07/14/25	
Total Xylenes	ND	0.0250	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		111 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.7 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2528156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/25	07/14/25	
<i>Surrogate: Bromofluorobenzene</i>		111 %	70-130	07/10/25	07/14/25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.7 %	70-130	07/10/25	07/14/25	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	07/10/25	07/14/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2528180
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/25	07/13/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/25	07/13/25	
<i>Surrogate: n-Nonane</i>		98.7 %	61-141	07/11/25	07/13/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2528148
Chloride	330	20.0	1	07/09/25	07/12/25	



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2528156-BLK1)

Prepared: 07/10/25 Analyzed: 07/14/25

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	0.557		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.6	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2528156-BS1)

Prepared: 07/10/25 Analyzed: 07/14/25

Benzene	2.37	0.0250	2.50		94.7	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.1	70-130			
Toluene	2.37	0.0250	2.50		94.7	70-130			
o-Xylene	2.41	0.0250	2.50		96.3	70-130			
p,m-Xylene	4.81	0.0500	5.00		96.2	70-130			
Total Xylenes	7.22	0.0250	7.50		96.2	70-130			
Surrogate: Bromofluorobenzene	0.552		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.531		0.500		106	70-130			

Matrix Spike (2528156-MS1)

Source: E507088-03

Prepared: 07/10/25 Analyzed: 07/14/25

Benzene	2.26	0.0250	2.50	ND	90.4	48-131			
Ethylbenzene	2.36	0.0250	2.50	ND	94.5	45-135			
Toluene	2.27	0.0250	2.50	ND	90.9	48-130			
o-Xylene	2.37	0.0250	2.50	ND	94.7	43-135			
p,m-Xylene	4.71	0.0500	5.00	ND	94.2	43-135			
Total Xylenes	7.08	0.0250	7.50	ND	94.4	43-135			
Surrogate: Bromofluorobenzene	0.568		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.3	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

Matrix Spike Dup (2528156-MSD1)

Source: E507088-03

Prepared: 07/10/25 Analyzed: 07/14/25

Benzene	2.27	0.0250	2.50	ND	90.9	48-131	0.596	23	
Ethylbenzene	2.38	0.0250	2.50	ND	95.4	45-135	0.927	27	
Toluene	2.28	0.0250	2.50	ND	91.2	48-130	0.242	24	
o-Xylene	2.39	0.0250	2.50	ND	95.6	43-135	0.967	27	
p,m-Xylene	4.75	0.0500	5.00	ND	94.9	43-135	0.761	27	
Total Xylenes	7.14	0.0250	7.50	ND	95.2	43-135	0.830	27	
Surrogate: Bromofluorobenzene	0.550		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		99.9	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2528156-BLK1)

Prepared: 07/10/25 Analyzed: 07/14/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.557		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.6	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2528156-BS2)

Prepared: 07/10/25 Analyzed: 07/14/25

Gasoline Range Organics (C6-C10)	46.5	20.0	50.0		93.0	70-130			
Surrogate: Bromofluorobenzene	0.560		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.486		0.500		97.2	70-130			
Surrogate: Toluene-d8	0.531		0.500		106	70-130			

Matrix Spike (2528156-MS2)

Source: E507088-03

Prepared: 07/10/25 Analyzed: 07/14/25

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.5	70-130			
Surrogate: Bromofluorobenzene	0.575		0.500		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			

Matrix Spike Dup (2528156-MSD2)

Source: E507088-03

Prepared: 07/10/25 Analyzed: 07/14/25

Gasoline Range Organics (C6-C10)	46.1	20.0	50.0	ND	92.3	70-130	0.290	20	
Surrogate: Bromofluorobenzene	0.575		0.500		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.4	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

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 (2528180-BLK1)

Prepared: 07/11/25 Analyzed: 07/13/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.3		50.0		103	61-141			

LCS (2528180-BS1)

Prepared: 07/11/25 Analyzed: 07/13/25

Diesel Range Organics (C10-C28)	266	25.0	250		106	66-144			
Surrogate: n-Nonane	49.0		50.0		98.0	61-141			

Matrix Spike (2528180-MS1)

Source: E507074-01

Prepared: 07/11/25 Analyzed: 07/13/25

Diesel Range Organics (C10-C28)	1000	50.0	250	978	10.1	56-156			M4
Surrogate: n-Nonane	57.0		50.0		114	61-141			

Matrix Spike Dup (2528180-MSD1)

Source: E507074-01

Prepared: 07/11/25 Analyzed: 07/13/25

Diesel Range Organics (C10-C28)	1300	50.0	250	978	129	56-156	25.8	20	R3
Surrogate: n-Nonane	60.5		50.0		121	61-141			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/16/2025 3:57:27PM
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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 (2528148-BLK1)

Prepared: 07/09/25 Analyzed: 07/12/25

Chloride	ND	20.0							
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LCS (2528148-BS1)

Prepared: 07/09/25 Analyzed: 07/12/25

Chloride	259	20.0	250		103	90-110			
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Matrix Spike (2528148-MS1)

Source: E507088-04

Prepared: 07/09/25 Analyzed: 07/12/25

Chloride	575	20.0	250	232	137	80-120			M2
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Matrix Spike Dup (2528148-MSD1)

Source: E507088-04

Prepared: 07/09/25 Analyzed: 07/12/25

Chloride	571	20.0	250	232	135	80-120	0.772	20	M2
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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. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/16/25 15:57
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- M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
- 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.
- R3 The RPD exceeded the acceptance limit. LCS spike recovery met acceptance criteria.
- 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: Bill Wilshusen 201H Well Pad				Address: 3122 National Parks Hwy				EE07087		230030002					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																					
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	TCEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA		
13:33	7/8/2025	Soil	1	SS01 - 0'			1								X						
15:33	7/8/2025	Soil	1	SS01 - 1'			2								X						
14:16	7/8/2025	Soil	1	SS02 - 0'			3								X						
15:41	7/8/2025	Soil	1	SS02 - 1'			4								X						
14:58	7/8/2025	Soil	1	SS03 - 0'			5								X						
15:50	7/8/2025	Soil	1	SS03 - 1'			6								X						
12:53	7/8/2025	Soil	1	SS04 - 0'			7								X						
15:46	7/8/2025	Soil	1	SS04 - 1'			8								X						
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, iestrella@ensolum.com, chamilton@ensolum.com, bmoir@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: Israel Estrella																					
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.															
<i>Israel Estrella</i>	7/9/25	7:11	<i>Michelle Gonzales</i>	7-9-25	6711																
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time																
<i>Michelle Gonzales</i>	7-9-25	1545	<i>Camden Briggs</i>	7-9-25	1615																
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time																
<i>Camden Briggs</i>	7-10-25	0000	<i>Caitlin Mann</i>	7-10-25	700	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N															
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time																
<i>Caitlin Mann</i>																					
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: 7/10/2025 10:06:12AM

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: 07/10/25 07:00	Work Order ID: E507088
Phone: (972) 371-5200	Date Logged In: 07/09/25 16:39	Logged In By: Noe Soto
Email: agiovengo@ensolum.com	Due Date: 07/16/25 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

Carrier: Courier

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

Comments/Resolution

Sample 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: Bill Wilshusen 201H Well Pad

Work Order: E507164

Job Number: 23003-0002

Received: 7/16/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/23/25

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: 7/23/25

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

Project Name: Bill Wilshusen 201H Well Pad
Workorder: E507164
Date Received: 7/16/2025 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/16/2025 8:00:00AM, under the Project Name: Bill Wilshusen 201H Well Pad.

The analytical test results summarized in this report with the Project Name: Bill Wilshusen 201H Well Pad 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,

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/23/25 12:31
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01-0'	E507164-01A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.
BH01-1'	E507164-02A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.
BH02-0'	E507164-03A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.
BH02-1'	E507164-04A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.
BH02-2'	E507164-05A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.
BH02-3'	E507164-06A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.
BH03-0'	E507164-07A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.
BH03-1'	E507164-08A	Soil	07/14/25	07/16/25	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH01-0'
E507164-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: BA		Batch: 2529110
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		95.1 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: BA		Batch: 2529110
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		90.8 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: HM		Batch: 2529140
Diesel Range Organics (C10-C28)	797	25.0	1	07/17/25	07/18/25	
Oil Range Organics (C28-C36)	173	50.0	1	07/17/25	07/18/25	
<i>Surrogate: n-Nonane</i>		96.2 %	61-141	07/17/25	07/18/25	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: IY		Batch: 2529193
Chloride	971	20.0	1	07/18/25	07/19/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH01-1'
E507164-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.2 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		90.5 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2529140
Diesel Range Organics (C10-C28)	33.3	25.0	1	07/17/25	07/18/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/25	07/18/25	
<i>Surrogate: n-Nonane</i>		97.1 %	61-141	07/17/25	07/18/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY		Batch: 2529193
Chloride	1170	20.0	1	07/18/25	07/19/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH02-0'
E507164-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		96.5 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.8 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2529140
Diesel Range Organics (C10-C28)	135	25.0	1	07/17/25	07/18/25	
Oil Range Organics (C28-C36)	162	50.0	1	07/17/25	07/18/25	
<i>Surrogate: n-Nonane</i>		96.7 %	61-141	07/17/25	07/18/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY		Batch: 2529193
Chloride	340	20.0	1	07/18/25	07/19/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH02-1'
E507164-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		95.7 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.4 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2529140
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/25	07/18/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/25	07/18/25	
<i>Surrogate: n-Nonane</i>		96.7 %	61-141	07/17/25	07/18/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY		Batch: 2529193
Chloride	2900	20.0	1	07/18/25	07/19/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH02-2'
E507164-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.0 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		90.9 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2529140
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/25	07/18/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/25	07/18/25	
<i>Surrogate: n-Nonane</i>		93.3 %	61-141	07/17/25	07/18/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY		Batch: 2529193
Chloride	1860	20.0	1	07/18/25	07/19/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH02-3'
E507164-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		92.5 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		92.9 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2529140
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/25	07/18/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/25	07/18/25	
<i>Surrogate: n-Nonane</i>						
		92.4 %	61-141	07/17/25	07/18/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2529193
Chloride	102	20.0	1	07/18/25	07/19/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH03-0'

E507164-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2529110	
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		96.1 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2529110	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.2 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: HM		Batch: 2529140	
Diesel Range Organics (C10-C28)	78.3	25.0	1	07/17/25	07/18/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/25	07/18/25	
<i>Surrogate: n-Nonane</i>		95.9 %	61-141	07/17/25	07/18/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2529193	
Chloride	379	100	5	07/18/25	07/19/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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BH03-1'
E507164-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Benzene	ND	0.0250	1	07/16/25	07/20/25	
Ethylbenzene	ND	0.0250	1	07/16/25	07/20/25	
Toluene	ND	0.0250	1	07/16/25	07/20/25	
o-Xylene	ND	0.0250	1	07/16/25	07/20/25	
p,m-Xylene	ND	0.0500	1	07/16/25	07/20/25	
Total Xylenes	ND	0.0250	1	07/16/25	07/20/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.4 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2529110
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/25	07/20/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.2 %	70-130	07/16/25	07/20/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2529140
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/25	07/19/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/25	07/19/25	
<i>Surrogate: n-Nonane</i>		94.9 %	61-141	07/17/25	07/19/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY		Batch: 2529193
Chloride	1750	20.0	1	07/18/25	07/19/25	



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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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 (2529110-BLK1)

Prepared: 07/16/25 Analyzed: 07/20/25

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	7.57		8.00		94.6	70-130			

LCS (2529110-BS1)

Prepared: 07/16/25 Analyzed: 07/20/25

Benzene	4.69	0.0250	5.00		93.7	70-130			
Ethylbenzene	4.58	0.0250	5.00		91.5	70-130			
Toluene	4.62	0.0250	5.00		92.3	70-130			
o-Xylene	4.60	0.0250	5.00		91.9	70-130			
p,m-Xylene	9.20	0.0500	10.0		92.0	70-130			
Total Xylenes	13.8	0.0250	15.0		92.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.58		8.00		94.7	70-130			

Matrix Spike (2529110-MS1)

Source: E507164-07

Prepared: 07/16/25 Analyzed: 07/20/25

Benzene	5.18	0.0250	5.00	ND	104	70-130			
Ethylbenzene	5.09	0.0250	5.00	ND	102	70-130			
Toluene	5.16	0.0250	5.00	ND	103	70-130			
o-Xylene	5.11	0.0250	5.00	ND	102	70-130			
p,m-Xylene	10.2	0.0500	10.0	ND	102	70-130			
Total Xylenes	15.3	0.0250	15.0	ND	102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.53		8.00		94.2	70-130			

Matrix Spike Dup (2529110-MSD1)

Source: E507164-07

Prepared: 07/16/25 Analyzed: 07/20/25

Benzene	5.27	0.0250	5.00	ND	105	70-130	1.70	27	
Ethylbenzene	5.15	0.0250	5.00	ND	103	70-130	1.05	26	
Toluene	5.21	0.0250	5.00	ND	104	70-130	1.00	20	
o-Xylene	5.16	0.0250	5.00	ND	103	70-130	0.931	25	
p,m-Xylene	10.3	0.0500	10.0	ND	103	70-130	0.797	23	
Total Xylenes	15.5	0.0250	15.0	ND	103	70-130	0.842	26	
Surrogate: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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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 (2529110-BLK1)

Prepared: 07/16/25 Analyzed: 07/20/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.40		8.00		92.5	70-130			

LCS (2529110-BS2)

Prepared: 07/16/25 Analyzed: 07/20/25

Gasoline Range Organics (C6-C10)	42.1	20.0	50.0		84.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.56		8.00		94.5	70-130			

Matrix Spike (2529110-MS2)

Source: E507164-07

Prepared: 07/16/25 Analyzed: 07/20/25

Gasoline Range Organics (C6-C10)	47.8	20.0	50.0	ND	95.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.88		8.00		98.5	70-130			

Matrix Spike Dup (2529110-MSD2)

Source: E507164-07

Prepared: 07/16/25 Analyzed: 07/23/25

Gasoline Range Organics (C6-C10)	41.8	20.0	50.0	ND	83.5	70-130	13.5	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.01		8.00		87.6	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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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 (2529140-BLK1)

Prepared: 07/17/25 Analyzed: 07/18/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.2		50.0		92.3	61-141			

LCS (2529140-BS1)

Prepared: 07/17/25 Analyzed: 07/18/25

Diesel Range Organics (C10-C28)	255	25.0	250		102	66-144			
Surrogate: n-Nonane	46.4		50.0		92.8	61-141			

Matrix Spike (2529140-MS1)

Source: E507150-11

Prepared: 07/17/25 Analyzed: 07/18/25

Diesel Range Organics (C10-C28)	261	25.0	250	ND	104	56-156			
Surrogate: n-Nonane	48.6		50.0		97.2	61-141			

Matrix Spike Dup (2529140-MSD1)

Source: E507150-11

Prepared: 07/17/25 Analyzed: 07/18/25

Diesel Range Organics (C10-C28)	263	25.0	250	ND	105	56-156	0.818	20	
Surrogate: n-Nonane	47.9		50.0		95.9	61-141			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/23/2025 12:31:31PM
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Anions by EPA 300.0/9056A

Analyst: IY

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 (2529193-BLK1)

Prepared: 07/18/25 Analyzed: 07/18/25

Chloride	ND	20.0							
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LCS (2529193-BS1)

Prepared: 07/18/25 Analyzed: 07/18/25

Chloride	251	20.0	250		100	90-110			
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Matrix Spike (2529193-MS1)

Source: E507156-04

Prepared: 07/18/25 Analyzed: 07/18/25

Chloride	269	20.0	250	ND	108	80-120			
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Matrix Spike Dup (2529193-MSD1)

Source: E507156-04

Prepared: 07/18/25 Analyzed: 07/18/25

Chloride	271	20.0	250	ND	108	80-120	0.469	20	
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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. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/23/25 12:31
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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: Bill Wilshusen 201H Well Pad				Address: 3122 National Parks Hwy				E507164		2303-002						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	Compliance	Y	or	N	
10:10	7/14/2025	Soil	1	BH01 - 0'		1																	
10:29	7/14/2025	Soil	1	BH01 - 1'		2																	
10:33	7/14/2025	Soil	1	BH02 - 0'		3																	
10:37	7/14/2025	Soil	1	BH02 - 1'		4																	
10:41	7/14/2025	Soil	1	BH02 - 2'		5																	
10:47	7/14/2025	Soil	1	BH02 - 3'		6																	
11:01	7/14/2025	Soil	1	BH03 - 0'		7																	
11:04	7/14/2025	Soil	1	BH03 - 1'		8																	
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, iestrella@ensolum.com, chamilton@ensolum.com, bmoir@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: Israel Estrella																							
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"/> N											
		7/15/25		7:11				7-15-25		0711													
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time													
		7-15-25		1730				7.15.25		1730													
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time													
		7.15.25		2215				7-16-25		800													
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time													
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time													
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA													
Note: Samples are discarded 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: 7/16/2025 9:31:28AM

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: 07/16/25 08:00	Work Order ID: E507164
Phone: (972) 371-5200	Date Logged In: 07/15/25 16:04	Logged In By: Caitlin Mars
Email: agiovengo@ensolum.com	Due Date: 07/23/25 17:00 (5 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

Carrier: Courier

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

Comments/Resolution

Sample 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: Bill Wilshusen 201H Well Pad

Work Order: E507281

Job Number: 23003-0002

Received: 7/24/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/30/25

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: 7/30/25

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



Project Name: Bill Wilshusen 201H Well Pad
Workorder: E507281
Date Received: 7/24/2025 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/24/2025 8:00:00AM, under the Project Name: Bill Wilshusen 201H Well Pad.

The analytical test results summarized in this report with the Project Name: Bill Wilshusen 201H Well Pad 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

Raina Schwanz
Laboratory Administrator
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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/30/25 15:08
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03-2'	E507281-01A	Soil	07/22/25	07/24/25	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/30/2025 3:08:26PM
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BH03-2'
E507281-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2530159
Benzene	ND	0.0250	1	07/25/25	07/30/25	
Ethylbenzene	ND	0.0250	1	07/25/25	07/30/25	
Toluene	ND	0.0250	1	07/25/25	07/30/25	
o-Xylene	ND	0.0250	1	07/25/25	07/30/25	
p,m-Xylene	ND	0.0500	1	07/25/25	07/30/25	
Total Xylenes	ND	0.0250	1	07/25/25	07/30/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		87.7 %	70-130	07/25/25	07/30/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2530159
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/25	07/30/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.8 %	70-130	07/25/25	07/30/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2531036
Diesel Range Organics (C10-C28)	ND	25.0	1	07/28/25	07/30/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/28/25	07/30/25	
<i>Surrogate: n-Nonane</i>		94.4 %	61-141	07/28/25	07/30/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2531037
Chloride	401	20.0	1	07/28/25	07/29/25	



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/30/2025 3:08:26PM
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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 (2530159-BLK1)

Prepared: 07/25/25 Analyzed: 07/29/25

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	6.99		8.00		87.4	70-130			

LCS (2530159-BS1)

Prepared: 07/25/25 Analyzed: 07/30/25

Benzene	5.51	0.0250	5.00		110	70-130			
Ethylbenzene	5.53	0.0250	5.00		111	70-130			
Toluene	5.56	0.0250	5.00		111	70-130			
o-Xylene	5.46	0.0250	5.00		109	70-130			
p,m-Xylene	11.2	0.0500	10.0		112	70-130			
Total Xylenes	16.6	0.0250	15.0		111	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.84		8.00		85.5	70-130			

Matrix Spike (2530159-MS1)

Source: E507283-05

Prepared: 07/25/25 Analyzed: 07/30/25

Benzene	4.65	0.0250	5.00	ND	93.0	70-130			
Ethylbenzene	4.58	0.0250	5.00	ND	91.6	70-130			
Toluene	4.63	0.0250	5.00	ND	92.6	70-130			
o-Xylene	4.57	0.0250	5.00	ND	91.5	70-130			
p,m-Xylene	9.29	0.0500	10.0	ND	92.9	70-130			
Total Xylenes	13.9	0.0250	15.0	ND	92.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.11		8.00		88.8	70-130			

Matrix Spike Dup (2530159-MSD1)

Source: E507283-05

Prepared: 07/25/25 Analyzed: 07/30/25

Benzene	5.56	0.0250	5.00	ND	111	70-130	17.8	27	
Ethylbenzene	5.46	0.0250	5.00	ND	109	70-130	17.6	26	
Toluene	5.53	0.0250	5.00	ND	111	70-130	17.7	20	
o-Xylene	5.43	0.0250	5.00	ND	109	70-130	17.1	25	
p,m-Xylene	11.0	0.0500	10.0	ND	110	70-130	17.0	23	
Total Xylenes	16.4	0.0250	15.0	ND	110	70-130	17.0	26	
Surrogate: 4-Bromochlorobenzene-PID	7.09		8.00		88.6	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/30/2025 3:08:26PM
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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 (2530159-BLK1)

Prepared: 07/25/25 Analyzed: 07/29/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.27		8.00		90.9	70-130			

LCS (2530159-BS2)

Prepared: 07/25/25 Analyzed: 07/29/25

Gasoline Range Organics (C6-C10)	44.9	20.0	50.0		89.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.45		8.00		93.1	70-130			

Matrix Spike (2530159-MS2)

Source: E507283-05

Prepared: 07/25/25 Analyzed: 07/30/25

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0	ND	96.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.39		8.00		92.4	70-130			

Matrix Spike Dup (2530159-MSD2)

Source: E507283-05

Prepared: 07/25/25 Analyzed: 07/30/25

Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.3	70-130	4.00	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.42		8.00		92.8	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/30/2025 3:08:26PM
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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 (2531036-BLK1)

Prepared: 07/28/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.1		50.0		88.2	61-141			

LCS (2531036-BS1)

Prepared: 07/28/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	266	25.0	250		106	66-144			
Surrogate: n-Nonane	44.7		50.0		89.3	61-141			

Matrix Spike (2531036-MS1)

Source: E507279-07

Prepared: 07/28/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	267	25.0	250	ND	107	56-156			
Surrogate: n-Nonane	44.4		50.0		88.8	61-141			

Matrix Spike Dup (2531036-MSD1)

Source: E507279-07

Prepared: 07/28/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	56-156	1.00	20	
Surrogate: n-Nonane	43.3		50.0		86.7	61-141			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/30/2025 3:08:26PM
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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 (2531037-BLK1)

Prepared: 07/28/25 Analyzed: 07/29/25

Chloride	ND	20.0							
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LCS (2531037-BS1)

Prepared: 07/28/25 Analyzed: 07/29/25

Chloride	254	20.0	250		102	90-110			
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Matrix Spike (2531037-MS1)

Source: E507277-07

Prepared: 07/28/25 Analyzed: 07/29/25

Chloride	278	20.0	250	24.5	101	80-120			
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Matrix Spike Dup (2531037-MSD1)

Source: E507277-07

Prepared: 07/28/25 Analyzed: 07/29/25

Chloride	279	20.0	250	24.5	102	80-120	0.408	20	
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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. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/30/25 15:08
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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: Bill Wilshusen 201H Well Pad				Address: 3122 National Parks Hwy				E507281		23003-0002					x	x			
Project Manager: Ashley Gioveno				City, State, Zip: Carlsbad NM, 88220															
Address: 3122 National Parks Hwy				Phone: 575-988-0055															
City, State, Zip: Carlsbad NM, 88220				Email: agioveno@ensolum.com															
Phone: 575-988-0055				Miscellaneous:															
Email: agioveno@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	TCEQ 1005-TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA		
11:35	7/22/2025	Soil	1	BH03 - 2'		1								x						

Additional Instructions: Please CC: cburton@ensolum.com, agioveno@ensolum.com, iestrella@ensolum.com, chamilton@ensolum.com, bmoir@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: Israel Estrella

Relinquished by: (Signature) <i>[Signature]</i>	Date 7/23/25	Time 7:11	Received by: (Signature) <i>Michelle Gonzales</i>	Date 7-23-25	Time 0711	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.
Relinquished by: (Signature) <i>Michelle Gonzales</i>	Date 7-23-25	Time 1500	Received by: (Signature) <i>Marissa Gonzales</i>	Date 7-23-25	Time 1500	
Relinquished by: (Signature) <i>Marissa Gonzales</i>	Date 7-23-25	Time 2345	Received by: (Signature) <i>Cath Mon</i>	Date 7-24-25	Time 800	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 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: 7/24/2025 9:28:31AM

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: 07/24/25 08:00 Work Order ID: E507281
Phone: (972) 371-5200 Date Logged In: 07/23/25 14:24 Logged In By: Caitlin Mars
Email: agiovengo@ensolum.com Due Date: 07/30/25 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

Carrier: Courier

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

Comments/Resolution

Sample 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

Empty box for 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: Bill Wilshusen 201H Well Pad

Work Order: E507298

Job Number: 23003-0002

Received: 7/25/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/31/25

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: 7/31/25

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



Project Name: Bill Wilshusen 201H Well Pad
Workorder: E507298
Date Received: 7/25/2025 7:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/25/2025 7:45:00AM, under the Project Name: Bill Wilshusen 201H Well Pad.

The analytical test results summarized in this report with the Project Name: Bill Wilshusen 201H Well Pad apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

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Michelle Gonzales
Client Representative
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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/31/25 09:08
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01-2'	E507298-01A	Soil	07/23/25	07/25/25	Glass Jar, 2 oz.
BH01-3'	E507298-02A	Soil	07/23/25	07/25/25	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/31/2025 9:08:42AM
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BH01-2'
E507298-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2530156	
Benzene	ND	0.0250	1	07/25/25	07/27/25	
Ethylbenzene	ND	0.0250	1	07/25/25	07/27/25	
Toluene	ND	0.0250	1	07/25/25	07/27/25	
o-Xylene	ND	0.0250	1	07/25/25	07/27/25	
p,m-Xylene	ND	0.0500	1	07/25/25	07/27/25	
Total Xylenes	ND	0.0250	1	07/25/25	07/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		99.2 %	70-130	07/25/25	07/27/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2530156	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/25	07/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		98.9 %	70-130	07/25/25	07/27/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH		Batch: 2531050	
Diesel Range Organics (C10-C28)	35.4	25.0	1	07/29/25	07/30/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/29/25	07/30/25	
<i>Surrogate: n-Nonane</i>						
		93.3 %	61-141	07/29/25	07/30/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2531043	
Chloride	1220	20.0	1	07/29/25	07/29/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/31/2025 9:08:42AM
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BH01-3'
E507298-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: SL		Batch: 2530156
Benzene	ND	0.0250	1	07/25/25	07/27/25	
Ethylbenzene	ND	0.0250	1	07/25/25	07/27/25	
Toluene	ND	0.0250	1	07/25/25	07/27/25	
o-Xylene	ND	0.0250	1	07/25/25	07/27/25	
p,m-Xylene	ND	0.0500	1	07/25/25	07/27/25	
Total Xylenes	ND	0.0250	1	07/25/25	07/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		99.7 %	70-130	07/25/25	07/27/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: SL		Batch: 2530156
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/25	07/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	07/25/25	07/27/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2531050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/29/25	07/30/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/29/25	07/30/25	
<i>Surrogate: n-Nonane</i>		92.9 %	61-141	07/29/25	07/30/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2531043
Chloride	148	20.0	1	07/29/25	07/29/25	



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/31/2025 9:08:42AM
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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 (2530156-BLK1)

Prepared: 07/25/25 Analyzed: 07/27/25

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	7.76		8.00		97.0	70-130			

LCS (2530156-BS1)

Prepared: 07/25/25 Analyzed: 07/27/25

Benzene	5.33	0.0250	5.00		107	70-130			
Ethylbenzene	5.25	0.0250	5.00		105	70-130			
Toluene	5.29	0.0250	5.00		106	70-130			
o-Xylene	5.23	0.0250	5.00		105	70-130			
p,m-Xylene	10.7	0.0500	10.0		107	70-130			
Total Xylenes	15.9	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130			

Matrix Spike (2530156-MS1)

Source: E507277-06

Prepared: 07/25/25 Analyzed: 07/27/25

Benzene	5.31	0.0250	5.00	ND	106	70-130			
Ethylbenzene	5.26	0.0250	5.00	ND	105	70-130			
Toluene	5.28	0.0250	5.00	ND	106	70-130			
o-Xylene	5.24	0.0250	5.00	ND	105	70-130			
p,m-Xylene	10.7	0.0500	10.0	ND	107	70-130			
Total Xylenes	15.9	0.0250	15.0	ND	106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.63		8.00		95.4	70-130			

Matrix Spike Dup (2530156-MSD1)

Source: E507277-06

Prepared: 07/25/25 Analyzed: 07/27/25

Benzene	5.04	0.0250	5.00	ND	101	70-130	5.17	27	
Ethylbenzene	5.02	0.0250	5.00	ND	100	70-130	4.66	26	
Toluene	5.03	0.0250	5.00	ND	101	70-130	4.92	20	
o-Xylene	5.00	0.0250	5.00	ND	100	70-130	4.65	25	
p,m-Xylene	10.2	0.0500	10.0	ND	102	70-130	4.60	23	
Total Xylenes	15.2	0.0250	15.0	ND	101	70-130	4.62	26	
Surrogate: 4-Bromochlorobenzene-PID	7.63		8.00		95.4	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/31/2025 9:08:42AM
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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 (2530156-BLK1)

Prepared: 07/25/25 Analyzed: 07/27/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.11		8.00		101	70-130			

LCS (2530156-BS2)

Prepared: 07/25/25 Analyzed: 07/27/25

Gasoline Range Organics (C6-C10)	57.3	20.0	50.0		115	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.48		8.00		106	70-130			

Matrix Spike (2530156-MS2)

Source: E507277-06

Prepared: 07/25/25 Analyzed: 07/27/25

Gasoline Range Organics (C6-C10)	51.2	20.0	50.0	ND	102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.08		8.00		101	70-130			

Matrix Spike Dup (2530156-MSD2)

Source: E507277-06

Prepared: 07/25/25 Analyzed: 07/27/25

Gasoline Range Organics (C6-C10)	52.5	20.0	50.0	ND	105	70-130	2.56	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.98		8.00		99.7	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/31/2025 9:08:42AM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

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 (2531050-BLK1)

Prepared: 07/29/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.1		50.0		88.2	61-141			

LCS (2531050-BS1)

Prepared: 07/29/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	244	25.0	250		97.5	66-144			
Surrogate: n-Nonane	45.0		50.0		90.0	61-141			

Matrix Spike (2531050-MS1)

Source: E507285-02

Prepared: 07/29/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	281	25.0	250	ND	112	56-156			
Surrogate: n-Nonane	49.3		50.0		98.6	61-141			

Matrix Spike Dup (2531050-MSD1)

Source: E507285-02

Prepared: 07/29/25 Analyzed: 07/29/25

Diesel Range Organics (C10-C28)	284	25.0	250	ND	114	56-156	1.19	20	
Surrogate: n-Nonane	49.8		50.0		99.5	61-141			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/31/2025 9:08:42AM
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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 (2531043-BLK1)

Prepared: 07/29/25 Analyzed: 07/29/25

Chloride	ND	20.0							
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LCS (2531043-BS1)

Prepared: 07/29/25 Analyzed: 07/29/25

Chloride	254	20.0	250		102	90-110			
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Matrix Spike (2531043-MS1)

Source: E507324-02

Prepared: 07/29/25 Analyzed: 07/29/25

Chloride	256	20.0	250	ND	103	80-120			
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Matrix Spike Dup (2531043-MSD1)

Source: E507324-02

Prepared: 07/29/25 Analyzed: 07/29/25

Chloride	256	20.0	250	ND	102	80-120	0.242	20	
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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. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/31/25 09:08
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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: Bill Wilshusen 201H Well Pad		Address: 3122 National Parks Hwy		500298	230030002				x	x			
Project Manager: Ashley Gioveno		City, State, Zip: Carlsbad NM, 88220		Phone: 575-988-0055									
Address: 3122 National Parks Hwy		Email: agioveno@ensolum.com		Miscellaneous:									
City, State, Zip: Carlsbad NM, 88220													
Phone: 575-988-0055													
Email: agioveno@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	TCEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA	
9:20	7/23/2025	Soil	1	BH01 - 2'		1													
11:53	7/23/2025	Soil	1	BH01 - 3'		2													

Additional Instructions: Please CC: cburton@ensolum.com, agioveno@ensolum.com, iestrella@ensolum.com, chamilton@ensolum.com, bmoir@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: Israel Estrella						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.
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>[Signature]</i>	7/24/25	7:11	Michelle Gonzales	7-24-25	0711	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Michelle Gonzales	7-24-25	1600	Andrew J.	7-24-25	1700	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Andrew J.	7-24-25	2400	Carth Mar	7-25-25	745	
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.

Lab Use Only
Received on ice:
 Y N

Envirotech Analytical Laboratory

Printed: 7/25/2025 11:24:02AM

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: Matador Resources, LLC. Date Received: 07/25/25 07:45 Work Order ID: E507298
Phone: (972) 371-5200 Date Logged In: 07/24/25 15:32 Logged In By: Caitlin Mars
Email: agiovengo@ensolum.com Due Date: 07/31/25 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

Carrier: Courier

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

Comments/Resolution

Sample 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

Empty box for 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: Bill Wilshusen 201H Well Pad

Work Order: E508165

Job Number: 23003-0002

Received: 8/15/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/25

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: 8/18/25



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

Project Name: Bill Wilshusen 201H Well Pad
Workorder: E508165
Date Received: 8/15/2025 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/15/2025 7:30:00AM, under the Project Name: Bill Wilshusen 201H Well Pad.

The analytical test results summarized in this report with the Project Name: Bill Wilshusen 201H Well Pad apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

Field Offices:

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Lynn Jarboe
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Michelle Gonzales
Client Representative
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Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 08/18/25 14:04
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS05-0'	E508165-01A	Soil	08/13/25	08/15/25	Glass Jar, 2 oz.
SS05-1'	E508165-02A	Soil	08/13/25	08/15/25	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:04:18PM
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SS05-0'

E508165-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2533121	
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		94.3 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2533121	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.7 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2533119	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/15/25	
<i>Surrogate: n-Nonane</i>						
		94.6 %	61-141	08/15/25	08/15/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2533123	
Chloride	179	20.0	1	08/15/25	08/15/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:04:18PM
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SS05-1'

E508165-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.4 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2533119
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/15/25	
<i>Surrogate: n-Nonane</i>		97.7 %	61-141	08/15/25	08/15/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2533123
Chloride	ND	20.0	1	08/15/25	08/15/25	



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:04:18PM
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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 (2533121-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

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	8.11		8.00		101	70-130			

LCS (2533121-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.54	0.0250	5.00		111	70-130			
Ethylbenzene	5.33	0.0250	5.00		107	70-130			
Toluene	5.47	0.0250	5.00		109	70-130			
o-Xylene	5.23	0.0250	5.00		105	70-130			
p,m-Xylene	10.7	0.0500	10.0		107	70-130			
Total Xylenes	15.9	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.98		8.00		99.7	70-130			

Matrix Spike (2533121-MS1)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.17	0.0250	5.00	ND	103	70-130			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	70-130			
Toluene	5.10	0.0250	5.00	ND	102	70-130			
o-Xylene	4.90	0.0250	5.00	ND	98.0	70-130			
p,m-Xylene	9.97	0.0500	10.0	ND	99.7	70-130			
Total Xylenes	14.9	0.0250	15.0	ND	99.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.10		8.00		101	70-130			

Matrix Spike Dup (2533121-MSD1)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.14	0.0250	5.00	ND	103	70-130	0.643	27	
Ethylbenzene	4.91	0.0250	5.00	ND	98.3	70-130	0.833	26	
Toluene	5.06	0.0250	5.00	ND	101	70-130	0.871	20	
o-Xylene	4.88	0.0250	5.00	ND	97.7	70-130	0.365	25	
p,m-Xylene	9.90	0.0500	10.0	ND	99.0	70-130	0.720	23	
Total Xylenes	14.8	0.0250	15.0	ND	98.5	70-130	0.603	26	
Surrogate: 4-Bromochlorobenzene-PID	8.02		8.00		100	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:04:18PM
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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 (2533121-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.8	70-130			

LCS (2533121-BS2)

Prepared: 08/15/25 Analyzed: 08/18/25

Gasoline Range Organics (C6-C10)	54.8	20.0	50.0		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.86		8.00		98.2	70-130			

Matrix Spike (2533121-MS2)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	49.0	20.0	50.0	ND	98.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.72		8.00		96.6	70-130			

Matrix Spike Dup (2533121-MSD2)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	48.5	20.0	50.0	ND	97.0	70-130	1.08	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.71		8.00		96.3	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:04:18PM
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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 (2533119-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	54.1		50.0		108	61-141			

LCS (2533119-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	232	25.0	250		92.8	66-144			
Surrogate: <i>n</i> -Nonane	47.1		50.0		94.1	61-141			

Matrix Spike (2533119-MS1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	56-156			
Surrogate: <i>n</i> -Nonane	49.0		50.0		98.0	61-141			

Matrix Spike Dup (2533119-MSD1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	248	25.0	250	ND	99.1	56-156	1.71	20	
Surrogate: <i>n</i> -Nonane	49.3		50.0		98.6	61-141			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:04:18PM
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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 (2533123-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride ND 20.0

LCS (2533123-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride 252 20.0 250 101 90-110

Matrix Spike (2533123-MS1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride 255 20.0 250 ND 102 80-120

Matrix Spike Dup (2533123-MSD1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride 258 20.0 250 ND 103 80-120 1.29 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. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 08/18/25 14:04
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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

Released to Imaging: 2/10/2026 8:33:44 AM

Received by OCD: 12/1/2025 7:27:21 AM

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: Bill Wilshusen 201H Well Pad				Address: 3122 National Parks Hwy				E508165		23003.000Z		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	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/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				
12:43	8/13/2025	S	1	SS05-0'		1						X						4.0			
13:24	8/13/2025	S	1	SS05-1'		2						X						4.1			

Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, chamilton@ensolum.com, iestrella@ensolum.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: Aboubakar Kone

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>8/14/25</u>	Time <u>7:11</u>	Received by: (Signature) <u>Michelle Gonzales</u>	Date <u>8-14-25</u>	Time <u>0711</u>	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: <input checked="" type="radio"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C _____
Relinquished by: (Signature) <u>Michelle Gonzales</u>	Date <u>8-14-25</u>	Time <u>1445</u>	Received by: (Signature) <u>Marissa Gonzales</u>	Date <u>8-14-25</u>	Time <u>1445</u>	
Relinquished by: (Signature) <u>Marissa Gonzales</u>	Date <u>8-14-25</u>	Time <u>1840</u>	Received by: (Signature) <u>Andrew Musso</u>	Date <u>8.14.25</u>	Time <u>1840</u>	
Relinquished by: (Signature) <u>Andrew Musso</u>	Date <u>8.14.25</u>	Time <u>2330</u>	Received by: (Signature) <u>Caitlin</u>	Date <u>8.15.25</u>	Time <u>730</u>	

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.



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Envirotech Analytical Laboratory

Printed: 8/15/2025 9:15:24AM

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: 08/15/25 07:30 Work Order ID: E508165
Phone: (972) 371-5200 Date Logged In: 08/14/25 16:01 Logged In By: Noe Soto
Email: agiovengo@ensolum.com Due Date: 08/16/25 07:00 (0 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

Carrier: Courier

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

Sample 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

Empty box for client instruction.

Comments/Resolution

Large empty box for comments/resolution.

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: Bill Wilshusen 201H Well Pad

Work Order: E508166

Job Number: 23003-0002

Received: 8/15/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/25

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: 8/18/25

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



Project Name: Bill Wilshusen 201H Well Pad
Workorder: E508166
Date Received: 8/15/2025 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/15/2025 7:30:00AM, under the Project Name: Bill Wilshusen 201H Well Pad.

The analytical test results summarized in this report with the Project Name: Bill Wilshusen 201H Well Pad apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 08/18/25 14:05
---	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS06-0'	E508166-01A	Soil	08/13/25	08/15/25	Glass Jar, 2 oz.
SS06-1'	E508166-02A	Soil	08/13/25	08/15/25	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:05:18PM
---	--	---

SS06-0'

E508166-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2533121	
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2533121	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.7 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2533119	
Diesel Range Organics (C10-C28)	25.7	25.0	1	08/15/25	08/15/25	T17
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/15/25	
<i>Surrogate: n-Nonane</i>		94.6 %	61-141	08/15/25	08/15/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2533123	
Chloride	371	20.0	1	08/15/25	08/15/25	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:05:18PM
---	--	---

SS06-1'

E508166-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.1 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2533119
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/15/25	
<i>Surrogate: n-Nonane</i>		97.1 %	61-141	08/15/25	08/15/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2533123
Chloride	104	20.0	1	08/15/25	08/15/25	



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:05:18PM
---	--	---

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 (2533121-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

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	8.11		8.00		101	70-130			

LCS (2533121-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.54	0.0250	5.00		111	70-130			
Ethylbenzene	5.33	0.0250	5.00		107	70-130			
Toluene	5.47	0.0250	5.00		109	70-130			
o-Xylene	5.23	0.0250	5.00		105	70-130			
p,m-Xylene	10.7	0.0500	10.0		107	70-130			
Total Xylenes	15.9	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.98		8.00		99.7	70-130			

Matrix Spike (2533121-MS1)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.17	0.0250	5.00	ND	103	70-130			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	70-130			
Toluene	5.10	0.0250	5.00	ND	102	70-130			
o-Xylene	4.90	0.0250	5.00	ND	98.0	70-130			
p,m-Xylene	9.97	0.0500	10.0	ND	99.7	70-130			
Total Xylenes	14.9	0.0250	15.0	ND	99.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.10		8.00		101	70-130			

Matrix Spike Dup (2533121-MSD1)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.14	0.0250	5.00	ND	103	70-130	0.643	27	
Ethylbenzene	4.91	0.0250	5.00	ND	98.3	70-130	0.833	26	
Toluene	5.06	0.0250	5.00	ND	101	70-130	0.871	20	
o-Xylene	4.88	0.0250	5.00	ND	97.7	70-130	0.365	25	
p,m-Xylene	9.90	0.0500	10.0	ND	99.0	70-130	0.720	23	
Total Xylenes	14.8	0.0250	15.0	ND	98.5	70-130	0.603	26	
Surrogate: 4-Bromochlorobenzene-PID	8.02		8.00		100	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:05:18PM
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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 (2533121-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.8	70-130			

LCS (2533121-BS2)

Prepared: 08/15/25 Analyzed: 08/18/25

Gasoline Range Organics (C6-C10)	54.8	20.0	50.0		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.86		8.00		98.2	70-130			

Matrix Spike (2533121-MS2)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	49.0	20.0	50.0	ND	98.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.72		8.00		96.6	70-130			

Matrix Spike Dup (2533121-MSD2)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	48.5	20.0	50.0	ND	97.0	70-130	1.08	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.71		8.00		96.3	70-130			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:05:18PM
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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 (2533119-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	54.1		50.0		108	61-141			

LCS (2533119-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	232	25.0	250		92.8	66-144			
Surrogate: <i>n</i> -Nonane	47.1		50.0		94.1	61-141			

Matrix Spike (2533119-MS1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	56-156			
Surrogate: <i>n</i> -Nonane	49.0		50.0		98.0	61-141			

Matrix Spike Dup (2533119-MSD1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	248	25.0	250	ND	99.1	56-156	1.71	20	
Surrogate: <i>n</i> -Nonane	49.3		50.0		98.6	61-141			



QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 8/18/2025 2:05:18PM
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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 (2533123-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	ND	20.0							
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LCS (2533123-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	252	20.0	250		101	90-110			
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Matrix Spike (2533123-MS1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	255	20.0	250	ND	102	80-120			
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Matrix Spike Dup (2533123-MSD1)

Source: E508165-02

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	258	20.0	250	ND	103	80-120	1.29	20	
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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. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Bill Wilshusen 201H Well Pad Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 08/18/25 14:05
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T17 The sample chromatographic pattern does not resemble the typical fuel standard used for quantitation.

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

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: Bill Wilshusen 201H Well Pad				Address: 3122 National Parks Hwy				E 2081166		2300.0007		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
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			Remarks
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	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA			
14:23	8/13/2025	S	1	SS06-0'		1						X						4.7		
15:08	8/13/2025	S	1	SS06-1'		2						X						4.3		

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: Aboubakar Kone

Relinquished by: (Signature) <i>[Signature]</i>	Date 8/14/25	Time 7:11	Received by: (Signature) <i>Michelle Gonzales</i>	Date 8.14.25	Time 0710	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: <input checked="" type="radio"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C _____
Relinquished by: (Signature) <i>Michelle Gonzales</i>	Date 8/14/25	Time 1445	Received by: (Signature) <i>Marissa Gonzales</i>	Date 8.14.25	Time 1445	
Relinquished by: (Signature) <i>Marissa Gonzales</i>	Date 8.14.25	Time 1840	Received by: (Signature) <i>Andrew Musso</i>	Date 8.14.25	Time 1840	
Relinquished by: (Signature) <i>Andrew Musso</i>	Date 8.14.25	Time 2330	Received by: (Signature) <i>Caitlin Man</i>	Date 8.15.25	Time 730	

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.

Released to Imaging: 2/10/2026 8:33:44 AM

Page 12 of 13

Received by OCD: 12/1/2025 7:27:21 AM

Page 137 of 161



Envirotech Analytical Laboratory

Printed: 8/15/2025 9:19:02AM

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: Matador Resources, LLC. Date Received: 08/15/25 07:30 Work Order ID: E508166
Phone: (972) 371-5200 Date Logged In: 08/14/25 16:10 Logged In By: Noe Soto
Email: agiovengo@ensolum.com Due Date: 08/16/25 07:00 (0 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

Carrier: Courier

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

Sample 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

Empty box for Client Instruction

Comments/Resolution

Large empty box for Comments/Resolution

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: [Jason Touchet](#); [Arsenio Jones](#); [Ashley Giovengo](#); [Bratcher, Michael, EMNRD](#); [Wells, Shelly, EMNRD](#)
Subject: Re: [EXTERNAL] Extension Request - Matador Production Company - Bill Wilshusen 201H Well Pad - Incident Number nAPP2506233274
Date: Friday, May 30, 2025 10:02:21 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[Outlook-xg0rshbd.png](#)

[**EXTERNAL EMAIL**]

Good morning Chad,

Thank you for the correspondence. Your 90-day time extension request is approved. Remediation Due date has been updated to September 2, 2025.

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

Have a safe and enjoyable weekend!

Regards,

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



From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Friday, May 30, 2025 8:57 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Extension Request - Matador Production Company - Bill Wilshusen 201H Well Pad - Incident Number nAPP2506233274

From: Chad Hamilton <chamilton@ensolum.com>
Sent: Friday, May 30, 2025 8:43 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Jason Touchet <jason.touchet@matadorresources.com>; Arsenio Jones <arsenio.jones@matadorresources.com>; Ashley Giovengo <agiovengo@ensolum.com>
Subject: [EXTERNAL] Extension Request - Matador Production Company - Bill Wilshusen 201H Well Pad - Incident Number nAPP2506233274

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

All,

Matador Production Company (Matador) is requesting an extension of the current deadline of June 2, 2025, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Bill Wilshusen 201H Well Pad (Site) (Incident Number nAPP2506233274). The release occurred on March 3, 2025, and approximately 10 barrels (bbls) of drilling mud were released on pad; 9 bbls were recovered. Due to ongoing completion operations, Matador has been unable to investigate lateral and vertical delineation or remediate potentially impacted soil in accordance with the strictest Closure Criteria per NMOCD Table I. Matador intends to submit a remediation work plan or closure report after completing excavation of the subject matter release and upon receiving final laboratory analytical results from confirmation sampling activities. Matador respectfully requests an extension until August 28, 2025.

Thanks,



Chad Hamilton

Project Geologist

940-923-0072

Ensolum, LLC



From: [Velez, Nelson, EMNRD](#)
To: [Chad Hamilton](#); [Enviro, OCD, EMNRD](#)
Cc: [Ashley Giovengo](#); [Jason Touchet](#)
Subject: Re: [EXTERNAL] Extension Request - Matador Production Company - Bill Wilshusen 201H Well Pad - nAPP2506233274
Date: Wednesday, September 3, 2025 7:40:58 AM
Attachments: [image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[Outlook-2ehys1kd.png](#)

[**EXTERNAL EMAIL**]

Good morning Chad,

Thank you for your inquiry. Due to activities outside of the control of Matador, your 90-day time extension is approved. Remediation Due date has been updated to December 1, 2025.

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

Regards,

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



From: Chad Hamilton <chamilton@ensolum.com>
Sent: Tuesday, September 2, 2025 2:52 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Ashley Giovengo <agiovengo@ensolum.com>; Jason Touchet <jason.touchet@matadorresources.com>
Subject: RE: [EXTERNAL] Extension Request - Matador Production Company - Bill Wilshusen 201H Well Pad - nAPP2506233274

Mr. Velez,

Ensolum, LLC (Ensolum), on behalf of Matador Production Company (Matador) respectfully requests a reconsideration of the denial for a 90-day extension of the current deadline of September 2, 2025, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Bill Wilshusen 201H Well Pad (Site) (Incident Number nAPP2506233274). Ensolum submitted an initial extension request on May 30, 2025, due to ongoing completions operations at the Site. Completion operations were concluded on July 8, 2025, at which point Ensolum personnel began delineation soil sampling at the Site. Lateral and vertical delineation of the subject matter release was completed on August 13, 2025. On August 22, 2025, Southwest Geophysical Consulting, LLC (Southwest Geophysical) was contracted to perform a karst survey at the Site. Southwest Geophysical will be onsite beginning on September 8, 2025, under the supervision of Dave Decker, to complete field activities for the geophysical portion of the karst survey. Once the geophysical karst survey for the Site has been completed, Matador intends to begin excavation of the subject matter release. 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 December 1, 2025. Please let me know if you have any further questions regarding this site.

Thanks,

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Sent: Tuesday, September 2, 2025 1:21 PM

To: Chad Hamilton <chamilton@ensolum.com>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Cc: Ashley Giovengo <agiovengo@ensolum.com>; Jason Touchet <jason.touchet@matadorresources.com>

Subject: Re: [EXTERNAL] Extension Request - Matador Production Company - Bill Wilshusen 201H Well Pad - nAPP2506233274

[**EXTERNAL EMAIL**]

Chad,

Thank you for the correspondence. Your request for a 90-day time extension has been denied. Submit your site assessment/remediation plan or remediation closure report as soon as possible. Matador may be subject to enforcement action, which may include civil penalties. In the event civil penalties are levied, they may be incurred daily, commencing the first date of the infraction.

Regards,

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



From: Chad Hamilton <chamilton@ensolum.com>
Sent: Tuesday, September 2, 2025 10:46 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Ashley Giovengo <agiovengo@ensolum.com>; Jason Touchet <jason.touchet@matadorresources.com>
Subject: [EXTERNAL] Extension Request - Matador Production Company - Bill Wilshusen 201H Well Pad - nAPP2506233274

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

Hello all,

Matador Production Company (Matador) is requesting an extension of the current deadline of September 2, 2025, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Bill Wilshusen 201H Well Pad (Site) (Incident Number nAPP2506233274). The release occurred on March 3, 2025, and 10 barrels (bbls) of drilling mud were released onto the pad surface; 9 bbls of drilling mud were recovered. The release impacted an area on-pad approximately 2,224 sq ft (square feet) in size on Federal Land managed by the Bureau of Land Management (BLM). Lateral and vertical delineation soil sampling in accordance with the strictest Closure Criteria per NMOCD Table I criteria has been completed at the Site. Excavation of the subject matter release will begin once Matador has selected a subcontractor for excavation activities. 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 December 1, 2025. Please let me know if you have any further questions regarding this site.

Thanks



Chad Hamilton

Project Geologist

940-923-0072

Ensolum, LLC

in f 

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 438141

QUESTIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438141
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	Bill Wilshusen 201H Well Pad
Date Release Discovered	03/03/2025
Surface Owner	Federal

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

Nature and Volume of Release	
<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	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Overflow - Tank, Pit, Etc. Tank (Any) Drilling Mud/Fluid Released: 10 BBL Recovered: 9 BBL Lost: 1 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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Oil Conservation Division
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Santa Fe, NM 87505**

QUESTIONS, Page 2

Action 438141

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438141
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>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.</i>	

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	<i>Not answered.</i>

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.

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ACKNOWLEDGMENTS

Action 438141

ACKNOWLEDGMENTS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438141
	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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Santa Fe, NM 87505

CONDITIONS

Action 438141

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438141
	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.	3/3/2025

Impacted Soil On-Pad	
Saturated Soil (inches)	
	0.2
Area (sq. ft.)	
	2333
Standing fluids	
inches of standing fluid	
	1
bbl estimate of standing fluids	
barrels recovered (if known)	
	9
Soil type	
	pad caliche
Spill type	
	oil(crude)
Barrel estimate in soil	
	0.9
Barrel estimate (standing fluids/ recovered+in soil)	
	9.9

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Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS

Action 438304

QUESTIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438304
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2506233274
Incident Name	NAPP2506233274 BILL WILSHUSEN 201H WELL PAD @ 0
Incident Type	Release Other
Incident Status	Initial C-141 Received

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	Bill Wilshusen 201H Well Pad
Date Release Discovered	03/03/2025
Surface Owner	Federal

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

Nature and Volume of Release	
<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	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Overflow - Tank, Pit, Etc. Tank (Any) Drilling Mud/Fluid Released: 10 BBL Recovered: 9 BBL Lost: 1 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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**State of New Mexico
Energy, Minerals and Natural Resources
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QUESTIONS, Page 2

Action 438304

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438304
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

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	<i>Not answered.</i>

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: 03/03/2025
--	--

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QUESTIONS, Page 3

Action 438304

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438304
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Site Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	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.
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	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.

Remediation Plan

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

Requesting a remediation plan approval with this submission	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 438304

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 438304
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
nvez	None	3/4/2025

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

QUESTIONS

Action 530524

QUESTIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 530524
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2506233274
Incident Name	NAPP2506233274 BILL WILSHUSEN 201H WELL PAD @ H-22-21S-27E
Incident Type	Release Other
Incident Status	Remediation Plan Received

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	BILL WILSHUSEN 201H WELL PAD
Date Release Discovered	03/03/2025
Surface Owner	Federal

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

Nature and Volume of Release	
<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	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Overflow - Tank, Pit, Etc. Tank (Any) Drilling Mud/Fluid Released: 10 BBL Recovered: 9 BBL Lost: 1 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 530524

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 530524
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

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	<i>Not answered.</i>

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: 12/01/2025
--	--

Sante Fe Main Office
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Oil Conservation Division
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QUESTIONS, Page 3

Action 530524

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 530524
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Between 1 and 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 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

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

Requesting a remediation plan approval with this submission	Yes
<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

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

Chloride (EPA 300.0 or SM4500 Cl B)	2900
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	970
GRO+DRO (EPA SW-846 Method 8015M)	797
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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

On what estimated date will the remediation commence	01/05/2026
On what date will (or did) the final sampling or liner inspection occur	01/23/2026
On what date will (or was) the remediation complete(d)	01/23/2026
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	2334
What is the estimated volume (in cubic yards) that will be remediated	44

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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, Page 4

Action 530524

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 530524
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)

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

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

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	Not answered.
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Yes
What is the name of the NMED facility	Lea land
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Jason Touchet Title: EHS Field Rep Email: jason.touchet@matadorresources.com Date: 12/01/2025
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 530524

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 530524
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 530524

QUESTIONS (continued)

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 530524
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	547952
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/04/2026
What was the (estimated) number of samples that were to be gathered	12
What was the sampling surface area in square feet	2344

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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Santa Fe, NM 87505

CONDITIONS

Action 530524

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 530524
	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 as written except with the following conditions; 1. All eight (8) bullet points within the proposed remediation plan are approved as written. 2. Since all eight (8) bullet points are directives already required and/or recommended within 19.15.29 NMAC, a variance is not warranted; therefore, the request is voided. 3. Prior to backfilling the open excavation per 19.15.29.12D (2) NMAC, Matador Production Co. (Matador) must collect a minimum of one (1) five point composite sample 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. 4. Matador has 90-days (May 11, 2026) to submit to OCD its appropriate or final remediation closure report.	2/10/2026