

# WEST MOUNT SPILL D CLOSURE REQUEST

# API NO. 30-005-64381 Unit Letter N, Section 19, Township 15S, Range 29E CHAVES COUNTY, NEW MEXICO

**DATE OF RELEASE: 09/20/2023 INCIDENT NO. NAPP2329138800** 

03/11/2025 Prepared by:



March 11, 2025

New Mexico Energy, Mineral & Natural Resources NMOCD District I C/O Mike Bratcher and Robert Hamlet 811 S. First Street Artesia, NM 88210

Mack Energy Corporation 11344 Lovington Hwy Artesia, NM 88210

Subject: Closure Report for Mack Energy Corporation- West Mount Spill D

API No. 30-005-64381 Incident No. NAPP2329138800 Unit Letter N, Section 19, Township 15S, Range 29E Chaves County, New Mexico

To Whom It May Concern:

Mack Energy engaged Energy Staffing Services, LLC (ESS) to conduct a spill assessment for the produced water release that occurred on September 20, 2023, at the West Mount Spill D site (hereafter referred to as "Spill D"). On September 22, 2023, at 4:12 p.m., ESS promptly notified the *New Mexico Oil Conservation Division (NMOCD), District I Office*, via email regarding the release (see attached notification). On behalf of Mack Energy, ESS also submitted the initial C141 Release Notification, and the spill calculator used to determine the release volume on October 18, 2023 (attachments provided). The NMOCD accepted the C141 as official on October 18, 2023, at 12:19 p.m. The incident was assigned to the number NAPP2329138800 (notification of correspondence is also attached).

This report provides a comprehensive account of the spill assessment, delineation, and remedial activities. It confirms that the closure criteria outlined in the 19.15.29.12 *New Mexico Administrative Code (NMAC: New Mexico Oil Conservation Division, 2018)* have been met, and that all relevant regulations have been adhered to. This document serves as the final report for seeking approval from the NMOCD to close the aforementioned release.

#### **Incident Description**

On September 20, 2023, Well Spring, a water transfer company, identified a failure in their lay flat line, resulting in the release of produced water into the pasture area of Spill D. Upon discovering the release, ESS was notified and promptly dispatched crews to the site to preform a comprehensive environmental site assessment. Based on the measured impact area, it was determined that approximately 23.97bbls of produced water was released, with no recoverable fluid, into the pasture area of Spill D. Initial site photos and measurements of the impacted area were taken. Please refer to the attached initial site photos for further details.

#### Site Characterization

The release at Spill D occurred on State Land, located at latitude 32.997533 and longitude - 104.070702, approximately 19.8 miles southeast of Hagerman, New Mexico. The site is legally described as Unit Letter N, Section 19, Township 15S, and Range 29E in Chaves County, New Mexico. A schematic of the site is attached.

Spill D includes production lines and is situated near production facilities and well pads. The release occurred in the pasture area of the site, which lies at an elevation of 3,735 feet. The area is historically dominated by alkali sacaton, Adonis blazingstar, black grama, blue grama, and other perennial grasses and forbs. Rangeland and vegetation classification details are attached for your reference.

According to the *United States Department of Agriculture Natural Resources Conservation Services,* the soil composition in the Spill D area consists of 100% Tencee-Sotim association (soil map attached). The *FEMA National Flood Hazard Layer* indicates a 0.2% chance of flooding in the area, with a 1% chance of flooding averaging one foot deep or occurring in drainage areas of less than one square mile (flood hazard map attached).

The *United States Department of the Interior, Bureau of Land Management,* has indicated a "low potential" for Karst Geology in the vicinity of Spill D (karst map attached).

There are twelve Palustrine Emergent (PEM) wetlands and three Riverine features (R1, R2, and R3) located within a half-mile radius of the site (see attached wetlands map). No other surface water bodies, continuously flowing watercourses, or lakebeds are present within this radius. A watercourse map is also attached for reference.

The nearest water wells, according to the *New Mexico Office of the State Engineer*, are as follows:

- RA12428, drilled in 2016, with a well depth of 170 feet and a groundwater depth of 125 feet, located 6,303 yards from the site.
- RA09248, drilled in 1996, with a well depth of 150 feet and a groundwater depth of 45 feet, located 8,246 yards from the site.

- RA12429 POD 1, drilled in 2016, with a well depth of 62 feet and a groundwater depth of 27 feet, located 8,283 yards from the site.
- RA10280, drilled in 2002, with a well depth of 70 feet and a groundwater depth of 40 feet, located 8,412 yards from the site.
- RA09059, drilled in 1955, with a well depth of 110 feet and a groundwater depth of 35 feet, located 8,840 yards from the site.

An extended groundwater search was conducted using the *OSE POD Mapping System* and found two other wells within a half-mile radius of the release:

- RA12006 POD 1, with no drill date, well depth, or groundwater depth available.
- RA12007 POD 1, with no drill date, well depth, or groundwater depth available.

The NMOSE, OSE POD, and groundwater maps are attached for your review.

#### **Closure Criteria Determination**

The closure criteria for soils impacted by the release are outlined in the chart below. Since there is no available groundwater data within a half-mile radius of the release point at Spill D and given the site's location on State Land with "low karst potential", the site was categorized under the <50' to groundwater criteria. This classification is solely due to the absence of recent or available groundwater depth information.

DGW	Constituent	Method	Limit
≤ 50′	Chloride	EPA 300.0 OR SM4500 CLB	600 mg/kg
	TPH (GRO + DRO+ MRO)	EPA SW-846 METHOD 8015M	100 mg/kg
	GRO + DRO	EPA SW-846 METHOD 8015M	50 mg/kg
	BTEX	EPA SW-846 METHOD 8021B OR 8260B	10 mg/kg
	Benzene	EPA SW-846 METHOD 8021B OR 8260B	10 mg/kg

#### **Soil Remediation Action Levels**

ESS has provided sufficient data confirming that the release has impacted the soil at Spill D. The remediation and abatement procedures followed are aligned with the goals and objectives outlined in the NMOCD Closure Criteria for Soils Impacted by a Release, dated August 14, 2018. This document outlines Mack Energy's initial response actions, site assessment, and sampling procedures conducted by ESS personnel. Below is a summary of the delineation process for the release.

#### **Soil Sampling Procedures**

Soil sampling for laboratory analysis was conducted according to the NMOCD – approved industry standards. Accepted NMOCD soil sampling procedures and laboratory analytical methods are as follows:

- Collect clean samples in airtight glass jars supplied by the laboratory to conduct the analysis.
- Each sample jar was labelled with site and sample information.
- Samples were kept in and stored in a cool place and packed on ice.
- Promptly ship samples to the lab for analysis following the chain of custody procedures.

The following lab analysis method was used for each bottom hole (vertical) and sidewall sample (horizontal) was submitted to Envirotech Analytical Laboratory:

Volatile Organics by EPA 8021B

- Benzene, Toluene, Ethylbenzene, p.m. Xylene, o-Xylene and Total Xylenes Nonhalogenated Organics by EPA 8015D – GRO
  - Gasoline Range Organics (C6-C10)

Nonhalogenated Organics by EPA 8015D - DRO/ORO

- Diesel Range Organics (C10-C28)
- Oil Range Organics (C28-C40)

Anions by EPA 300.0/9056A

Chloride

#### **Release Investigation Data**

On November 15, 2023, ESS arrived at the Spill D site to establish delineation sample points, which were GPS-located. The crews began collecting surface samples, which were field-tested, logged, and submitted to Envirotech Laboratory for confirmation. A total of 10 vertical sample points and 8 horizontal sample points were established. Samples were collected using a backhoe in 1-foot and 2-foot intervals. Bottom hole samples were then sent to the laboratory for further analysis and confirmation.

Please refer to the delineation sample data provided below, with laboratory results highlighted in yellow. Additional sample data, the delineation sample map, and the lab analysis are attached to this report for your review.

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
SP1	SURF	>4000	L	ND	ND	ND	ND	ND	9920
	2	320							
	4	400							
	6	240							
	8	160	1	ND	ND	ND	ND	ND	70
SP2	SURF	>4000	L	ND	ND	ND	ND	ND	7790
	2	320							
	4	320							

	6	160							
	8	160	L	ND	ND	ND	ND	ND	152
	_								_
SP3	SURF	800	L	ND	ND	ND	ND	ND	1380
	2	400							
	4	240							
	6	160							
	8	160	L	ND	ND	ND	ND	ND	87.2
SP4	SURF	1280	L	ND	ND	ND	ND	ND	2490
	2	320							
	4	320							
	6	160							
	8	160	L	ND	ND	ND	ND	ND	25.1
SP5	SURF	240	L	ND	ND	33.8	65.1	98.9	532
	2	400							
	4	320							
	6	400							
	8	160	L	ND	ND	ND	ND	ND	40.4
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	14400
	2	320							
	4	320							
	6	160							
	8	160	L	ND	ND	ND	ND	ND	65.7
SP7	SURF	720	L	ND	ND	ND	ND	ND	684
	2	320							
	4	240							
	6	480							
	8	160	Н	ND	ND	35.1	109	144.1	40.7
	10	160							
	12	80	L	ND	ND	ND	ND	ND	ND
SP8	SURF	>4000	L	ND	ND	ND	ND	ND	13600
	2	480							
	4	240							
	6	160							
	8	160	Н	ND	ND	43.8	137	180.8	150
	10	80							

	12	80	L	ND	ND	ND	ND	ND	ND
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	15000
	2	240							
	4	320							
	6	320							
	8	160	Н	ND	ND	ND	55	55	ND
	10	80							
	12	80	L	ND	ND	ND	ND	ND	ND
SP10	SURF	240	L	ND	ND	ND	ND	ND	80.6
	2	320							
	4	320							
	6	160							
	8	160	L	ND	ND	ND	ND	ND	ND
SW1	SURF	>4000	L	ND	ND	ND	ND	ND	1170
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	675
	1	160							
	2	160	L	ND	ND	ND	ND	ND	20.7
SW3	SURF	2400	L	ND	ND	ND	ND	ND	2650
	1	320							
	2	160	L	ND	ND	ND	ND	ND	42.2
SW4	SURF	160	L	ND	ND	ND	ND	ND	ND
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW5	SURF	>4000	L	ND	ND	ND	ND	ND	790
	1	400							
	2	320	L	ND	ND	ND	ND	ND	104
SW6	SURF	240	L	ND	ND	ND	ND	ND	21
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW7	SURF	240	L	ND	ND	ND	ND	ND	ND

	1	480							
	2	160	Н	ND	ND	35.9	114	149.9	ND
	3	320							
	4	160	L	ND	ND	ND	ND	ND	47.7
SW8	SURF	160	L	ND	ND	ND	ND	ND	ND
	1	720							
	2	240							
	3	240	Н	ND	ND	38	122	160	47.2
	4	160							
	5	80	L	ND	ND	ND	ND	ND	ND

Please find the delineation photos attached to this report. Since the employee responsible for taking photos during the delineation phase is no longer with ESS, the available delineation photos are limited.

On August 19, 2024, ESS issued the official notification to the NMOCD regarding the composite phase of the release at Spill D. The NMOCD received and acknowledged the notification on the same day (see attached email correspondence).

On August 21, 2024, ESS crews began collecting 200 square foot composite samples from the excavation area at Spill D. In total, 27 bottom hole composite samples were gathered, field tested and sent to Envirotech Laboratory for confirmation. The composite sample data is provided below and is also attached to this report, along with lab confirmation results.

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
COMP1	6	240	L	ND	ND	ND	ND	ND	68.6
COMP2	6	160	L	ND	ND	ND	ND	ND	ND
COMP3	6	240	L	ND	ND	ND	ND	ND	28.5
COMP4	6	240	L	ND	ND	ND	ND	ND	28.7
COMP5	10	240	L	ND	ND	ND	ND	ND	ND
COMP6	10	240	L	ND	ND	ND	ND	ND	23.7
COMP7	10	160	L	ND	ND	ND	ND	ND	27
COMP8	10	160	L	ND	ND	ND	ND	ND	75.6

СОМР9	10	222							
		320	L	ND	ND	ND	ND	ND	ND
COMP10	10	220		ND	ND	ND	ND	ND	ND
COMP10	10	320	L	ND	ND	ND	ND	ND	ND
COMP11	10	240	L	ND	ND	ND	ND	ND	24.7
COMP12	10	160	L	ND	ND	ND	ND	ND	57.6
COMP13	6	160	L	ND	ND	ND	ND	ND	51.1
COMP14	6	160	L	ND	ND	ND	ND	ND	48.9
COMP15	6	160	L	ND	ND	ND	ND	ND	51.9
COMPTS	0	100	L	ND	ND	ND	ND	ND	31.9
COMP16	6	160	L	ND	ND	ND	ND	ND	42.2
COMP17	6	160	L	ND	ND	ND	ND	ND	55
COMP18	6	240	L	ND	ND	ND	ND	ND	80.6
COMP19	6	160	L	ND	ND	ND	ND	ND	ND
COMP20	6	240	L	ND	ND	ND	ND	ND	67.9
CON 20		2 10	_	TAB.	142	142	142	142	67.5
SWCOMP1	6	160	L	ND	ND	ND	ND	ND	64.1
CIACCOLARS		240		110	ND	ND	ALD.	NE	00
SWCOMP2	6	240	L	ND	ND	ND	ND	ND	88
SWCOMP3	6	240	L	ND	ND	ND	ND	ND	86.9
SWCOMP4	6	160	L	ND	ND	ND	ND	ND	ND
SWCOMP5	6	160	L	ND	ND	ND	ND	ND	ND
33311113			_						
SWCOMP6	6	240	L	ND	ND	ND	ND	ND	83.9
CMCCAADZ		160		ND	ND	ND	NE	NE	63
SWCOMP7	6	160	L	ND	ND	ND	ND	ND	63

Please find the attached remediation photos.

The impacted area at Spill D measured 3,919 square feet. During the remediation phase, a total of 1,060 cubic yards of contaminated soil was excavated and transported to Gandy's Disposal. Additionally, 1,180 cubic yards of fill dirt was hauled from Gandy's Disposal to the site for backfilling, along with 216 cubic yards of topsoil sourced from the landowner's pit. The site was contoured, sloped back to its natural grade, and broad-casted with NMSLO Sandy Loam seed. Backfilling and seeding was completed on January 13, 2025. The final photos are attached to this report.

#### **Closure Request**

On behalf of Mack Energy, Energy Staffing Services, LLC formally requests the closure of the incident (NAPP2329138800) related to the produced water release at the West Mount Spill D pasture area. Both Mack Energy and ESS certify that all information contained in this report is accurate and complete. Furthermore, both entities confirm compliance with all applicable closure requirements for this release.

Should you have any questions or concerns regarding this closure request after reviewing the report, please feel free to contact the undersigned at (575) 390-6397 or (575) 393-9048. Alternatively, you can email any inquiries to natalie@energystaffingllc.com.

Sincerely,

**Director of Environmental and Regulatory Services** 

ptalii Grladde

**Energy Staffing Services, LLC.** 

2724 NW County Road Hobbs, NM 88240 Cell: 575-390-6397

Office: 575-393-9048

Email: natalie@energystaffingllc.com

#### Attachments

**Spill Notification** 

Initial C141 and Spill Calculator Form

Impact Map

**Initial Site Photos** 

Site Map

Rangeland and Vegetation Classification

Soil Map

FEMA National Flood Hazard Layer Map

Karst Geology Map

Wetlands Map

Watercourse Water Map

**Groundwater Information** 

**Groundwater Map** 

OSE POD Map

**Delineation Sample Data** 

Delineation Sample Map and GPS Log

Lab Analysis for Delineation

**Delineation Site Photos** 

**Composite Notification** 

Composite Sample Data

Composite Sample Map and GPS Log

Lab analysis for Remediation

Remediation and Final Photos

Final C141



#### FW: MACK ENERGY - WESTMOUNT FEDERAL COM #1 RELEASE'S

From Natalie Gladden <natalie@energystaffingllc.com>

Date Thu 1/30/2025 11:28 AM

**To** Brittney Corral <br/>brittney@energystaffingllc.com>

#### Natalie Gladden

**Director of Environmental and Regulatory Services** 

**Energy Staffing Services, LLC.** 

2724 NW County Road Hobbs, NM 88240 Cell: 575-390-6397 Office: 575-393-9048

Unice: 575-595-9046

Email: natalie@energystaffingllc.com



From: Natalie Gladden

Sent: Tuesday, September 26, 2023 2:39 PM

 ${\tt EMNRD\,<\!Robert.Hamlet@state.nm.us>;\,Harimon,\,Jocelyn,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Velez,\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Velez,\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon@emnrd.nm.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon.gov>;\,Nelson,\,EMNRD\,<\!Jocelyn.Harimon.gov>;\,Nelson,\,EMNRD\,$ 

 $< Nelson. Velez@state.nm. us>; CFO\_Spill, BLM\_NM < BLM\_NM\_CFO\_Spill@blm.gov>; Amos, James A < JAMOS@BLM.GOV>; staylor@blm.gov>; Amos, James A < JAMOS@Blm.gov>; Amos, Amos, Amos, Amos,$ 

**Cc:** mattbuckles@mec.com

Subject: RE: MACK ENERGY - WESTMOUNT FEDERAL COM #1 RELEASE'S

Here is the last of them. C141's will be finalized and uploaded shortly. I will send an update with Incident numbers when they are completed.

LOCATION	BBLS RELEASED	BBLS RECOVERED	LAT	LONG	INCIDENT NO.
WEST MOUNT #1 RELEASE	96.64	0	32.978491	-104.094969	NAPP2325464608
WEST MOUNT 9.14.23 RELEASE	206.76	0	32.98084	-104.12499	NAPP2326353635
WEST MOUNT 1A	156.17	0	32.97852	-104.09253	
WEST MOUNT 1B	341.08	0	32.97878	-104.090782	
WEST MOUNT SPILL A	84.53	0	33.000002	-104.070796	
WEST MOUNT SPILL B	16.35	0	32.999326	-104.071112	
WEST MOUNT SPILL C	30.56	0	32.988705	-104.072056	
WEST MOUNT SPILL D	23.97	0	32.997553	-104.070702	
WEST MOUNT SPILL E	6.21	0	32.995899	-104.070484	
WEST MOUNT SPILL F	52.01	0	32.993548	-104.06973	
WEST MOUNT SPILL G	39.14	0	32.99116	-104.069688	
WEST MOUNT SPILL H	32.78	0	32.98947	-104.069673	
WEST MOUNT SPILL I	5.55	0	32.977062	-104.07104	
WEST MOUNT SPILL J	9.57	0	32.987071	-104.07267	
WEST MOUNT SPILL K	137.04	0	32.986297	-104.073293	
WEST MOUNT SPILL L	5.63	0	32.980975	-104.076513	
WEST MOUNT SPILL M	4.33	0	32.980377	-104.077642	
WEST MOUNT SPILL N	27.95	0	32.980198	-104.07756	
WEST MOUNT SPILL O	37.6	0	32.97911	-104.07904	
WEST MOUNT SPILL P	11.47	0	32.978302	-104.086227	
WEST MOUNT SPILL Q	28.39	0	32.9785	-104.088419	
WEST MOUNT SPILL R	57.7	0	32.978615	-104.098708	
WEST MOUNT SPILL S	37.79	0	32.980236	-104.100214	
WEST MOUNT SPILL T	1.96	0	32.981999	-104.100329	

WEST MOUNT SPILL U	72.38	0	32.983718	-104.099543	
WEST MOUNT SPILL V	29.73	0	32.983887	-104.099136	
WEST MOUNT SPILL W	158.62	0	32.984507	-104.09919	
WEST MOUNT SPILL X	20.11	0	32.986417	-104.101312	
WEST MOUNT SPILL Y	18.18	0	32.987519	-104.102957	
WEST MOUNT SPILL Z	459.2	0	32.989524	-104.110031	
WEST MOUNT SPILL AA	14.97	0	32.988148	-104.11355	
WEST MOUNT SPILL BB	14.58	0	32.987211	-104.115205	
WEST MOUNT SPILL CC	25.44	0	32.983495	-104.119472	
WEST MOUNT SPILL DD	13.66	0	32.981861	-104.120784	

#### Natalie Gladden

**Director of Environmental and Regulatory Services** 

**Energy Staffing Services, LLC.** 

2724 NW County Road Hobbs, NM 88240 Cell: 575-390-6397 Office: 575-393-9048

Email: natalie@energystaffingllc.com



From: Natalie Gladden

Sent: Friday, September 22, 2023 4:12 PM

To: ocdonline, emnrd, EMNRD < EMNRD.OCDOnline@state.nm.us >; Bratcher, Mike, EMNRD < mike.bratcher@state.nm.us >; Hamlet, Robert,

EMNRD < Robert. Hamlet@state.nm.us >; Harimon, Jocelyn, EMNRD < Jocelyn. Harimon@emnrd.nm.gov >; Velez, Nelson, EMNRD

<Nelson.Velez@state.nm.us>; CFO\_Spill, BLM\_NM <BLM\_NM\_CFO\_Spill@blm.gov>; Amos, James A <JAMOS@BLM.GOV>; staylor@blm.gov

Cc: mattbuckles@mec.com

Subject: MACK ENERGY - WESTMOUNT FEDERAL COM #1 RELEASE'S

Importance: High

All,

On September 9<sup>th</sup>, Matt Buckles with Mack Energy reported a release at the Westmount #1 at 12:31pm by email. This incident report is NAPP2325464608. On September 14<sup>th</sup>, another report of a release was sent out also on the same line but in a different area, this incident report is NAPP2326353635. The frac line company known as Well Spring Automation, LLC is responsible for laying, maintaining, and removing said frac line and is contracted by Mack Energy to do so. After further investigation due to the sizes of two spills mentioned above, the following releases have been located, photo'd, and mapped. This is a large list of releases. We were not sure how to handle this as we are still finding the releases currently. As of right now we know of 23 releases that have occurred over the last two days. Crews are on site and documenting each release. As we are aware each release will have its own C141 and incident number. We will send out additional notifications as they become available, spills are located and documented. Each release will be handled individually moving forward. Below is the first set of releases that will be added to the Westmount Federal Com #1 list:

LOCATION	BBLS RELEASED	BBLS RECOVERED	LAT	LONG	INCIDENT NO.
WEST MOUNT #1 RELEASE	96.64	0	32.978491	-104.094969	NAPP2325464608
WEST MOUNT 9.14.23 RELEASE	206.76	0	32.98084	-104.12499	NAPP2326353635
WEST MOUNT 1A	156.17	0	32.97852	-104.09253	
WEST MOUNT 1B	341.08	0	32.97878	-104.090782	
WEST MOUNT SPILL A	84.53	0	33.000002	-104.070796	
WEST MOUNT SPILL B	16.35	0	32.999326	-104.071112	
WEST MOUNT SPILL C	30.56	0	32.988705	-104.072056	
WEST MOUNT SPILL D	23.97	0	32.997553	-104.070702	
WEST MOUNT SPILL E	6.21	0	32.995899	-104.070484	
WEST MOUNT SPILL F	52.01	0	32.993548	-104.06973	
WEST MOUNT SPILL G	39.14	0	32.99116	-104.069688	
WEST MOUNT SPILL H	32.78	0	32.98947	-104.069673	
WEST MOUNT SPILL I	5.55	0	32.977062	-104.07104	
WEST MOUNT SPILL J	9.57	0	32.987071	-104.07267	

WEST MOUNT SPILL K	137.04	0	32.986297	-104.073293	
WEST MOUNT SPILL L	5.63	0	32.980975	-104.076513	
WEST MOUNT SPILL M	4.33	0	32.980377	-104.077642	
WEST MOUNT SPILL N	27.95	0	32.980198	-104.07756	
WEST MOUNT SPILL O	37.6	0	32.97911	-104.07904	
WEST MOUNT SPILL P	11.47	0	32.978302	-104.086227	
WEST MOUNT SPILL Q	28.39	0	32.9785	-104.088419	
WEST MOUNT SPILL R	57.7	0	32.978615	-104.098708	
WEST MOUNT SPILL S	37.79	0	32.980236	-104.100214	

We will be making more updates as releases are found. C141's will be sent out to the BLM and uploaded to the NMOCD as soon as possible.

If you have any questions, please let me know.

#### Natalie Gladden

**Director of Environmental and Regulatory Services** 

**Energy Staffing Services, LLC.** 

2724 NW County Road Hobbs, NM 88240 Cell: 575-390-6397 Office: 575-393-9048

Email: natalie@energystaffingllc.com



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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

### **Release Notification**

#### **Responsible Party**

<b>F</b>	J	
Responsible Party MACK ENERGY CORPORATION	OGRID 013837	
Contact Name MATT BUCKLES	Contact Telephone 575-703-1958	
Contact email mattbuckles@mec.com	Incident # (assigned by OCD)	
Contact mailing address 11344 Lovington Highway, Artesia N 88210	NM	
Location of	f Release Source	
Latitude 32.997533 (NAD 83 in decimal)	Longitude -104.070702  al degrees to 5 decimal places)	

Site Name WEST MOUNT SPILL D
Site Type PRODUCTION AREA

Date Release Discovered 9/20/2023
API# (if applicable) 30-005-64381

Unit Letter	Section	Township	Range	County	
N	19	15S	29E	CHAVES	
	-		IV.	1	

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

#### Nature and Volume of Release

Is the concentration of dissolved chloride in the produced water >10,000 mg/l?  Condensate  Volume Released (bbls)  Natural Gas  Volume Released (Mcf)  Other (describe)  Volume/Weight Released (provide units)  Volume/Weight Recovered (provide units)  Cause of Release	Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
produced water >10,000 mg/l?  Condensate  Volume Released (bbls)  Natural Gas  Volume Released (Mcf)  Other (describe)  Volume/Weight Released (provide units)  Volume/Weight Recovered (provide units)  Cause of Release	□ Produced Water     □ Produced Water	Volume Released (bbls) 23.97	Volume Recovered (bbls)0BBLS
□ Natural Gas       Volume Released (Mcf)       Volume Recovered (Mcf)         □ Other (describe)       Volume/Weight Released (provide units)       Volume/Weight Recovered (provide units)         Cause of Release			☐ Yes ☐ No
	Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Cause of Release	Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
	Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
The water transfer company Well Spring found a failure on their lay flat line, releasing the fluid to the pasture area.	Cause of Release		
The water transfer company wen spring found a function my fact may releasing the fine as a second	The water transfer co	mpany Well Spring found a failure on their lay flat	line, releasing the fluid to the pasture area.

Form C-141 Page 2 State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?   ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?  DUE TO VOLUME OF RELEASE
	to the OCD, Bratcher, Hamlet, Venegas, on 9/22 at 4:12pm
	Initial Response
The responsible p	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
☐ The source of the rele	ase has been stopped.
The impacted area ha	s been secured to protect human health and the environment.
Released materials ha	we been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and managed appropriately.
has begun, please attach	AC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have attended at the environment of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: NATAL	
Signature:	hi Gladder Date: 10/18/23
email: natalie@energys	Telephone: 575-390-6397
OCD Only	
Received by:	Date:

#### MACK ENERGY - WEST MOUNT SPILL D

Soil Type	Porosity	Length	Width	<b>Depth</b> (.083 per inch)	Cubic Feet	Estimated Barrels	Soil Type
Clay	0.15	10	10	0.083	8.3	0.22	Clay
Peat	0.40	10	10	0.083	8.3	0.59	Peat
Glacial Sediments	0.13	10	10	0.083	8.3	0.19	Glacial Sediments
Sandy Clay	0.12	10	10	0.083	8.3	0.18	Sandy Clay
Silt	0.16	10	10	0.083	8.3	0.24	Silt
Loess	0.25	10	10	0.083	8.3	0.37	Loess
Fine Sand	0.16	10	10	0.083	8.3	0.24	Fine Sand
Medium Sand	0.25	72.06	89.92	0.083	537.80972	23.97	Medium Sand
Coarse Sand	0.26	10	10	0.083	8.3	0.38	Coarse Sand
Gravely Sand	0.26	10	10	0.083	8.3	0.38	Gravely Sand
Fine Gravel	0.26	10	10	0.083	8.3	0.38	Fine Gravel
Medium Gravel	0.20	10	10	0.083	8.3	0.30	Medium Gravel
Coarse Gravel	0.18	10	10	0.083	8.3	0.27	Coarse Gravel
Sandstone	0.25	10	10	0.083	8.3	0.37	Sandstone
Siltstone	0.18	10	10	0.083	8.3	0.27	Siltstone
Shale	0.05	10	10	0.083	8.3	0.07	Shale
Limestone	0.13	10	10	0.083	8.3	0.19	Limestone
Basalt	0.19	10	10	0.083	8.3	0.28	Basalt
Volcanic Tuff	0.20	10	10	0.083	8.3	0.30	Volcanic Tuff
Standing Liquids	Х	10	10	0.083	8.3	1.48	Standing Liquids

1	2	3	4	5	6
0.083	0.166	0.250	0.332	0.415	0.500
7	8	9	10	11	12
0.581	0.664	0.750	0.830	0.913	1.000

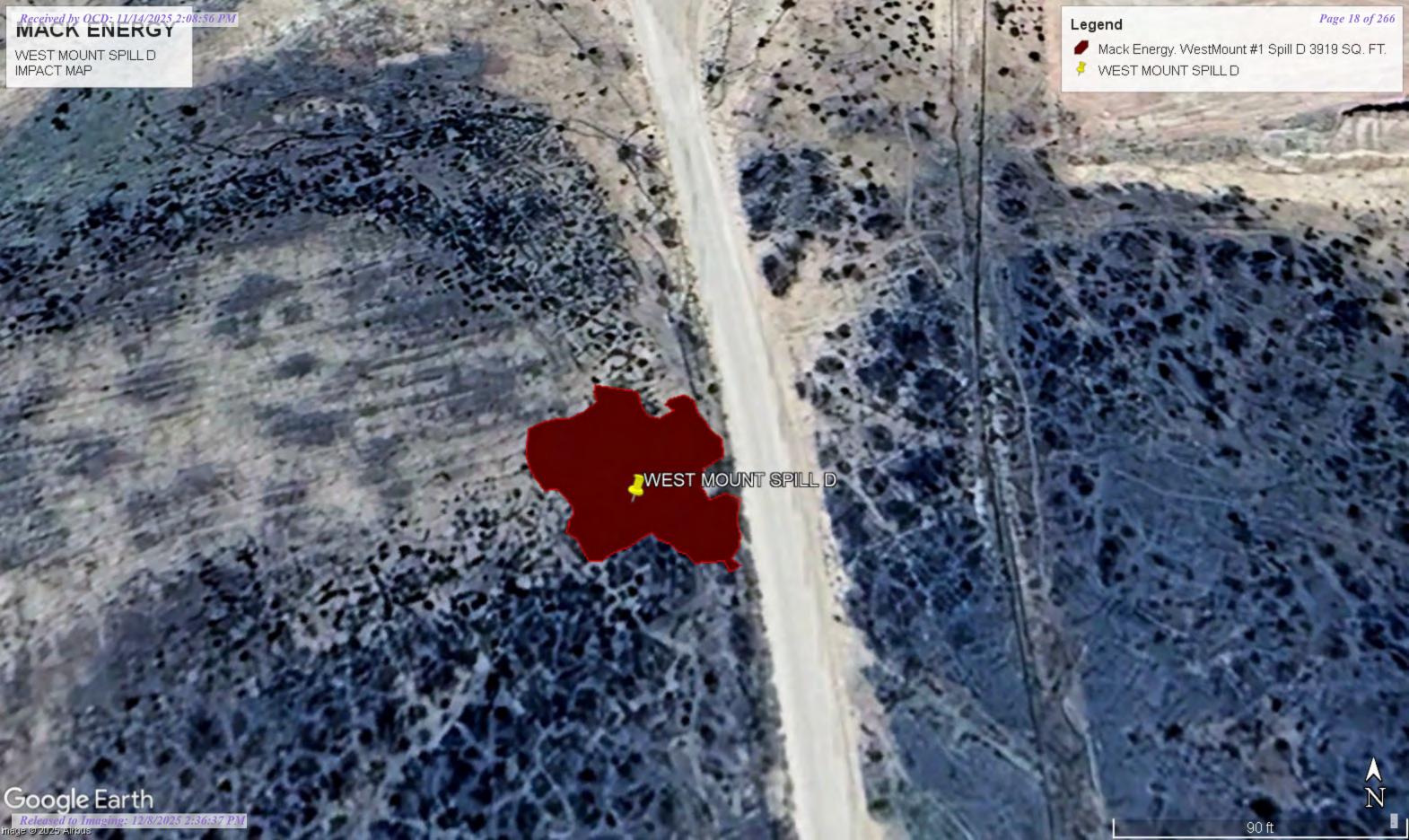
NOTE: This is an **estimate** tool designed for quick field estimates of whether a C-141 should be requred (*l.e. a release is estimated to be greater than or less than 5 barrel volumes*)

Choose the one prevailing ground type for estimating spill volumes at a single location.

Note that the depth should be measured in feet and tenths of feet (1 inch = .083)

Cubic Feet = L x W x D

Estimated Barrels = ((Cubic Feet x Porosity) / 5.61)



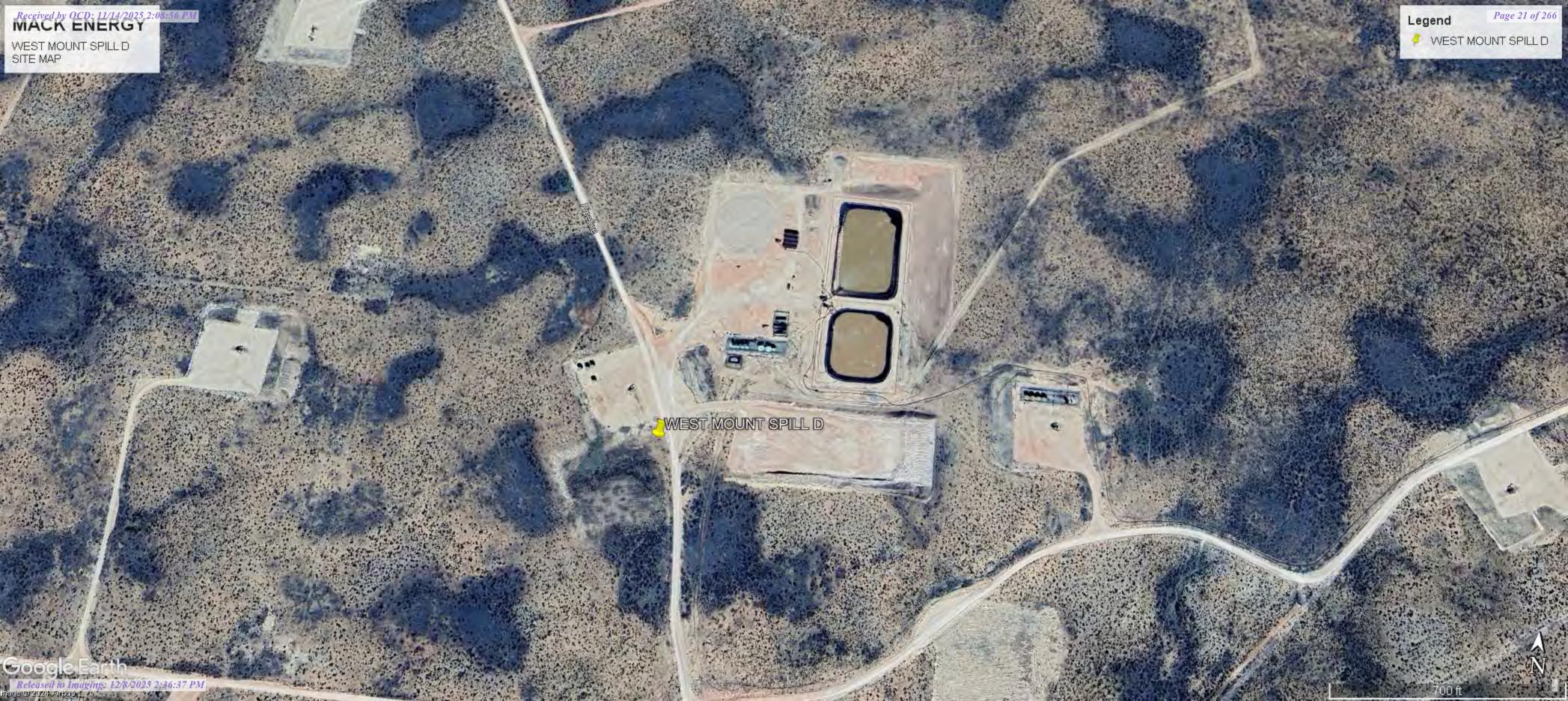
# MACK ENERGY: WEST MOUNT SPILL D INITIAL SITE PHOTOS







United St. Mack En lest Moun c line spill



WEST MOUNT SPILL D

### Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition

In areas that have similar climate and topography, differences in the kind and amount of rangeland or forest understory vegetation are closely related to the kind of soil. Effective management is based on the relationship between the soils and vegetation and water.

This table shows, for each soil that supports vegetation, the ecological site, plant association, or habitat type; the total annual production of vegetation in favorable, normal, and unfavorable years; the characteristic vegetation; and the average percentage of each species. An explanation of the column headings in the table follows.

An ecological site, plant association, or habitat type is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time throughout the soil development process; a characteristic hydrology, particularly infiltration and runoff that has developed over time; and a characteristic plant community (kind and amount of vegetation). The hydrology of the site is influenced by development of the soil and plant community. The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. The plant community on an ecological site, plant association, or habitat type is typified by an association of species that differs from that of other ecological sites, plant associations, or habitat types in the kind and/or proportion of species or in total production. Descriptions of ecological sites are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service (NRCS). Descriptions of plant associations or habitat types are available from local U.S. Forest Service offices.

Total dry-weight production is the amount of vegetation that can be expected to grow annually in a well managed area that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, the amount and distribution of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content.

Characteristic vegetation (the grasses, forbs, shrubs, and understory trees that make up most of the potential natural plant community on each soil) is listed by common name. Under rangeland composition and forest understory, the expected percentage of the total annual production is given for each species making up the characteristic vegetation. The percentages are by dry weight for rangeland. Percentages for forest understory are by either dry weight or canopy cover. The amount that can be used as forage depends on the kinds of grazing animals and on the grazing season.

Range management requires knowledge of the kinds of soil and of the potential natural plant community. It also requires an evaluation of the present range similarity index and rangeland trend. Range similarity index is determined by comparing the present plant community with the potential natural plant community on a particular rangeland ecological site. The more closely the existing community resembles the potential community, the higher the range similarity index. Rangeland trend is defined as the direction of change in an existing plant community relative to the potential natural plant community. Further information about the range similarity index and rangeland trend is available in the "National Range and Pasture Handbook," which is available in local offices of NRCS or on the Internet.

The objective in range management is to control grazing so that the plants growing on a site are about the same in kind and amount as the potential natural plant community for that site. Such management generally results in the optimum production of vegetation, control of undesirable brush species, conservation of water, and control of erosion. Sometimes, however, an area with a range similarity index somewhat below the potential meets grazing needs, provides wildlife habitat, and protects soil and water resources.

#### Reference:

United States Department of Agriculture, Natural Resources Conservation Service, National range and pasture handbook.

# Report—Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition–Chaves County, New Mexico, Southern Part														
Map unit symbol and soil		Total d	, , ,											
name	Association, or Habitat Type	Favorable year	Normal year	Unfavorable year	or forest understory vegetation	n	Rangeland	Forest understory						
		Lb/ac	Lb/ac	Lb/ac		Pct dry wt	Pct dry wt							
Aa—Alama loam														
Alama	Loamy (R070BC007NM)	1,200	_	650	Adonis blazingstar	30								
					black grama	15								
									other perennial grasses	15				
					bush muhly	5								
					little bluestem	5								
					other shrubs	5								
					other perennial forbs	5								
					rabo de ardilla	5								
					threeawn	5								
					yucca	5								

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition---Chaves County, New Mexico, Southern Part

WEST MOUNT SPILL D

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition–Chaves County, New Mexico, Southern Part											
Map unit symbol and soil	Ecological Site, Plant			Total dry-weight production		-					
name	Association, or Habitat Type	Favorable year			or forest understory vegetation	-		Forest understory			
		Lb/ac	Lb/ac	Lb/ac		Pct dry wt	Pct dry wt				
HrC—Holloman-Gypsum land complex, 3 to 5 percent slopes											
Holloman	Gyp Upland	800	600	375	alkali sacaton	45					
	(R070BB006NM)			black grama	10						
					coldenia	10					
					blue grama	5					
					fourwing saltbush	5					
					gyp dropseed	5					
					gypsum grama	5					
								other shrubs	5		
					other perennial forbs	5					
					other perennial grasses	5					
Gypsum land	_	_	_	_	_						

#### **Data Source Information**

Soil Survey Area: Chaves County, New Mexico, Southern Part

Survey Area Data: Version 18, Sep 7, 2023



### Soil Map—Chaves County, New Mexico, Southern Part (WEST MOUNT SPILL D)

#### MAP LEGEND

â

0

Δ

Water Features

Transportation

---

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

**US Routes** 

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

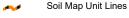
Aerial Photography

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Points

#### **Special Point Features**

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Candfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Sandy Spot

Severely Eroded Spot

Saline Spot

Sinkhole

Slide or Slip

Sodic Spot

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

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

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

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Chaves County, New Mexico, Southern Part Survey Area Data: Version 18, Sep 7, 2023

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

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

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

## **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TS	Tencee-Sotim association	12.6	100.0%
Totals for Area of Interest		12.6	100.0%

OReleas 250 Im 5 9 Ang: 12/8/2025 296:37 PM

## National Flood Hazard Layer FIRMette





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

Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD **HAZARD AREAS** Regulatory Floodway

> depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average

Levee. See Notes. Zone X OTHER AREAS OF FLOOD HAZARD Area with Flood Risk due to Levee Zone D

NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D

- -- - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | IIIIII Levee, Dike, or Floodwall

> 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary -- Coastal Transect Baseline OTHER Profile Baseline

> > Hydrographic Feature

Digital Data Available No Digital Data Available

**FEATURES** 

MAP PANELS

Unmapped

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

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

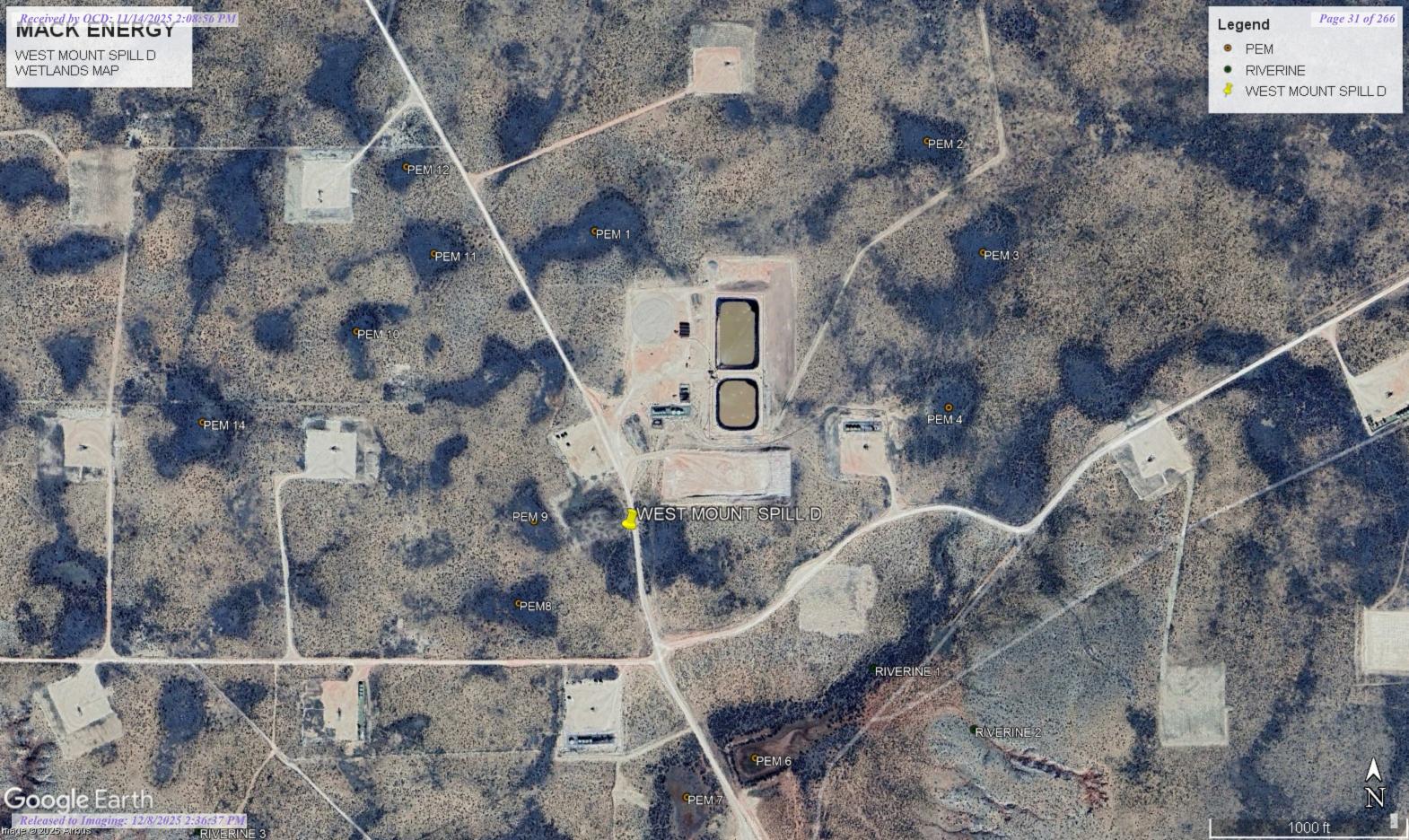
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/4/2024 at 3:57 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

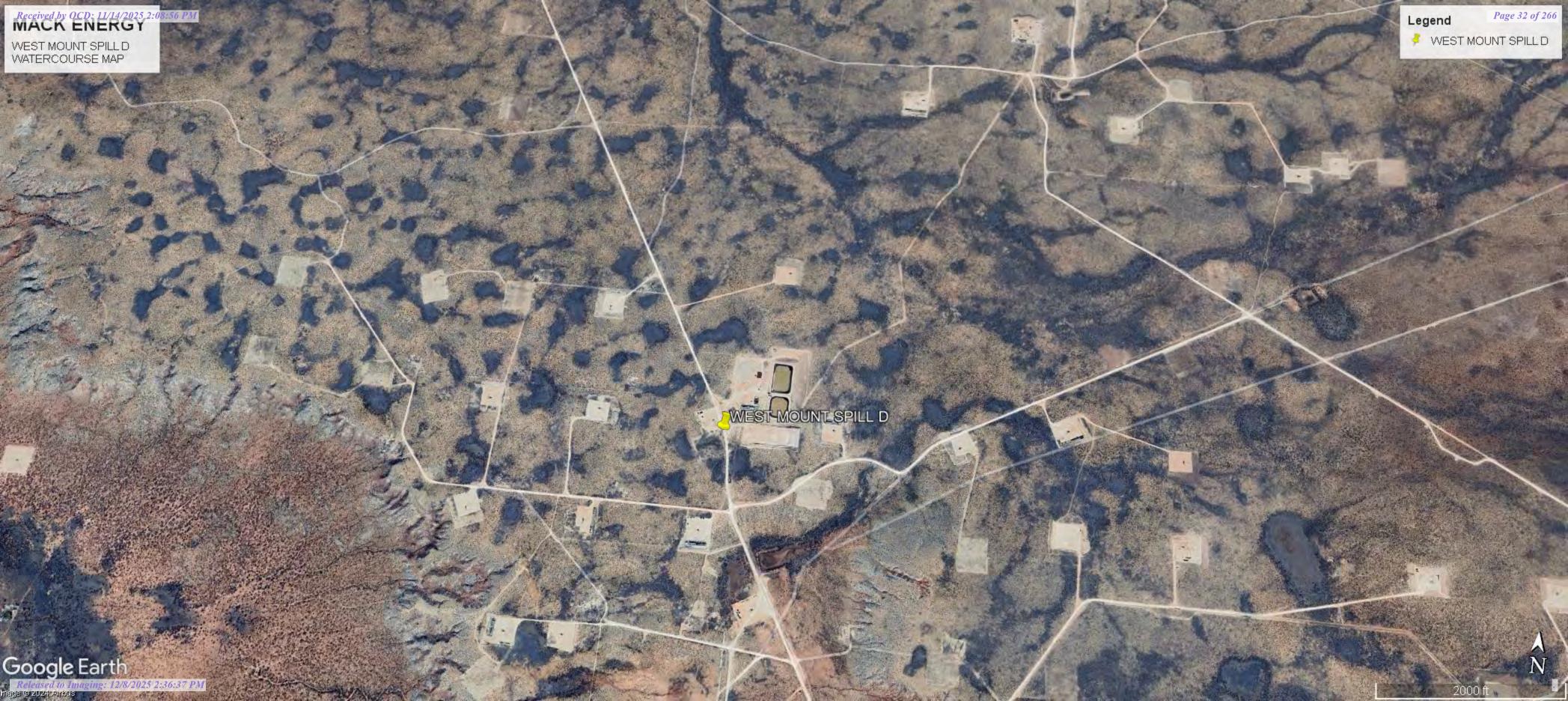
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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



2,000









# New Mexico Office of the State Engineer Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

Q64 Q16 Q4 Sec Tws Rng

X Y

RA 12428

4 2 1 21 15S 28E

00570 0050047

580579 3652317

Driller License: 1058 Driller Company: KEY'S DRILLING & PUMP SERVICE

Driller Name: DONALD KUEHN III

Drill Start Date: 07/28/2016 Drill Finish Date: 08/04/2016 Plug Date:

Log File Date:08/08/2016PCW Rcv Date:Source:ShallowPump Type:Pipe Discharge Size:Estimated Yield: 15 GPMCasing Size:4.50Depth Well:170 feetDepth Water:125 feet

Water Bearing Stratifications: Top Bottom Description

125 140 Sandstone/Gravel/Conglomerate
140 160 Sandstone/Gravel/Conglomerate
160 170 Sandstone/Gravel/Conglomerate

Casing Perforations: Top Bottom

125 170



# New Mexico Office of the State Engineer Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

Q64 Q16 Q4 Sec Tws Rng

X Y

RA 12429 POD1

1 1 4 32 15S 28E

579093 3648401



**Driller License: 1044** 

1044 Driller Company: EADES WELL DRILLING & PUMP SERVICE

BBU 1 1110 0 BU 114B 0EB) (10E

Driller Name: EADES, ALAN

**Drill Start Date: 11/17/2016** 

11/28/2016

5.13

Drill Finish Date: 11/1

11/17/2016 Plug Date:

Shallow

Log File Date: Pump Type:

PCW Rcv Date:

**Depth Well:** 

Estimated Yield:

Source:

Casing Size:

Pipe Discharge Size:

62 feet

Depth Water: 27 feet

Water Bearing Stratifications:

**Top Bottom Description** 

33 Sandstone/Gravel/Conglomerate

33

27

62 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

22 62

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



## New Mexico Office of the State Engineer

## **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

**Well Tag POD Number**  Q64 Q16 Q4 Sec Tws Rng

X

RA 09248

17 15S 28E 3

578704 3652884\*



Driller Company: ANDERSON, RAYMOND **Driller License: 1344** 

**Driller Name:** RAYMOND ANDERSON

4.50

**Drill Start Date:** 07/10/1996

**Drill Finish Date:** 07/13/1996 Plug Date:

Source: Shallow

Log File Date: 07/25/1996 **Pump Type:** 

Pipe Discharge Size:

**PCW Rcv Date:** 

Estimated Yield: 2 GPM

**Casing Size:** 

**Depth Well:** 

150 feet

**Depth Water:** 

45 feet

Water Bearing Stratifications:

**Top Bottom Description** 

100

50

60 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

45

\*UTM location was derived from PLSS - see Help

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



## New Mexico Office of the State Engineer

## **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

Q64 Q16 Q4 Sec Tws Rng

X Y

RA 10280

4 3 3 17 15S 28E

578501 3652680\*

Ü

Driller License: 1490 Driller Company: FERNANDO'S WATER WELL

**Driller Name:** CARREON, FERNANDO

**Drill Start Date:** 06/20/2002

**Drill Finish Date:** 

07/15/2002 Plo

Plug Date:

Source:

Shallow

Log File Date: Pump Type: 04/23/2003 SUBMER PCW Rcv Date:

Pipe Discharge Size: 1.25

Estimated Yield: 10 GPM

Casing Size:

5.00

Depth Well:

70 feet

Depth Water:

40 feet

Water Bearing Stratifications:

**Top Bottom Description** 

70

1 70 Sandstone/Gravel/Conglomerate

**Casing Perforations:** 

Top Bottom

40



## New Mexico Office of the State Engineer

## **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

Q64 Q16 Q4 Sec Tws Rng

X Y

RA 09059

2 4 4 18 15S 28E

578099 3652875\*



Driller License: 1344 Driller Company: ANDERSON, RAYMOND

**Driller Name:** RAYMOND ANDERSON

4.50

**Drill Start Date:** 11/13/1995

**Drill Finish Date:** 

**PCW Rcv Date:** 

**Depth Well:** 

01/15/1996 Plug Date:

Source: Shallow

Log File Date: 02/08/1997 Pump Type:

Dina Dinahana Cina

Estimated Yield:

Casing Size:

Pipe Discharge Size:

110 feet

Depth Water:

35 feet

**Water Bearing Stratifications:** 

**Top Bottom Description** 

60

65 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

30 90

## **Point of Diversion Summary**

quarters are 1=NW 2=NE 3=SW 4=SE NAD83 UTM in meters quarters are smallest to largest **Well Tag POD Nbr** Q64 Q16 Q4 Tws Rng X Map Sec RA 12006 POD1 29E 587049.3 NE NE SW 19 15S 3651703.3 \* UTM location was derived from PLSS - see Help **Driller License: Driller Company: Driller Name: Drill Start Date: Drill Finish Date:** Plug Date: **PCW Rcv Date:** Log File Date: Source: **Pump Type: Pipe Discharge Size: Estimated Yield:** Casing Size: **Depth Well: Depth Water:** 

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

2/19/25 9:21 AM MST Point of Diversion Summary

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## **Point of Diversion Summary**

quarters are 1=NW 2=NE 3=SW 4=SE NAD83 UTM in meters quarters are smallest to largest **Well Tag POD Nbr** Q64 Q16 Q4 Tws Rng X Map Sec RA 12007 POD1 29E 586999.1 SE NE SW 19 15S 3651508.8 \* UTM location was derived from PLSS - see Help **Driller License: Driller Company: Driller Name: Drill Start Date: Drill Finish Date:** Plug Date: **PCW Rcv Date:** Log File Date: Source: **Pump Type: Pipe Discharge Size: Estimated Yield:** Casing Size: **Depth Well: Depth Water:** 

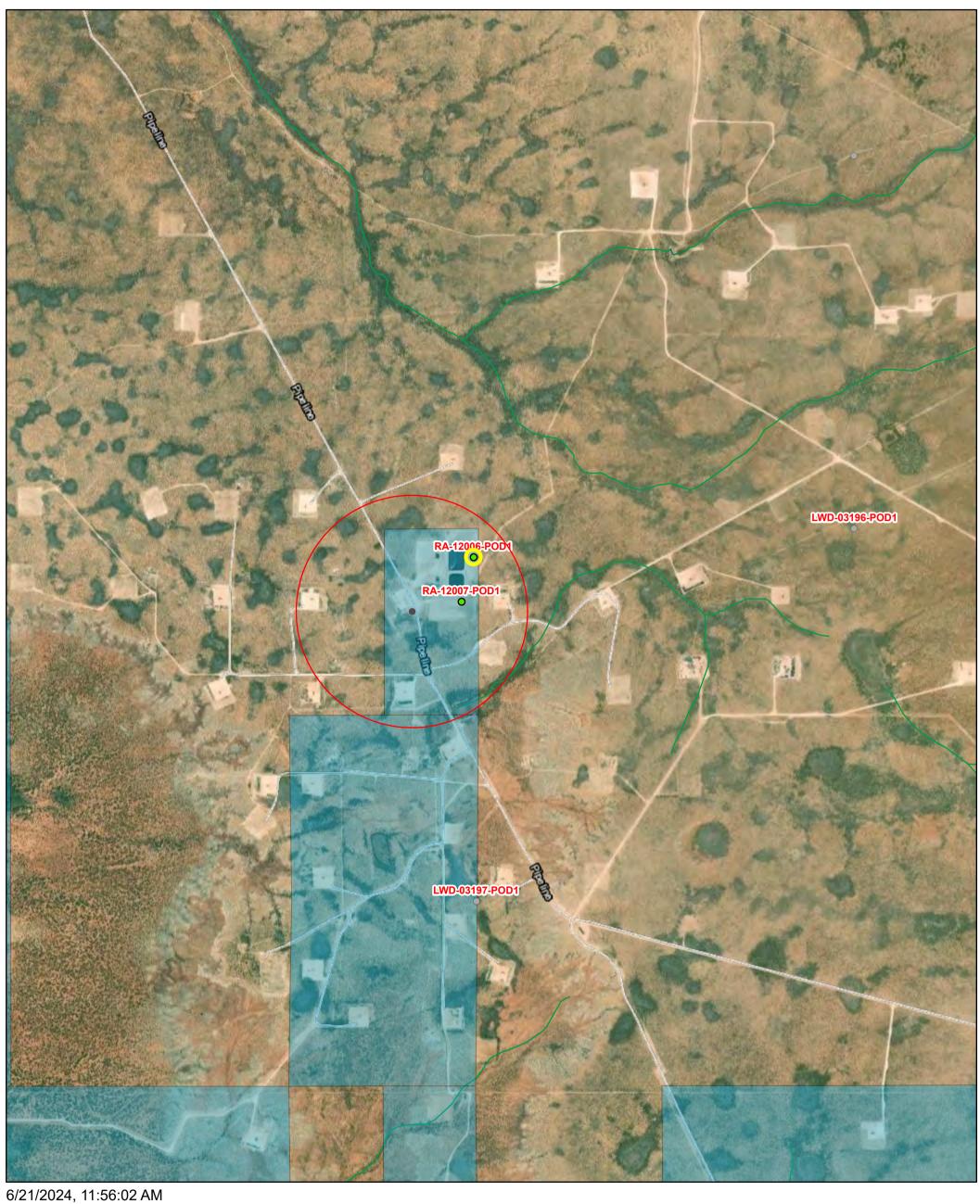
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/19/25 9:18 AM MST Point of Diversion Summary

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# **OSE POD Location Map**



GIS WATERS PODS

Pending

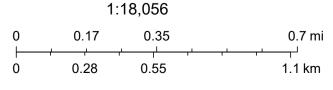
Both Estates

NHD Flowlines

OSE District Boundary

Artificial Path

Stream River



Esri, HERE, iPC, Esri, HERE, Garmin, iPC, Maxar



**Company Nam MACK** 

**Location Name:** 

WEST MOUNT SPILL D

SP1   SURF   >4000   L   ND   ND   ND   ND   ND   9920   11/15/2	SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
2   320											11/15/2023
A	0. 1				112	110	110	110	110	3320	11/13/2023
6											
SP2   SURF   >4000   L   ND   ND   ND   ND   ND   11/15/2											
SP2   SURF   >4000   L   ND   ND   ND   ND   ND   11/15/2				ı	ND	ND	ND	ND	ND	70	3/4/2024
2   320											
2   320	SP2	SURF	>4000	L	ND	ND	ND	ND	ND	7790	11/15/2023
SP3   SURF   800   L   ND   ND   ND   ND   ND   ND   152   3/4/20		2	320								
SP3   SURF   800   L   ND   ND   ND   ND   ND   1380   11/15/2		4	320								
SP3         SURF         800         L         ND         ND         ND         ND         ND         1380         11/15/2           2         400         A         240         A         240         A         240         A         240         A         3/4/20           6         160         B         160         L         ND         ND         ND         ND         ND         ND         ND         ND         11/15/2         3/4/20           SP4         SURF         1280         L         ND         N		6	160								
2   400		8	160	L	ND	ND	ND	ND	ND	152	3/4/2024
2   400											
4       240       6       160 </td <td>SP3</td> <td>SURF</td> <td>800</td> <td>L</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>1380</td> <td>11/15/2023</td>	SP3	SURF	800	L	ND	ND	ND	ND	ND	1380	11/15/2023
6         160         L         ND         ND         ND         ND         ND         87.2         3/4/20           SP4         SURF         1280         L         ND         ND         ND         ND         ND         2490         11/15/2           2         320   <		2	400								
8         160         L         ND         ND         ND         ND         87.2         3/4/20           SP4         SURF         1280         L         ND         ND         ND         ND         ND         11/15/2           2         320   <		4	240								
SP4         SURF         1280         L         ND         ND         ND         ND         12490         11/15/2           2         320											
2 320		8	160	L	ND	ND	ND	ND	ND	87.2	3/4/2024
2 320											
4       320        0       0	SP4	SURF		L	ND	ND	ND	ND	ND	2490	11/15/2023
6       160       L       ND       ND       ND       ND       ND       25.1       3/4/20         SP5       SURF       240       L       ND       ND       33.8       65.1       98.9       532       11/15/2         2       400   <											
8         160         L         ND         ND         ND         ND         25.1         3/4/20           SP5         SURF         240         L         ND         ND         33.8         65.1         98.9         532         11/15/2           2         400         4         320         4         320         4         40.4         3/4/20           SP6         SURF         >4000         L         ND         ND         ND         ND         ND         14400         11/15/2           2         320 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
SP5         SURF         240         L         ND         ND         33.8         65.1         98.9         532         11/15/2           2         400         4         320         4         320         4         320         4         3/4/20           SP6         SURF         >4000         L         ND         ND         ND         ND         ND         14400         11/15/2           2         320         4         320         320         3/4/20           8         160         L         ND         ND         ND         ND         ND         65.7         3/4/20           SP7         SURF         720         L         ND         ND         ND         ND         ND         ND         684         11/15/2           2         320         -         -         ND         ND         ND         ND         ND         ND         684         11/15/2											
2       400         4       320         6       400         8       160       L       ND       ND       ND       ND       ND       40.4       3/4/20         SP6       SURF       >4000       L       ND       ND       ND       ND       ND       14400       11/15/2         2       320       - </td <td></td> <td>8</td> <td>160</td> <td>L</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>25.1</td> <td>3/4/2024</td>		8	160	L	ND	ND	ND	ND	ND	25.1	3/4/2024
2       400         4       320         6       400         8       160       L       ND       ND       ND       ND       ND       40.4       3/4/20         SP6       SURF       >4000       L       ND       ND       ND       ND       ND       14400       11/15/2         2       320       - </td <td></td> <td>01155</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0= 1</td> <td>00.0</td> <td></td> <td>11/15/2222</td>		01155						0= 1	00.0		11/15/2222
4       320       320       3/4/20         8       160       L       ND       ND       ND       ND       ND       ND       14/20         SP6       SURF       >4000       L       ND       ND       ND       ND       ND       11/15/2         2       320       320       3/4/20       3/4/20       3/4/20         8       160       L       ND       ND       ND       ND       ND       ND       684       11/15/2         SP7       SURF       720       L       ND       ND       ND       ND       ND       ND       684       11/15/2	SP5			L	ND	ND	33.8	65.1	98.9	532	11/15/2023
6       400       ND       ND       ND       ND       ND       ND       40.4       3/4/20         SP6       SURF       >4000       L       ND       ND       ND       ND       ND       11/15/2         2       320 <td></td>											
8       160       L       ND       ND       ND       ND       40.4       3/4/20         SP6       SURF       >4000       L       ND       ND       ND       ND       ND       11/15/2         2       320 <td></td>											
SP6         SURF         >4000         L         ND         ND         ND         ND         14400         11/15/2           2         320					ND	ND	ND	ND	ND	40.4	2/4/2024
2       320         4       320         6       160         8       160       L       ND       ND       ND       ND       ND       65.7       3/4/20         SP7       SURF       720       L       ND       ND       ND       ND       ND       684       11/15/2         2       320		ð	100		NU	IND	שא	שויו	IND	40.4	3/4/2024
2       320         4       320         6       160         8       160       L       ND       ND       ND       ND       ND       65.7       3/4/20         SP7       SURF       720       L       ND       ND       ND       ND       ND       684       11/15/2         2       320	SPA	SLIRE	>4000	1	ND	ND	ND	ND	ND	14400	11/15/2023
4       320	310			_	140	140	140	140	140	1-700	11/13/2023
6       160         8       160       L       ND       ND       ND       ND       ND       65.7       3/4/20         SP7       SURF       720       L       ND       ND       ND       ND       ND       ND       684       11/15/2         2       320           11/15/2											
8         160         L         ND         ND         ND         ND         65.7         3/4/20           SP7         SURF         720         L         ND         ND         ND         ND         ND         684         11/15/2           2         320         -											†
SP7         SURF         720         L         ND         ND         ND         ND         ND         684         11/15/2           2         320				L	ND	ND	ND	ND	ND	65.7	3/4/2024
2 320											, , , , , , ,
2 320	SP7	SURF	720	L	ND	ND	ND	ND	ND	684	11/15/2023
+   <sup>2+0</sup>		4	240								
6 480		6	480								
8 160 H ND ND <b>35.1 109 144.1</b> 40.7 3/5/20		8	160	Н	ND	ND	35.1	109	144.1	40.7	3/5/2024

	10	160								
	12	80	L	ND	ND	ND	ND	ND	ND	4/2/2024
										, ,
SP8	SURF	>4000	L	ND	ND	ND	ND	ND	13600	11/15/2023
	2	480								
	4	240								
	6	160								
	8	160	Н	ND	ND	43.8	137	180.8	150	3/5/2024
	10	80								
	12	80	L	ND	ND	ND	ND	ND	ND	4/2/2024
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	15000	11/15/2023
	2	240								
	4	320								
	6	320								
	8	160	Н	ND	ND	ND	55	55	ND	3/5/2024
	10	80								
	12	80	L	ND	ND	ND	ND	ND	ND	6/6/2024
SP10	SURF	240	L	ND	ND	ND	ND	ND	80.6	11/15/2023
	2	320								
	4	320								
	6	160								
	8	160	L	ND	ND	ND	ND	ND	ND	3/5/2024
SW1	SURF	>4000	L	ND	ND	ND	ND	ND	1170	11/15/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	ND	3/5/2024
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	675	11/15/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	20.7	3/5/2024
SW3	SURF	2400	L	ND	ND	ND	ND	ND	2650	11/15/2023
	1	320								
	2	160	L	ND	ND	ND	ND	ND	42.2	3/5/2024
SW4	SURF	160	L	ND	ND	ND	ND	ND	ND	11/15/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	ND	3/5/2024
SW5	SURF	>4000	L	ND	ND	ND	ND	ND	790	11/15/2023
	1	400								
	2	320	L	ND	ND	ND	ND	ND	104	3/5/2024

SW6	SURF	240	L	ND	ND	ND	ND	ND	21	11/15/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	ND	3/5/2024
SW7	SURF	240	L	ND	ND	ND	ND	ND	ND	11/15/2023
	1	480								
	2	160	Н	ND	ND	35.9	114	149.9	ND	3/5/2024
	3	320								
	4	160	L	ND	ND	ND	ND	ND	47.7	4/2/2024
SW8	SURF	160	L	ND	ND	ND	ND	ND	ND	11/15/2023
	1	720								
	2	240								
	3	240	Н	ND	ND	38	122	160	47.2	3/5/2024
	4	160		_	_		_	_	_	
	5	80	L	ND	ND	ND	ND	ND	ND	4/2/2024

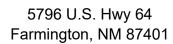
CLIENT: MACK ENERGY
LOCATION: WEST MOUNT SPILL D

SAMPLE ID	LAT	LONG
SP1	32.997509°	-104.070897°
SP2	32.997561°	-104.070844°
SP3	32.997525°	-104.070755°
SP4	32.997488°	-104.070819°
SP5	32.997447°	-104.070766°
SP6	32.997423°	-104.070718°
SP7	32.997433°	-104.070843°
SW1	32.997538°	-104.070947°
SW2	32.997593°	-104.070868°
SW3	32.997576°	-104.070776°
SW4	32.997507°	-104.070711°
SW5	32.997458°	-104.070692°
SW6	32.997378°	-104.070705°
SW7	32.997401°	-104.070825°
SW8	32.997420°	-104.070891°

Report to:

Natalie Gladden





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





# envirotech

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## **Analytical Report**

Mack Energy

Project Name: West Mount Frack Line Spill D

Work Order: E311140

Job Number: 20046-0001

Received: 11/17/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 11/20/23

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: 11/20/23

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount Frack Line Spill D

Workorder: E311140

Date Received: 11/17/2023 7:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/17/2023 7:00:00AM, under the Project Name: West Mount Frack Line Spill D.

The analytical test results summarized in this report with the Project Name: West Mount Frack Line Spill D 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 reguarding 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

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## Sample Summary

Mack Energy	Project Name:	West Mount Frack Line Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/23 16:47

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 1- Surf	E311140-01A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SW 2- Surf	E311140-02A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SW 3- Surf	E311140-03A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SW 4- Surf	E311140-04A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SW 5- Surf	E311140-05A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SW 6- Surf	E311140-06A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SW 7- Surf	E311140-07A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SW 8- Surf	E311140-08A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.

Mack Energy	Project Name:	West Mount Frack Line Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/2023 4:47:15PM

## SW 1- Surf E311140-01

		2011110 01					
Analyte	Result	Reporting Limit	Dilu	ution	Prepared	Analyzed	Notes
Allaryu	Result	Limit	Dilu	ition	Trepared	Anaryzeu	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	/kg mg/kg		Analyst:	RAS		Batch: 2346116
Benzene	ND	0.0250	1	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		119 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		119 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	1	11/17/23	11/18/23	
Surrogate: n-Nonane		90.0 %	50-200		11/17/23	11/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	<u> </u>	Analyst:	BA		Batch: 2346124
Chloride	1170	200	1	0	11/17/23	11/20/23	



Mack Energy	Project Name:	West Mount Frack Line Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/2023 4:47:15PM

### SW 2- Surf E311140-02

Result	Reporting Limit		tion	Prepared	Analyzed	Notes
				•		Batch: 2346116
	<u> </u>	1			11/17/23	Butch: 23 10110
		1				
		1				
		1				
		1				
		1				
ND	0.0250	- 1		11/1//23	11/1//23	
	115 %	70-130		11/17/23	11/17/23	
	96.1 %	70-130		11/17/23	11/17/23	
	108 %	70-130		11/17/23	11/17/23	
mg/kg	mg/kg	1	Analyst:	RAS		Batch: 2346116
ND	20.0	1	Į.	11/17/23	11/17/23	
	115 %	70-130		11/17/23	11/17/23	
	96.1 %	70-130		11/17/23	11/17/23	
	108 %	70-130		11/17/23	11/17/23	
mg/kg	mg/kg	1	Analyst:	KM		Batch: 2346121
ND	25.0	1		11/17/23	11/18/23	
ND	50.0	1		11/17/23	11/18/23	
	87.0 %	50-200		11/17/23	11/18/23	
mg/kg	mg/kg		Analyst:	BA		Batch: 2346124
675	200	10	0	11/17/23	11/20/23	
	mg/kg ND	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           ID         0.0250           ID         0.0250           ID         96.1 %           ID         108 %           mg/kg         mg/kg           ND         20.0           ID         %           ID         96.1 %           ID         108 %           mg/kg         mg/kg           ND         25.0           ND         50.0           87.0 %         mg/kg           mg/kg         mg/kg	mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           115 %         70-130           96.1 %         70-130           108 %         70-130           mg/kg         mg/kg           ND         20.0           115 %         70-130           96.1 %         70-130           108 %         70-130           mg/kg         mg/kg           ND         25.0           ND         50.0           87.0 %         50-200           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Analyst:           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           ND         70-130         1           96.1 %         70-130         70-130           mg/kg         mg/kg         Analyst:           ND         20.0         1           115 %         70-130         70-130           mg/kg         mg/kg         Analyst:           ND         25.0         1           ND         50.0         1           87.0 %         50-200           mg/kg         Mg/kg         Analyst:	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0500         1         11/17/23           ND         0.0250         1         11/17/23           ND         70-130         11/17/23           96.1 %         70-130         11/17/23           108 %         70-130         11/17/23           Mg/kg         mg/kg         Analyst: RAS           ND         20.0         1         11/17/23           115 %         70-130         11/17/23           96.1 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23         11/17/23           ND         0.0500         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           115 %         70-130         11/17/23         11/17/23           108 %         70-130         11/17/23         11/17/23           115 %         70-130         11/17/23         11/17/23           11/17/23         11/17/23         11/17/23         11/17/23           108 %         70-130         11/17/23         11/17/23           108 %         70-130         11/17/23         11/17/23           108 %         70-130         11/17/23         11/17/23           108 %



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 4:47:15PM

### SW 3- Surf E311140-03

		E311140-03					
Analyte	Result	Reporting Limit	Dilut	tion	Prepared	Analyzed	Notes
Analyte	Resuit	Limit	Dilu	tion	Prepared	Anaiyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	Analyst: R	AS		Batch: 2346116
Benzene	ND	0.0250	1	ļ	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1		11/17/23	11/17/23	
Toluene	ND	0.0250	1		11/17/23	11/17/23	
o-Xylene	ND	0.0250	1		11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1		11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1		11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1		11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: K	М		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1		11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1		11/17/23	11/18/23	
Surrogate: n-Nonane		88.0 %	50-200		11/17/23	11/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	1	Analyst: B	A		Batch: 2346124
Chloride	2650	40.0	2	2	11/17/23	11/20/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 4:47:15PM

### SW 4- Surf E311140-04

		E311140-04					
Analyte	Result	Reporting Limit		ıtion	Prepared	Analyzed	Notes
- Tallan, Ve					•	111111/200	
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:			Batch: 2346116
Benzene	ND	0.0250		1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250		1	11/17/23	11/17/23	
Toluene	ND	0.0250		1	11/17/23	11/17/23	
o-Xylene	ND	0.0250		1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250		1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		118 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0		1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		118 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0		1	11/17/23	11/18/23	_
Oil Range Organics (C28-C36)	ND	50.0		1	11/17/23	11/18/23	
Surrogate: n-Nonane		84.9 %	50-200		11/17/23	11/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	BA		Batch: 2346124
Chloride	ND	20.0		1	11/17/23	11/20/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 4:47:15PM

#### SW 5- Surf E311140-05

		E311140-05					
Analyte	Result	Reporting Limit	Dilu	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	1	Analyst:	RAS		Batch: 2346116
Benzene	ND	0.0250	1		11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1		11/17/23	11/17/23	
Toluene	ND	0.0250	1		11/17/23	11/17/23	
o-Xylene	ND	0.0250	1		11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1		11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1		11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		118 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	1	Analyst:	RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1		11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		118 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	1	Analyst:	KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1		11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1		11/17/23	11/18/23	
Surrogate: n-Nonane		81.6 %	50-200		11/17/23	11/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	BA		Batch: 2346124
Chloride	790	200	10	0	11/17/23	11/20/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 4:47:15PM

#### SW 6- Surf E311140-06

		Reporting		•			
Analyte	Result	Limit	Dilu	ıtion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RAS		Batch: 2346116
Benzene	ND	0.0250	1	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	1	11/17/23	11/18/23	
Surrogate: n-Nonane		81.1 %	50-200		11/17/23	11/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	ВА		Batch: 2346124
Chloride	21.0	20.0	1	1	11/17/23	11/20/23	

Mack Energy	Project Name:	West Mount Frack Line Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/2023 4:47:15PM

### SW 7- Surf E311140-07

		E311140-07					
Analyte	Result	Reporting Limit	Dilu	ıtion	Prepared	Analyzed	Notes
,				Analyst:		111111111111111111111111111111111111111	Batch: 2346116
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	-	Anaryst		11/17/22	Batch: 2340110
Benzene	ND	0.0250			11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	. I		11/17/23	11/17/23	
Toluene	ND	0.0250	1	l	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	l	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	1	11/17/23	11/18/23	
Surrogate: n-Nonane		84.3 %	50-200		11/17/23	11/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	BA		Batch: 2346124
Chloride	ND	20.0	1	1	11/17/23	11/20/23	



Mack Energy	Project Name:	West Mount Frack Line Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/2023 4:47:15PM

#### SW 8- Surf E311140-08

		E311140-08					
	D 1	Reporting		.•	D 1		N.
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: I	RAS		Batch: 2346116
Benzene	ND	0.0250	1	l	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	l	11/17/23	11/17/23	
Toluene	ND	0.0250	1	l	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	l	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	l	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	l	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.0 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		107 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: I	RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	l	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.0 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		107 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: I	ζM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	l	11/17/23	11/18/23	
Surrogate: n-Nonane		83.3 %	50-200		11/17/23	11/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: I	BA		Batch: 2346124
Chloride	ND	20.0	1		11/17/23	11/20/23	



## **QC Summary Data**

West Mount Frack Line Spill D Mack Energy Project Name: Reported: 7 W. Compress Road Project Number: 20046-0001 Artesia NM, 88210 Project Manager: Natalie Gladden 11/20/2023 4:47:15PM **Volatile Organic Compounds by EPA 8260B** Analyst: RAS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % Notes Blank (2346116-BLK1) Prepared: 11/17/23 Analyzed: 11/17/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 ND 0.0250 Total Xylenes Surrogate: Bromofluorobenzene 0.589 0.500 118 70-130 Surrogate: 1,2-Dichloroethane-d4 0.472 0.500 94.4 70-130 0.500 107 70-130 Surrogate: Toluene-d8 0.537 LCS (2346116-BS1) Prepared: 11/17/23 Analyzed: 11/17/23 2.52 0.0250 2.50 101 70-130 Benzene 2.58 2.50 103 70-130 Ethylbenzene 0.0250 2.53 0.0250 2.50 101 70-130 2.55 70-130 0.0250 2.50 102 o-Xylene 5.12 5.00 102 70-130 p,m-Xylene 0.0500 7.67 0.0250 7.50 102 70-130 Total Xylenes Surrogate: Bromofluorobenzene 0.581 0.500 116 70-130 0.500 101 70-130 Surrogate: 1,2-Dichloroethane-d4 0.506 70-130 Surrogate: Toluene-d8 0.500 0.547 Matrix Spike (2346116-MS1) Source: E311140-04 Prepared: 11/17/23 Analyzed: 11/17/23 2.55 0.0250 2.50 ND 102 48-131 45-135 Ethylbenzene 2.66 0.0250 2.50 ND 107 103 48-130 Toluene 2.58 0.0250 2.50 ND 2.59 0.0250 2.50 ND 104 43-135 o-Xylene 5.22 5.00 ND 104 43-135 p,m-Xylene 0.0500 Total Xylenes 7.81 0.0250 7.50 ND 104 43-135 Surrogate: Bromofluorobenzene 0.592 0.500 118 70-130 0.495 0.500 99.0 70-130 Surrogate: 1,2-Dichloroethane-d4 0.500 70-130 0.546 Surrogate: Toluene-d8 Matrix Spike Dup (2346116-MSD1) Source: E311140-04 Prepared: 11/17/23 Analyzed: 11/17/23 2.72 0.0250 2.50 ND 109 48-131 6.15 23 2.84 0.0250 2.50 ND 45-135 6.34 27 Ethylbenzene 2.73 ND 109 48-130 24 2.50 5.66 Toluene 0.0250 o-Xylene 2.75 0.0250 2.50 ND 110 43-135 5.89 27 5.00 ND 111 43-135 5.80 27 5.53 p,m-Xylene 0.0500



27

Total Xylenes

Surrogate: Toluene-d8

Surrogate: Bromofluorobenzene

Surrogate: 1,2-Dichloroethane-d4

8.28

0.580

0.506

0.547

0.0250

7.50

0.500

0.500

0.500

ND

110

116

101

109

43-135

70-130

70-130

70-130

5.83

Surrogate: Toluene-d8

## **QC Summary Data**

Mack EnergyProject Name:West Mount Frack Line Spill DReported:7 W. Compress RoadProject Number:20046-0001Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 4:47:15PM

Artesia NM, 88210		Project Number: Project Manager:		ntalie Gladden					11/20/2023 4:47:15P1
	Non	halogenated (	Organics l	by EPA 801	5D - GR	RO			Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limi	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2346116-BLK1)							Prepared: 11	1/17/23	Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.589		0.500		118	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			
LCS (2346116-BS2)							Prepared: 11	1/17/23	Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	54.3	20.0	50.0		109	70-130			
Surrogate: Bromofluorobenzene	0.583		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.483		0.500		96.5	70-130			
Surrogate: Toluene-d8	0.552		0.500		110	70-130			
Matrix Spike (2346116-MS2)				Source: E	2311140-0	4	Prepared: 1	1/17/23	Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	57.3	20.0	50.0	ND	115	70-130			
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.1	70-130			
Surrogate: Toluene-d8	0.560		0.500		112	70-130			
Matrix Spike Dup (2346116-MSD2)				Source: E	2311140-0	4	Prepared: 11	1/17/23	Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130	6.77	20	
Surrogate: Bromofluorobenzene	0.595		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			

0.500

0.562

112

70-130



## **QC Summary Data**

Mack Energy	Project Name:	West Mount Frack Line Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	•
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/2023 4:47:15PM

Artesia NM, 88210		Project Manager	r: N	atalie Gladden					11/20/2023 4:47:15PM
	Nonha	logenated Or	ganics by	EPA 8015D	- DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2346121-BLK1)							Prepared: 1	1/17/23 A	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.7		50.0		89.4	50-200			
LCS (2346121-BS1)							Prepared: 1	1/17/23 A	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	227	25.0	250		91.0	38-132			
Surrogate: n-Nonane	44.7		50.0		89.4	50-200			
Matrix Spike (2346121-MS1)				Source:	E311140-0	)3	Prepared: 1	1/17/23 A	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.4	38-132			
Surrogate: n-Nonane	46.3		50.0		92.6	50-200			
Matrix Spike Dup (2346121-MSD1)				Source:	E311140-0	)3	Prepared: 1	1/17/23 A	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	228	25.0	250	ND	91.2	38-132	1.35	20	
Surrogate: n-Nonane	45.3		50.0		90.5	50-200			



Matrix Spike Dup (2346124-MSD1)

Chloride

4920

## **QC Summary Data**

Mack Energy 7 W. Compress Road		Project Name: Project Number:		Vest Mount Fra 0046-0001	ick Line S <sub>l</sub>	oill D			Reported:
Artesia NM, 88210		Project Manager	: N	atalie Gladder	1			1	1/20/2023 4:47:15PM
		Anions	by EPA	300.0/9056 <i>A</i>	<b>A</b>				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2346124-BLK1)							Prepared: 1	1/17/23 Ar	nalyzed: 11/20/23
Chloride	ND	20.0							
LCS (2346124-BS1)							Prepared: 1	1/17/23 Ar	nalyzed: 11/20/23
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2346124-MS1)				Source:	E311139-0	)4	Prepared: 1	1/17/23 Ar	nalyzed: 11/20/23
Chloride	5200	200	250	5030	68.8	80-120			M4

250

200

Source: E311139-04

NR

80-120

5.58

5030

#### 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.



Prepared: 11/17/23 Analyzed: 11/20/23

## **Definitions and Notes**

ſ	Mack Energy	Project Name:	West Mount Frack Line Spill D	
l	7 W. Compress Road	Project Number:	20046-0001	Reported:
l	Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/23 16:47

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.

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.



hain of Custod	dy	
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Page	OI

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COM		,			nal	0-000	N	×	30 3	Lanuara	CWA	SDW
	10		1	Ana	lysis ar	nd Metho	bd		1			RCF
1	D by 801	GRO/DRO by 8015	8021	010	300.0		NM	ΤX		NM CO	State UT AZ	TX
Lab Number	DRO/ORO by 8015	GRO/DRC	BTEX by 8021	VOC by 8260 Metals 6010	Chloride 300.0		86000	верос			Remarks	
							1					
THE PERSON NAMED IN				_			+					
3							+			-		
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	1-1	ina		Sa	mples rea	uiring thern	nal preser	vetion m	ust be recei	ived on ice the da	y they are sam	pled cr
Coto			0	ts.	cked in ic	e at an avg t	temp abov	kab U	ess than 6 °C Ise Only	C on subsequent of	days.	
Date		Time	Bot	T	1		<u>T2</u>			<u></u>		
The same of the sa	the sample of th	the sample locate which is the sample locate which the sample locate which is the sample locate which the sample locate which is the sample locate which	g the sample location, sough	g the sample location,  SUSCIDATE  Time  UNDATE  Time  Time	3 4 5 4 5 4 5 4 5 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	the sample location, Samples received in its  Cate  WA  Samples received in its  Cate  WA  Time  Received  Time	the sample location,  Samples requiring them racked in ice at an avg to Date  Time  Received on ice	Samples requiring thermal present packed in ice at an avg temp above.  Date  Time  Received on ice:	Samples requiring thermal preservation may be packed in ice at an avg temp above 0 but le the state of the st	Samples requiring thermal preservation must be receiped in ice at an avg temp above 0 but less than 6 for packed in ice at an avg temp above 0 but less than 6 for pa	g the sample location,  Samples requiring thermal preservation must be received on ice the day packed in ice at an avg temp above 0 but less than 6 °C on subsequent of the sample of th	Samples requiring thermal preservation must be received on ice the day they are sample location, packed in ice at an any temp above 0 but less than 6 °C on subsequent days.  Cate Time  Received on ice:  Ab Use Only  Received on ice:



Printed: 11/17/2023 9:59:21AM

### **Envirotech Analytical Laboratory**

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.

	to response concerning enese from a woman 2 mount of the			1			
Client:	Mack Energy	Date Received:	11/17/23 0	7:00		Work Order ID:	E311140
Phone:	(575) 390-6397	Date Logged In:	11/16/23 1	5:56		Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/20/23 1	7:00 (1 day TAT)			
	Custody (COC)						
	e sample ID match the COC?		Yes				
	e number of samples per sampling site location mat	ch the COC	Yes				
	mples dropped off by client or carrier?		Yes	Carrier: C	Courier_		
	COC complete, i.e., signatures, dates/times, reques	ted analyses?	Yes				
5. Were al	I samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssic		Yes			<u>Comment</u>	s/Resolution
Sample T	urn Around Time (TAT)				m.	11.	1.1. COC
6. Did the	COC indicate standard TAT, or Expedited TAT?		Yes		1 -	oled not provi	ded on COC per
Sample C					client.		
	ample cooler received?		Yes				
8. If yes, v	vas 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				
	sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling isible ice, record the temperature. Actual sample	received w/i 15	Yes				
		temperature. 4 v	<u>~</u>				
Sample C	ontainer ueous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers?		Yes				
	ppropriate volume/weight or number of sample contain		Yes				
Field Lab	•	ers conceted.	103				
	ield sample labels filled out with the minimum info	rmation.					
	mple ID?		Yes				
D	nte/Time Collected?		Yes				
C	ollectors name?		No				
	reservation						
	he COC or field labels indicate the samples were pr	eserved?	No				
	mple(s) correctly preserved?		NA				
24. Is lab	filteration required and/or requested for dissolved m	etals?	No				
	se Sample Matrix						
	he sample have more than one phase, i.e., multiphas		No				
27. If yes,	does the COC specify which phase(s) is to be analy	zed?	NA				
Subcontr	act Laboratory						
28. Are sa	mples required to get sent to a subcontract laborator	y?	No				
29. Was a	subcontract laboratory specified by the client and if	so who?	NA	Subcontract Lab	o: NA		
Client In	<u>struction</u>						

Date

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





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Practical Solutions for a Better Tomorrow

## **Analytical Report**

Mack Energy

Project Name: West Mount Frack Line Spill D

Work Order: E311141

Job Number: 20046-0001

Received: 11/17/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 11/20/23

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: 11/20/23

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount Frack Line Spill D

Workorder: E311141

Date Received: 11/17/2023 7:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/17/2023 7:00:00AM, under the Project Name: West Mount Frack Line Spill D.

The analytical test results summarized in this report with the Project Name: West Mount Frack Line Spill D 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 reguarding 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

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Envirotech Web Address: www.envirotech-inc.com

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## Sample Summary

Mack Energy	Project Name:	West Mount Frack Line Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/23 15:54

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 1- Surface	E311141-01A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 2- Surface	E311141-02A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 3- Surface	E311141-03A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 4- Surface	E311141-04A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 5- Surface	E311141-05A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 6- Surface	E311141-06A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 7- Surface	E311141-07A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 8- Surface	E311141-08A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 9- Surface	E311141-09A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 10- Surface	E311141-10A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.

Mack Energy	Project Name:	West Mount Frack Line Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/2023 3:54:47PM

### SP 1- Surface E311141-01

		EUTIT OT					
Analyte	Result	Reporting Limit		ıtion	Prepared	Analyzed	Notes
Allaryu	Result	Limit	Dilu	ition	Trepared	Anaryzeu	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RAS		Batch: 2346116
Benzene	ND	0.0250	1	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	nalyst: RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	1	11/17/23	11/17/23	
Surrogate: n-Nonane		86.1 %	50-200		11/17/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	BA		Batch: 2346125
Chloride	9920	200	1	0	11/17/23	11/18/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 2- Surface E311141-02

		1511171-02				
Analyte	Result	Reporting Limit	Dilut	ion Prepared	Analyzed	Notes
Amaryce	Result	Dillit		1	Anaryzeu	
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: RAS		Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.2 %	70-130	11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130	11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.2 %	70-130	11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130	11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/17/23	
Surrogate: n-Nonane		89.8 %	50-200	11/17/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: BA		Batch: 2346125
Chloride	7790	200	10	11/17/23	11/18/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 3- Surface E311141-03

		201111100					
Analyte	Result	Reporting Limit		ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RAS		Batch: 2346116
Benzene	ND	0.0250		1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250		1	11/17/23	11/17/23	
Toluene	ND	0.0250		1	11/17/23	11/17/23	
o-Xylene	ND	0.0250		1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500		1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250		1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.9 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RAS		Batch: 2346116	
Gasoline Range Organics (C6-C10)	ND	20.0		1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.9 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0		1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0		1	11/17/23	11/17/23	
Surrogate: n-Nonane		85.8 %	50-200		11/17/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	BA		Batch: 2346125
Chloride	1380	40.0		2	11/17/23	11/18/23	

Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 4- Surface E311141-04

	E311141-04					
Result		Dilut	tion	Prepared	Analyzed	Notes
				•	7 mary 200	
mg/kg	mg/kg		Analyst: R			Batch: 2346116
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0500	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
	116 %	70-130		11/17/23	11/17/23	
	99.5 %	70-130		11/17/23	11/17/23	
	108 %	70-130		11/17/23	11/17/23	
mg/kg	mg/kg	I	Analyst: R	AS		Batch: 2346116
ND	20.0	1		11/17/23	11/17/23	
	116 %	70-130		11/17/23	11/17/23	
	99.5 %	70-130		11/17/23	11/17/23	
	108 %	70-130		11/17/23	11/17/23	
mg/kg	mg/kg	A	Analyst: Kl	M		Batch: 2346121
ND	25.0	1		11/17/23	11/17/23	
ND	50.0	1		11/17/23	11/17/23	
	84.9 %	50-200		11/17/23	11/17/23	
mg/kg	mg/kg	A	Analyst: B	A		Batch: 2346125
2490	40.0	2	. ———	11/17/23	11/18/23	
	ND ND ND ND ND ND Mg/kg ND Mg/kg	Result         Reporting           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           II6 %         99.5 %           108 %         108 %           mg/kg         mg/kg           ND         20.0           II6 %         99.5 %           108 %         108 %           mg/kg         mg/kg           ND         25.0           ND         50.0           84.9 %         mg/kg           mg/kg         mg/kg	Reporting           Result         Limit         Dilu           mg/kg         mg/kg           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           116 %         70-130         70-130           99.5 %         70-130         70-130           mg/kg         mg/kg         108 %           ND         20.0         1           mg/kg         mg/kg         108 %           ND         25.0         1           ND         25.0         1           ND         50.0         1           84.9 %         50-200           mg/kg         mg/kg	Reporting           Result         Limit         Dilution           mg/kg         mg/kg         Analyst: RA           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           116 %         70-130           99.5 %         70-130           108 %         70-130           mg/kg         mg/kg         Analyst: RA           ND         20.0         1           116 %         70-130         1           mg/kg         mg/kg         Analyst: RA           ND         25.0         1           ND         25.0         1           ND         50.0         1           84.9 %         50-200           mg/kg         Mg/kg         Analyst: BA	Reporting           Result         Limit         Dilution         Prepared           mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0500         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           99.5 %         70-130         11/17/23           99.5 %         70-130         11/17/23           108 %         70-130         11/17/23           99.5 %         70-130         11/17/23           99.5 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %         70-130         11/17/23           108 %	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         Mapper and Malyzed           mg/kg         Mapper and Malyzed           mg/kg         Mapper and Malyzed           Mapper and Malyzed           Mapper and Malyzed           ND         0.0250         1         11/17/23



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 5- Surface E311141-05

		E311141-05					
Analyte	Result	Reporting Limit		ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: RAS		Batch: 2346116
Benzene	ND	0.0250		1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250		1	11/17/23	11/17/23	
Toluene	ND	0.0250		1	11/17/23	11/17/23	
o-Xylene	ND	0.0250		1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500		1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250		1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		107 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0		1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		107 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: KM		Batch: 2346121
Diesel Range Organics (C10-C28)	33.8	25.0		1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	65.1	50.0		1	11/17/23	11/17/23	
Surrogate: n-Nonane		84.6 %	50-200		11/17/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: BA		Batch: 2346125
Chloride	532	20.0		1	11/17/23	11/18/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 6- Surface E311141-06

		E311141-00					
	D 1:	Reporting		.•	D 1		N.
Analyte	Result	Limit	Dilut	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	Analyst: RA	.S		Batch: 2346116
Benzene	ND	0.0250	1		11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1		11/17/23	11/17/23	
Toluene	ND	0.0250	1		11/17/23	11/17/23	
o-Xylene	ND	0.0250	1		11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1		11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1		11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	Analyst: RA	.S		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1		11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		116 %	70-130		11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130		11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130		11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: KN	1		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1		11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1		11/17/23	11/17/23	
Surrogate: n-Nonane		62.8 %	50-200		11/17/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: BA			Batch: 2346125
Chloride	14400	400	20	)	11/17/23	11/18/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 7- Surface E311141-07

		1511171-07				
Analyte	Result	Reporting Limit	Dilu	tion Prepared	Analyzed	Notes
Allaryte	Result	Limit	Dilui	non Trepared	Allalyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	Analyst: RAS		Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130	11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	1	Analyst: RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	11/17/23	11/17/23	
Surrogate: Toluene-d8		108 %	70-130	11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	1	Analyst: KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/17/23	
Surrogate: n-Nonane		83.2 %	50-200	11/17/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	1	Analyst: BA		Batch: 2346125
Chloride	684	20.0	1	11/17/23	11/18/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 8- Surface E311141-08

		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	А	Analyst: RAS		Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130	11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130	11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130	11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	А	Analyst: RAS		Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		115 %	70-130	11/17/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130	11/17/23	11/17/23	
Surrogate: Toluene-d8		109 %	70-130	11/17/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Α	Analyst: KM		Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/17/23	
Surrogate: n-Nonane		82.3 %	50-200	11/17/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Α	Analyst: BA		Batch: 2346125
Chloride	13600	400	20	11/17/23	11/18/23	



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/20233:54:47PM

#### SP 9- Surface E311141-09

Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
resur	Emit		•	7 mary zea	110103
mg/kg	mg/kg	Analy	yst: RAS		Batch: 2346116
ND	0.0250	1	11/17/23	11/17/23	
ND	0.0250	1	11/17/23	11/17/23	
ND	0.0250	1	11/17/23	11/17/23	
ND	0.0250	1	11/17/23	11/17/23	
ND	0.0500	1	11/17/23	11/17/23	
ND	0.0250	1	11/17/23	11/17/23	
	116 %	70-130	11/17/23	11/17/23	
	94.5 %	70-130	11/17/23	11/17/23	
	109 %	70-130	11/17/23	11/17/23	
mg/kg	mg/kg	Anal	yst: RAS		Batch: 2346116
ND	20.0	1	11/17/23	11/17/23	
	****				
	116 %	70-130	11/17/23	11/17/23	
	116 % 94.5 %	70-130 70-130	11/17/23 11/17/23	11/17/23 11/17/23	
	,-				
mg/kg	94.5 %	70-130 70-130	11/17/23	11/17/23	Batch: 2346121
mg/kg ND	94.5 % 109 %	70-130 70-130	11/17/23 11/17/23	11/17/23	Batch: 2346121
	94.5 % 109 % mg/kg	70-130 70-130 Analy	11/17/23 11/17/23 yst: KM	11/17/23 11/17/23	Batch: 2346121
ND	94.5 % 109 % mg/kg 25.0	70-130 70-130 Analy	11/17/23 11/17/23 yst: KM	11/17/23 11/17/23 11/18/23	Batch: 2346121
ND	94.5 % 109 % mg/kg 25.0 50.0	70-130 70-130 Analy 1 1 50-200	11/17/23 11/17/23 yst: KM 11/17/23 11/17/23	11/17/23 11/17/23 11/18/23 11/18/23	Batch: 2346121  Batch: 2346125
	ND ND ND ND ND ND	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           I16 %         94.5 %           109 %         mg/kg           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Analy           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           116 %         70-130           94.5 %         70-130           109 %         70-130           mg/kg         mg/kg         Analy           ND         20.0         1	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0500         1         11/17/23           ND         0.0250         1         11/17/23           ND         70-130         11/17/23           94.5 %         70-130         11/17/23           109 %         70-130         11/17/23           mg/kg         mg/kg         Analyst: RAS           ND         20.0         1         11/17/23	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           ND         0.0500         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           116 %         70-130         11/17/23         11/17/23           109 %         70-130         11/17/23         11/17/23           mg/kg         mg/kg         Analyst: RAS           ND         20.0         1         11/17/23         11/17/23



Mack EnergyProject Name:West Mount Frack Line Spill D7 W. Compress RoadProject Number:20046-0001Reported:Artesia NM, 88210Project Manager:Natalie Gladden11/20/2023 3:54:47PM

#### SP 10- Surface E311141-10

Result	Reporting Limit		tion	Prepared	Analyzed	Notes
mg/kg	mg/kg	I	Analyst: R	AS		Batch: 2346116
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
ND	0.0500	1		11/17/23	11/17/23	
ND	0.0250	1		11/17/23	11/17/23	
	116 %	70-130		11/17/23	11/17/23	
	97.8 %	70-130		11/17/23	11/17/23	
	109 %	70-130		11/17/23	11/17/23	
mg/kg	mg/kg	1	Analyst: R	AS		Batch: 2346116
ND	20.0	1		11/17/23	11/17/23	
	116 %	70-130		11/17/23	11/17/23	
	97.8 %	70-130		11/17/23	11/17/23	
	109 %	70-130		11/17/23	11/17/23	
mg/kg	mg/kg	1	Analyst: K	ĽM.		Batch: 2346121
ND	25.0	1		11/17/23	11/18/23	
ND	50.0	1		11/17/23	11/18/23	
	89.7 %	50-200		11/17/23	11/18/23	
mg/kg	mg/kg	1	Analyst: B	BA		Batch: 2346125
80.6	20.0	1		11/17/23	11/18/23	
· · · · · · · · · · · · · · · · · · ·	mg/kg ND	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           II6 %         97.8 %           109 %         mg/kg           ND         20.0           II6 %         97.8 %           109 %         109 %           mg/kg         mg/kg           ND         25.0           ND         50.0           89.7 %         mg/kg           mg/kg         mg/kg	mg/kg         mg/kg           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           116 %         70-130         70-130           97.8 %         70-130         70-130           mg/kg         mg/kg         70-130           109 %         70-130         70-130           mg/kg         mg/kg         1           ND         25.0         1           ND         50.0         1           89.7 %         50-200           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Analyst: R           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         70-130         1           97.8 %         70-130         70-130           mg/kg         mg/kg         Analyst: R           ND         20.0         1           116 %         70-130         70-130           97.8 %         70-130         70-130           mg/kg         mg/kg         Analyst: R           ND         25.0         1           ND         50.0         1           89.7 %         50-200           mg/kg         Mg/kg         Analyst: R	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0500         1         11/17/23           ND         0.0250         1         11/17/23           ND         0.0250         1         11/17/23           ND         70-130         11/17/23           97.8 %         70-130         11/17/23           109 %         70-130         11/17/23           MD         20.0         1         11/17/23           97.8 %         70-130         11/17/23           109 %         70-130         11/17/23           109 %         70-130         11/17/23           109 %         70-130         11/17/23           109 %         70-130         11/17/23           109 %         70-130         11/17/23           109 %         70-130         11/17/23           100 %         70-130         11/17/23           100 %         70-130 <t< td=""><td>Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23         11/17/23           ND         0.0500         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           97.8 %         70-130         11/17/23         11/17/23           1109 %         70-130         11/17/23         11/17/23           11/17/23         11/17/23         11/17/23         11/17/23           11/17/23         11/17/23         11/17/23         11/17/23           109 %         70-130         11/17/23         11/17/23           109 %         70-130         11/17/23         11/17/23           109 %         70-130         11/17/23         11/17/23           109 %</td></t<>	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: RAS           ND         0.0250         1         11/17/23         11/17/23           ND         0.0500         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           ND         0.0250         1         11/17/23         11/17/23           97.8 %         70-130         11/17/23         11/17/23           1109 %         70-130         11/17/23         11/17/23           11/17/23         11/17/23         11/17/23         11/17/23           11/17/23         11/17/23         11/17/23         11/17/23           109 %         70-130         11/17/23         11/17/23           109 %         70-130         11/17/23         11/17/23           109 %         70-130         11/17/23         11/17/23           109 %

West Mount Frack Line Spill D Mack Energy Project Name: Reported: 7 W. Compress Road Project Number: 20046-0001 Artesia NM, 88210 Project Manager: Natalie Gladden 11/20/2023 3:54:47PM **Volatile Organic Compounds by EPA 8260B** Analyst: RAS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % Notes Blank (2346116-BLK1) Prepared: 11/17/23 Analyzed: 11/17/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 ND 0.0250 Total Xylenes Surrogate: Bromofluorobenzene 0.589 0.500 118 70-130 Surrogate: 1,2-Dichloroethane-d4 0.472 0.500 94.4 70-130 0.500 107 70-130 Surrogate: Toluene-d8 0.537 LCS (2346116-BS1) Prepared: 11/17/23 Analyzed: 11/17/23 2.52 0.0250 2.50 101 70-130 Benzene 2.58 2.50 103 70-130 Ethylbenzene 0.0250 2.53 0.0250 2.50 101 70-130 2.55 70-130 0.0250 2.50 102 o-Xylene 5.12 5.00 102 70-130 p,m-Xylene 0.0500 7.67 0.0250 7.50 102 70-130 Total Xylenes Surrogate: Bromofluorobenzene 0.581 0.500 116 70-130 0.500 101 70-130 Surrogate: 1,2-Dichloroethane-d4 0.506 70-130 Surrogate: Toluene-d8 0.500 0.547 Matrix Spike (2346116-MS1) Source: E311140-04 Prepared: 11/17/23 Analyzed: 11/17/23 2.55 0.0250 2.50 ND 102 48-131 45-135 Ethylbenzene 2.66 0.0250 2.50 ND 107 103 48-130 Toluene 2.58 0.0250 2.50 ND 2.59 0.0250 2.50 ND 104 43-135 o-Xylene 5.22 5.00 ND 104 43-135 p,m-Xylene 0.0500 Total Xylenes 7.81 0.0250 7.50 ND 104 43-135 Surrogate: Bromofluorobenzene 0.592 0.500 118 70-130 0.495 0.500 99.0 70-130 Surrogate: 1,2-Dichloroethane-d4 0.500 70-130 0.546 Surrogate: Toluene-d8 Matrix Spike Dup (2346116-MSD1) Source: E311140-04 Prepared: 11/17/23 Analyzed: 11/17/23 2.72 0.0250 2.50 ND 109 48-131 6.15 23 2.84 0.0250 2.50 ND 45-135 6.34 27 Ethylbenzene 2.73 ND 109 48-130 24 2.50 5.66 Toluene 0.0250 o-Xylene 2.75 0.0250 2.50 ND 110 43-135 5.89 27 5.00 ND 111 43-135 5.80 27 5.53 p,m-Xylene 0.0500 27 8.28 0.0250 7.50 ND 110 43-135 5.83 Total Xylenes



0.500

0.500

0.500

116

101

109

70-130

70-130

70-130

Surrogate: Bromofluorobenzene

Surrogate: 1,2-Dichloroethane-d4

Surrogate: Toluene-d8

0.580

0.506

0.547

Surrogate: Bromofluorobenzene

Surrogate: Toluene-d8

Surrogate: 1,2-Dichloroethane-d4

# **QC Summary Data**

West Mount Frack Line Spill D Mack Energy Project Name: Reported: 7 W. Compress Road Project Number: 20046-0001

Artesia NM, 88210		Project Manager	: Na	atalie Gladden				11.	/20/2023 3:54:47PM
	Non	halogenated (	Organics l	by EPA 801	5D - Gl	RO			Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2346116-BLK1)							Prepared: 1	1/17/23 Ana	lyzed: 11/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.589		0.500		118	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			
LCS (2346116-BS2)							Prepared: 1	1/17/23 Ana	lyzed: 11/17/23
Gasoline Range Organics (C6-C10)	54.3	20.0	50.0		109	70-130			
Surrogate: Bromofluorobenzene	0.583		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.483		0.500		96.5	70-130			
Surrogate: Toluene-d8	0.552		0.500		110	70-130			
Matrix Spike (2346116-MS2)				Source: I	E311140-0	04	Prepared: 1	1/17/23 Ana	lyzed: 11/17/23
Gasoline Range Organics (C6-C10)	57.3	20.0	50.0	ND	115	70-130			
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.1	70-130			
Surrogate: Toluene-d8	0.560		0.500		112	70-130			
Matrix Spike Dup (2346116-MSD2)				Source: I	E311140-0	04	Prepared: 1	1/17/23 Ana	lyzed: 11/17/23
Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130	6.77	20	

0.500

0.500

0.500

119

97.8

112

70-130

70-130

70-130

0.595

0.489

0.562



Mack Energy	Project Name:	West Mount Frack Line Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/2023 3:54:47PM

Artesia NM, 88210		Project Manage	r: N	atalie Gladden					11/20/2023 3:54:47PM
	Nonha	logenated Or	ganics by	EPA 8015D	- DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2346121-BLK1)							Prepared: 1	1/17/23	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.7		50.0		89.4	50-200			
LCS (2346121-BS1)							Prepared: 1	1/17/23	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	227	25.0	250		91.0	38-132			
Surrogate: n-Nonane	44.7		50.0		89.4	50-200			
Matrix Spike (2346121-MS1)				Source:	E311140-0	)3	Prepared: 1	1/17/23	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.4	38-132			
Surrogate: n-Nonane	46.3		50.0		92.6	50-200			
Matrix Spike Dup (2346121-MSD1)				Source:	E311140-0	)3	Prepared: 1	1/17/23	Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	228	25.0	250	ND	91.2	38-132	1.35	20	
Gurrogate: n-Nonane	45.3		50.0		90.5	50-200			



Mack Energy 7 W. Compress Road		Project Name: Project Number:		Vest Mount Fra 0046-0001	nck Line Sp	oill D			Reported:
Artesia NM, 88210		Project Manager	: N	Vatalie Gladder	1				11/20/2023 3:54:47PM
		Anions	by EPA	300.0/9056 <i>A</i>	4				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2346125-BLK1)							Prepared:	11/17/23	Analyzed: 11/18/23
Chloride	ND	20.0							
LCS (2346125-BS1)							Prepared:	11/17/23	Analyzed: 11/18/23
Chloride	246	20.0	250		98.5	90-110			
Matrix Spike (2346125-MS1)				Source:	E311141-0	7	Prepared:	11/17/23	Analyzed: 11/18/23
Chloride	946	20.0	250	684	105	80-120			
Matrix Spike Dup (2346125-MSD1)				Source:	E311141-0	7	Prepared:	11/17/23	Analyzed: 11/18/23
Chloride	873	20.0	250	684	75.8	80-120	7.97	20	M2

#### QC Summary Report Comment:

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



# **Definitions and Notes**

Mack Energy	Project Name:	West Mount Frack Line Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/20/23 15:54

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Project Information

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Received by OCD: 11/14/2025 2:08:56 PM

Client: A	lack	( 405()	<b>CA</b>		TI	Bill To		ā-	-	La	b Us	e Onl	V	Yes T			TAT		EPA P	rogram
Projects	1056 110	END C	2 171	e spill	Att	ention: ENERGY STAFFING SEI	RVICES	Lah	WO#			Job N	lumbe		1D	2D	3D	Standard	CWA	SDWA
Project N		100	uc cen	c Hari L		dress: 2724 NW COUNTY RD		F.	WO#	41		200	1460	1000		X				
Address:						y, State, Zip HOBBS, NM 8824	0							Method						RCRA
City, Stat					Control of the same	one: 575-393-9048	75											1000		
Phone:	-7				Fm	ail: NATALIE@ENERGYSTAFFING	LLC.COM	15	15					1					State	
Email:						BRITTNEY@ENERGYSTAFFIN		y 80	y 80	e	0	_	0.0		NN			NM CO	UT AZ	TX
Report d	ue by:					pitt itte e brondi billion		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			×		X		
Time	Date	1,200	No. of	c 1 10			Lab	3/0	JQ/C	X by	Cby	tals	orid		верос	BGDOC			Remarks	
Sampled	Sampled	Matrix	Containers	Sample ID			Number	DRC	GRI	ВТВ	0	Σ	5		BG	BG		1	V.500.7(1)(5	
	11/15/23	5	1	501	Sul	<i>C</i> 0	1								X					
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Addition	nal Instruc	tions:	1	1000	30 1			-	-	-										
I, (field sam	pler), attest to	the validit	y and authen	ticity of this san	nple. I am awar	e that tampering with or intentionally mislat	belling the sampl	le locat	tion,									ved on ice the day Con subsequent da		led or received
date or tim	e of collection	is consider			s for legal action		W. C.	1_				pscked	in ice at	an avg cem					-10:	
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Relinquist	ed by: (Sign	ature)	Date	-11 23	Time 1700	Received by: (Signature)	Date		Time	2		T1			T2			T3		
Relinquish	ed by: (Sign	eture)	Date	16-00	Time	Received by: (Signature)	Date   11/17		Time	1:00			311	0- 4	4					
1 Indre	J	2880		11:16-23 Aqueous, O - Ot	2330	Gmentero	1	-		The state of the s			Temp		1	-	1/01			
Sample Ma	trix: S - Soil, S	d - Solid, Sg	- Sludge, A -	Aqueous, O - Ot	her	1	Containe	er Typ	e:g-	glass	, p - p	ooly/pl	astic, a	ig - amb	er gla	iss, v	- VOA	part for the an	alueie of the	ahovo
Note: San	ples are dis	arded 30	days after r	esults are repo	orted unless o	ther arrangements are made. Hazardo	ous samples wil	ll be re	eturne	d to c	d for	or dispo	sed of a	at the clie	ent ex	pense.	inere	nor for the su	arysis or me	anove
samples is	applicable	only to tho	se samples	received by the	ne laboratory v	with this COC. The liability of the labora	tory is limited	to rue	amou	int bal	a for C	on the i	chort.							



Printed: 11/17/2023 9:58:39AM

#### **Envirotech Analytical Laboratory**

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: Mack Energy Date Received: 11/17/23 00:00 Work Order ID: E311141  Phone: (575) 390-6397 Date Logged In: 11/16/23 15:58 Logged In By: Jordan Mon Email: Natalie@energystaffingllc.com Due Date: 11/20/23 17:00 (1 day TAT)	
Email: Natalie@energystaffingllc.com Due Date: 11/20/23 17:00 (1 day TAT)	
	ıtano
Chain of Custody (COC)	
1. Does the sample ID match the COC?  Yes  2. Poss the graph of complex processing site leasting match the COC.	
2. Does the number of samples per sampling site location match the COC  Yes	
3. Were samples dropped off by client or carrier?  Yes Carrier: Courier	
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?  Yes	
5. Were all samples received within holding time? Yes  Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.  Comments/Resolution	<u>n</u>
Sample Turn Around Time (TAT)	100
6. Did the COC indicate standard TAT, or Expedited TAT?  Yes  Time sampled not provided on C	OC per
Sample Cooler client.	
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?	
10. Were custody/security seals present? No	
11. If yes, were custody/security seals intact?	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C  Note: Thermal preservation is not required, if samples are received w/i 15  minutes of sampling  13. If no visible ice, record the temperature. Actual sample temperature: 4°C	
Sample Container  14. Are aqueous VOC samples present?  No	
15. Are VOC samples collected in VOA Vials?  NA	
16. Is the head space less than 6-8 mm (pea sized or less)?  NA	
17. Was a trip blank (TB) included for VOC analyses?  NA	
18. Are non-VOC samples collected in the correct containers?  Yes	
19. Is the appropriate volume/weight or number of sample containers collected?  Yes	
Field Label	
20. Were field sample labels filled out with the minimum information:	
Sample ID? Yes	
Date/Time Collected? No	
Collectors name? No	
Sample Preservation	
21. Does the COC or field labels indicate the samples were preserved?	
22. Are sample(s) correctly preserved?	
24. Is lab filteration required and/or requested for dissolved metals?	
Multiphase Sample Matrix	
26. Does the sample have more than one phase, i.e., multiphase?	
27. If yes, does the COC specify which phase(s) is to be analyzed?	
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	

Date

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

# **Analytical Report**

Mack Energy

Project Name: West Mount Spill D

Work Order: E403044

Job Number: 20046-0001

Received: 3/6/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/7/24

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: 3/7/24

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount Spill D

Workorder: E403044

Date Received: 3/6/2024 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/6/2024 8:00:00AM, under the Project Name: West Mount Spill D.

The analytical test results summarized in this report with the Project Name: West Mount Spill D 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 reguarding 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

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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## **Sample Summary**

Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	03/07/24 14:50

Client Sample ID	Lab Sample ID Ma	rix Sampled	Received	Container
SP 1 -8'	E403044-01A So	il 03/04/24	03/06/24	Glass Jar, 2 oz.
SP 2 -8'	E403044-02A So	il 03/04/24	03/06/24	Glass Jar, 2 oz.
SP 3 -8'	E403044-03A So	il 03/04/24	03/06/24	Glass Jar, 2 oz.
SP 4 -8'	E403044-04A So	il 03/04/24	03/06/24	Glass Jar, 2 oz.
SP 5 -8'	E403044-05A So	il 03/04/24	03/06/24	Glass Jar, 2 oz.
SP 6 -8'	E403044-06A So	il 03/04/24	03/06/24	Glass Jar, 2 oz.



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

#### SP 1 -8' E403044-01

		E403044-01				
Analysis	Result	Reporting Limit	Dilution	D	A l d	Notes
Analyte	Resuit	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: BA		Batch: 2410063
Benzene	ND	0.0250	1	03/06/24	03/06/24	
Ethylbenzene	ND	0.0250	1	03/06/24	03/06/24	
Toluene	ND	0.0250	1	03/06/24	03/06/24	
-Xylene	ND	0.0250	1	03/06/24	03/06/24	
o,m-Xylene	ND	0.0500	1	03/06/24	03/06/24	
Total Xylenes	ND	0.0250	1	03/06/24	03/06/24	
Surrogate: 4-Bromochlorobenzene-PID		96.6 %	70-130	03/06/24	03/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: BA		Batch: 2410063
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/06/24	03/06/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.4 %	70-130	03/06/24	03/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		89.7 %	50-200	03/06/24	03/07/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: IY		Batch: 2410065
Chloride	70.0	20.0	1	03/06/24	03/06/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

#### SP 2 -8'

#### E403044-02

		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: BA		Batch: 2410063
Benzene	ND	0.0250	1	03/06/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/06/24	03/07/24	
Toluene	ND	0.0250	1	03/06/24	03/07/24	
o-Xylene	ND	0.0250	1	03/06/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/06/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/06/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		96.5 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: BA		Batch: 2410063
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/06/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.7 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		90.8 %	50-200	03/06/24	03/07/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: IY		Batch: 2410065
· · · · · · · · · · · · · · · · · · ·	152	20.0		03/06/24	03/06/24	·



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

## SP 3 -8'

		E403044-03				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410063
Benzene	ND	0.0250	1	03/06/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/06/24	03/07/24	
Toluene	ND	0.0250	1	03/06/24	03/07/24	
o-Xylene	ND	0.0250	1	03/06/24	03/07/24	
o,m-Xylene	ND	0.0500	1	03/06/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/06/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		96.2 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410063
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/06/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.4 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		92.7 %	50-200	03/06/24	03/07/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2410065
Chloride	87.2	20.0	1	03/06/24	03/06/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

#### SP 4 -8'

		E403044-04				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: BA		Batch: 2410063
Benzene	ND	0.0250	1	03/06/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/06/24	03/07/24	
Toluene	ND	0.0250	1	03/06/24	03/07/24	
o-Xylene	ND	0.0250	1	03/06/24	03/07/24	
o,m-Xylene	ND	0.0500	1	03/06/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/06/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		95.9 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: BA		Batch: 2410063
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/06/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.2 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		90.5 %	50-200	03/06/24	03/07/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: IY		Batch: 2410065
Chloride	25.1	20.0	1	03/06/24	03/06/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

#### SP 5 -8'

#### E403044-05

		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2410063
Benzene	ND	0.0250	1	03/06/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/06/24	03/07/24	
Toluene	ND	0.0250	1	03/06/24	03/07/24	
o-Xylene	ND	0.0250	1	03/06/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/06/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/06/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		95.4 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2410063
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/06/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.0 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Aı	nalyst: KM		Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		87.2 %	50-200	03/06/24	03/07/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Aı	nalyst: IY		Batch: 2410065
	40.4	20.0		03/06/24	03/06/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

## SP 6 -8'

		E403044-06				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410063
Benzene	ND	0.0250	1	03/06/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/06/24	03/07/24	
Toluene	ND	0.0250	1	03/06/24	03/07/24	
o-Xylene	ND	0.0250	1	03/06/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/06/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/06/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		95.5 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410063
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/06/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.9 %	70-130	03/06/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		84.1 %	50-200	03/06/24	03/07/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2410065
Chloride	65.7	20.0	1	03/06/24	03/06/24	



		QC 50	A 1111111	ary Data	•				
Mack Energy		Project Name:	V	Vest Mount Spi	ll D				Reported:
7 W. Compress Road	Project Number:		2	0046-0001					
Artesia NM, 88210		Project Manager:	N	atalie Gladden				3	3/7/2024 2:50:17PM
		by EPA 802	1B		Analyst: BA				
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410063-BLK1)							Prepared: 0	3/06/24 Ana	alyzed: 03/06/24
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	7.87		8.00		98.4	70-130			
LCS (2410063-BS1)							Prepared: 0	3/06/24 Ana	alyzed: 03/06/24
Benzene	5.21	0.0250	5.00		104	70-130			
Ethylbenzene	5.06	0.0250	5.00		101	70-130			
Toluene	5.20	0.0250	5.00		104	70-130			
p-Xylene	5.14	0.0250	5.00		103	70-130			
o,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.5	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			
Matrix Spike (2410063-MS1)				Source:	E403043-	02	Prepared: 0	3/06/24 Ana	alyzed: 03/06/24
Benzene	5.21	0.0250	5.00	ND	104	54-133			
Ethylbenzene	5.04	0.0250	5.00	ND	101	61-133			
Toluene	5.19	0.0250	5.00	ND	104	61-130			
o-Xylene	5.12	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131			
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.90		8.00		98.8	70-130			
Matrix Spike Dup (2410063-MSD1)				Source:	E403043-	02	Prepared: 0	3/06/24 Ana	alyzed: 03/06/24
Benzene	5.54	0.0250	5.00	ND	111	54-133	6.10	20	
Ethylbenzene	5.36	0.0250	5.00	ND	107	61-133	6.10	20	
Toluene	5.52	0.0250	5.00	ND	110	61-130	6.12	20	
o-Xylene	5.46	0.0250	5.00	ND	109	63-131	6.34	20	
p,m-Xylene	10.9	0.0500	10.0	ND	109	63-131 63-131	6.08 6.17	20 20	
Total Xylenes	16.4	0.0250	15.0	ND	109				



70-130

Surrogate: 4-Bromochlorobenzene-PID

Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

Artesia NM, 88210		Project Manage	r: Na	talie Gladder	1			3/7	/2024 2:50:17PM	
	Non	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	
Blank (2410063-BLK1)							Prepared: 0	3/06/24 Analy	zed: 03/06/24	
Gasoline Range Organics (C6-C10)	ND	20.0								
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.98		8.00		87.3	70-130				
LCS (2410063-BS2)							Prepared: 0	3/06/24 Analy	zed: 03/06/24	
Gasoline Range Organics (C6-C10)	46.9	20.0	50.0		93.7	70-130				
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.06		8.00		88.3	70-130				
Matrix Spike (2410063-MS2)				Source:	E403043-	02	Prepared: 0	3/06/24 Analy	zed: 03/06/24	
Gasoline Range Organics (C6-C10)	45.3	20.0	50.0	ND	90.5	70-130				
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130				
Matrix Spike Dup (2410063-MSD2)				Source:	E403043-	02	Prepared: 0	3/06/24 Analy	zed: 03/06/24	
Gasoline Range Organics (C6-C10)	44.3	20.0	50.0	ND	88.6	70-130	2.19	20		
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.16		8.00		89.6	70-130				

Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	•
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/7/2024 2:50:17PM

Artesia NM, 88210		Project Manage	r: Na	talie Gladder	ı				3/7/2024 2:50:17PM
	Nonhal	Nonhalogenated Organics by EPA 8015D - DRO/ORO						Analyst: NV	
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410059-BLK1)							Prepared: 0	3/06/24 Ar	nalyzed: 03/06/24
tiesel Range Organics (C10-C28)	ND	25.0							
vil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	47.1		50.0		94.1	50-200			
.CS (2410059-BS1)							Prepared: 0	3/06/24 Ar	nalyzed: 03/06/24
viesel Range Organics (C10-C28)	269	25.0	250		108	38-132			
urrogate: n-Nonane	47.5		50.0		95.0	50-200			
Aatrix Spike (2410059-MS1)				Source:	E403021-0	03	Prepared: 0	3/06/24 Ar	nalyzed: 03/06/24
viesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132			
urrogate: n-Nonane	44.8		50.0		89.7	50-200			
Matrix Spike Dup (2410059-MSD1)				Source:	E403021-0	03	Prepared: 0	3/06/24 Ar	nalyzed: 03/06/24
tiesel Range Organics (C10-C28)	248	25.0	250	ND	99.4	38-132	1.10	20	
urrogate: n-Nonane	43.5		50.0		87.0	50-200			



Chloride

## **QC Summary Data**

Mack Energy 7 W. Compress Road		Project Name: Project Number		est Mount Sp 0046-0001	ill D				Reported:
Artesia NM, 88210		Project Manage	r: N	atalie Gladder	ı				3/7/2024 2:50:17PM
		Anions	by EPA 3	300.0/9056 <i>A</i>	4				Analyst: DT
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410065-BLK1)							Prepared: 0	3/06/24 A	nalyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410065-BS1)							Prepared: 0	3/06/24 A	nalyzed: 03/06/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2410065-MS1)				Source:	E403043-	04	Prepared: 0	3/06/24 A	nalyzed: 03/06/24
Chloride	811	20.0	250	488	129	80-120			M2
Matrix Spike Dup (2410065-MSD1)				Source:	E403043-	04	Prepared: 0	3/06/24 A	nalyzed: 03/06/24

250

20.0

75.7

80-120

18.0

20

M2

677

#### 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**

Γ	Mack Energy	Project Name:	West Mount Spill D	
ı	7 W. Compress Road	Project Number:	20046-0001	Reported:
	Artesia NM, 88210	Project Manager:	Natalie Gladden	03/07/24 14:50

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Rele	
Released to	Project Information
Imaging	Client: Mack En
19.	Project: West M
70	Project Manager:
-	Address:
2/2	City, State, Zip
2	Phone:
2/8/2025	Email:
2	Report due by:
ن	Time Date

Chain of Custody

	1 . /
Page	l of l

Received by OCD: 11/14/2025 2:08:56 PM

Client: 4	lack Ex	20154			1			Bill To		2		La	b Us	e Onl	V	- CO 10" T			TAT		EPA PI	ogram
Project:	Nes+ W	mint :	SBILL P	)		Atte	ntion: ENER	GY STAFFING SERV	ICES	Lab	WO#	_	_	Job N	lumb	er	1D		3D	Standard	CWA	SDWA
	/lanager:					Addi	ess: 2724 N	W COUNTY RD		EL	WO#	300	4	200	40-	1000		X				
Address:						City,	State, Zip	HOBBS, NM 88240					and the same of	Analys	sis an	d Metho	od			1000		RCRA
City, Stat	e, Zip				T	Phor	ne: 575-393-	9048														
Phone:					10	Ema	il: NATALIE@	ENERGYSTAFFINGLI	.C.COM	015	115				1		1				State	
Email:							BRITTNEY	@ENERGYSTAFFINGI	LC.COM	3y 8(	oy 8(	21	00	0	0.00		ΣN			NM CO	UT AZ	TX
Report d	ue by:									ROL	ROE	y 80	/ 826	601	Je 30	- 1		X		X		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample II	)				Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		верос	BGDOC			Remarks	
	03/04	5	1	5P	l	- 8	•		t								X					
	(		1	58	2	- 8			2								1					
				SP	3	- 8	e		3								1					
				SP	4	- 8'			4								1/					
				58	5.	- 8'			5								1					
	03/04	5	1	5P	6 -	8'			6								X					
Additio	nal Instruc	tions:	1	1							,	1										
4.0	pler), attest t							h or intentionally mislabell	ing the samp	e locat	ian,									eived on ice the day °C on subsequent d		ed or received
Relinquish	ned by: (Sign		Date		Time	34.44	Received by: (S	ignature)	Date 3-5-	24	Time	310	)	Rece	eived	on ice:		ab U	se Onl	У		
	ned by: (Sign	atule)		5-24	_	olo	Received by: (5	ignature) /	3.5		Time	70		T1			T2			Т3	4	
Relinquis	ned by: (Sign	ature)	Date	5.21	Time	230	Andrew Received by: (S	iignature)	Date 3(0	124	Time				Ten	np °C_	4	10	J.M	7 19		
1	trix: S - Soil, S	d-Solid Se		-	-				Containe	er Typ		100					ber gla	ass, v	- VOA			
Note: Sar	nples are dis	carded 30	days after r	esults are re	eported	unless oth	er arrangement:	are made. Hazardous	samples wi	Il be re	eturne	d to c	lient c	or dispo	sed o	f at the c	lient ex	pense	. The re	eport for the an	alysis of the	above
samples i	s applicable	only to tho	se samples	received by	the labo	oratory wi	th this COC. The	liability of the laborator	y is limited	to the	amou	nt pai	d for	on the	repor	t.						



Printed: 3/6/2024 10:48:16AM

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If

hone: (575) 390-6397 Date	e Received:	03/06/24	08:00		Work Order ID:	E403044
	e Logged In:	03/05/24	16:23		Logged In By:	Angelina Pineda
mail: Natalie@energystaffingllc.com Due	Date:	03/07/24	17:00 (1 day TAT)			
hain of Custody (COC)						
. Does the sample ID match the COC?		Yes				
. Does the number of samples per sampling site location match the	ne COC	Yes				
. Were samples dropped off by client or carrier?		Yes	Carrier: C	<u>Courier</u>		
. Was the COC complete, i.e., signatures, dates/times, requested a	ınalyses?	No				
. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	field,	Yes			Commen	ts/Resolution
ample Turn Around Time (TAT)  Did the COC indicate standard TAT, or Expedited TAT?		Yes		Project man	nager and tir	ne sampled not
ample Cooler				documente	d on COC b	v client.
. Was a sample cooler received?		Yes		Goodinonio		,
. If yes, was cooler received in good condition?		Yes				
. Was the sample(s) received intact, i.e., not broken?						
- · · · · ·		Yes				
0. Were custody/security seals present?		No				
1. If yes, were custody/security seals intact?	ro. 00.00	NA				
<ol> <li>Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., or Note: Thermal preservation is not required, if samples are recomminutes of sampling</li> <li>If no visible ice, record the temperature. Actual sample tem</li> </ol>	ived w/i 15	Yes C				
ample Container	_					
4. Are aqueous VOC samples present?		No				
5. Are VOC samples collected in VOA Vials?		NA				
6. Is the head space less than 6-8 mm (pea sized or less)?		NA				
7. Was a trip blank (TB) included for VOC analyses?		NA				
8. Are non-VOC samples collected in the correct containers?		Yes				
9. Is the appropriate volume/weight or number of sample containers of	ollected?	Yes				
ield Label  O. Were field sample labels filled out with the minimum informate	ion					
Sample ID?	1011	Yes				
Date/Time Collected?		Yes	Į.			
Collectors name?		Yes				
ample Preservation						
1. Does the COC or field labels indicate the samples were preser-	ved?	No				
2. Are sample(s) correctly preserved?		NA				
4. Is lab filteration required and/or requested for dissolved metals	;?	No				
Iultiphase Sample Matrix						
6. Does the sample have more than one phase, i.e., multiphase?		No				
7. If yes, does the COC specify which phase(s) is to be analyzed?	?	NA				
ubcontract Laboratory						
Are samples required to get sent to a subcontract laboratory?		No				
The state of the s	vho?	NA	Subcontract Lab	· NA		
Was a subcontract laboratory enecified by the client and if so w		11/A	Suocomurci Lad	. IAU		
<ol><li>Was a subcontract laboratory specified by the client and if so very client Instruction</li></ol>						

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

# **Analytical Report**

Mack Energy

Project Name: West Mount Spill D

Work Order: E403053

Job Number: 20046-0001

Received: 3/7/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/8/24

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: 3/8/24

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount Spill D

Workorder: E403053

Date Received: 3/7/2024 6:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/7/2024 6:30:00AM, under the Project Name: West Mount Spill D.

The analytical test results summarized in this report with the Project Name: West Mount Spill D 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 reguarding 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

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## **Sample Summary**

Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	03/08/24 14:09

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1-2'	E403053-01A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SW2-2'	E403053-02A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SW3-2'	E403053-03A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SW4-2'	E403053-04A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SW5-2'	E403053-05A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SW6-2'	E403053-06A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SW7-2'	E403053-07A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SW8-3'	E403053-08A	Soil	03/05/24	03/07/24	Glass Jar, 2 oz.



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW1-2' E403053-01

		E-103033-01				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	yst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		98.2 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.4 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		101 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	yst: IY		Batch: 2410076
Chloride	ND	20.0	1	03/07/24	03/07/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW2-2'

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		96.9 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.7 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		103 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2410076



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW3-2'

		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		96.8 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.9 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Aı	nalyst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		99.6 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Aı	nalyst: IY		Batch: 2410076
Chloride	42.2	20.0	1	03/07/24	03/07/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW4-2'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		96.8 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.0 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		103 %	50-200	03/07/24	03/08/24	
	mg/kg	mg/kg	Anal	yst: IY		Batch: 2410076
Anions by EPA 300.0/9056A	88	8 8				



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW5-2'

		2.00000				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	*		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		96.3 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.0 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		107 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: IY		Batch: 2410076
Chloride	104	20.0	1	03/07/24	03/07/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW6-2'

E403	053	-06
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		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		96.9 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.2 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		94.2 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2410076
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW7-2'

	Reporting				
Result	Limit	Dilutio	on Prepared	Analyzed	Notes
mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2410075
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0500	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
	96.9 %	70-130	03/07/24	03/07/24	
mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2410075
ND	20.0	1	03/07/24	03/07/24	
	88.6 %	70-130	03/07/24	03/07/24	
mg/kg	mg/kg	Aı	nalyst: KM		Batch: 2410074
35.9	25.0	1	03/07/24	03/08/24	
11.4	50.0	1	03/07/24	03/08/24	
114					
114	104 %	50-200	03/07/24	03/08/24	
mg/kg			03/07/24 nalyst: IY	03/08/24	Batch: 2410076
	mg/kg  ND ND ND ND ND ND ND ND ND Mg/kg	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           MD         0.0250           MD         0.0250           mg/kg         mg/kg           ND         20.0           88.6 %         mg/kg           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         An           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           mg/kg         mg/kg         An           ND         20.0         1           88.6 %         70-130         70-130           mg/kg         mg/kg         An	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: BA           ND         0.0250         1         03/07/24           ND         0.0250         1         03/07/24           ND         0.0250         1         03/07/24           ND         0.0250         1         03/07/24           ND         0.0500         1         03/07/24           ND         0.0250         1         03/07/24           mg/kg         70-130         03/07/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         03/07/24           88.6 %         70-130         03/07/24           mg/kg         mg/kg         Analyst: KM	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: BA           ND         0.0250         1         03/07/24         03/07/24           ND         0.0500         1         03/07/24         03/07/24           ND         0.0250         1         03/07/24         03/07/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         03/07/24         03/07/24           88.6 %         70-130         03/07/24         03/07/24           mg/kg         mg/kg         Analyst: BA



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

#### SW8-3'

E403	053-08
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		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		97.0 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.2 %	70-130	03/07/24	03/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	38.0	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	122	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		105 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2410076
· · · · · · · · · · · · · · · · · · ·	47.2	20.0		03/07/24	03/07/24	



		QC SI	umma	iry Dat	a				
Mack Energy 7 W. Compress Road Artesia NM, 88210		Project Name: Project Number: Project Manager:	20	est Mount Sp 0046-0001 atalie Gladde					<b>Reported:</b> 3/8/2024 2:09:10PM
711costa 1(111, 00210									
		Volatile O	rganics b	by EPA 802	21B				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410075-BLK1)							Prepared: 0	3/07/24 A	nalyzed: 03/07/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
o,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.87		8.00		98.4	70-130			
LCS (2410075-BS1)							Prepared: 0	3/07/24 A	nalyzed: 03/07/24
Benzene	5.11	0.0250	5.00		102	70-130			
Ethylbenzene	4.99	0.0250	5.00		99.9	70-130			
Toluene	5.12	0.0250	5.00		102	70-130			
o-Xylene	5.06	0.0250	5.00		101	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
Total Xylenes	15.3	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.91		8.00		98.9	70-130			
Matrix Spike (2410075-MS1)				Source:	E403053-	05	Prepared: 0	3/07/24 A	nalyzed: 03/07/24
Benzene	5.06	0.0250	5.00	ND	101	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	5.06	0.0250	5.00	ND	101	61-130			
p-Xylene	5.01	0.0250	5.00	ND	100	63-131			
o,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.82		8.00		97.8	70-130			
Matrix Spike Dup (2410075-MSD1)				Source:	E403053-	05	Prepared: 0	3/07/24 A	nalyzed: 03/07/24
Benzene	5.40	0.0250	5.00	ND	108	54-133	6.56	20	
Ethylbenzene	5.29	0.0250	5.00	ND	106	61-133	6.76	20	
Toluene	5.41	0.0250	5.00	ND	108	61-130	6.72	20	
p-Xylene	5.38	0.0250	5.00	ND	108	63-131	7.16	20	
n m-Xylene	10.8	0.0500	10.0	ND	108	63-131	6.72	20	

10.0

15.0

8.00

0.0500

0.0250

ND

ND

108

108

98.4

63-131

63-131

70-130

6.72

6.87

20

20



p,m-Xylene Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

10.8

16.2

7.87

Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

Artesia NM, 88210		Project Manage	r: Na	ıtalie Gladder	1			3/	8/2024 2:09:10PM
	Non	halogenated	Organics l	by EPA 80	15D - Gl	RO			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
Blank (2410075-BLK1)							Prepared: 0	3/07/24 Ana	lyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.12		8.00		89.0	70-130			
LCS (2410075-BS2)							Prepared: 0	3/07/24 Ana	lyzed: 03/07/24
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.23		8.00		90.4	70-130			
Matrix Spike (2410075-MS2)				Source:	E403053-	05	Prepared: 0	3/07/24 Ana	lyzed: 03/07/24
Gasoline Range Organics (C6-C10)	44.6	20.0	50.0	ND	89.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.19		8.00		89.8	70-130			
Matrix Spike Dup (2410075-MSD2)				Source:	E403053-	05	Prepared: 0	3/07/24 Ana	lyzed: 03/07/24
Gasoline Range Organics (C6-C10)	44.8	20.0	50.0	ND	89.6	70-130	0.477	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.20		8.00		89.9	70-130			

Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	·
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:09:10PM

Artesia NM, 88210		Project Manage	r: Na	italie Gladder	1			:	3/8/2024 2:09:10PM
	Nonhal	logenated Or	ganics by	EPA 8015I	) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410074-BLK1)							Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	50.8		50.0		102	50-200			
LCS (2410074-BS1)							Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
urrogate: n-Nonane	50.5		50.0		101	50-200			
Matrix Spike (2410074-MS1)				Source:	E403035-	05	Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
urrogate: n-Nonane	47.7		50.0		95.3	50-200			
Matrix Spike Dup (2410074-MSD1)				Source:	E403035-	05	Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	279	25.0	250	ND	111	38-132	0.439	20	
'urrogate: n-Nonane	51.2		50.0		102	50-200			



Mack Energy		Project Name:		est Mount Spi	ill D				Reported:
7 W. Compress Road Artesia NM, 88210		Project Number: Project Manager:		046-0001 atalie Gladder	1				3/8/2024 2:09:10PM
		Anions	by EPA 3	00.0/9056	<b>A</b>				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410076-BLK1)							Prepared: 0	3/07/24 A	Analyzed: 03/07/24
Chloride	ND	20.0							
LCS (2410076-BS1)							Prepared: 0	3/07/24 A	Analyzed: 03/07/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2410076-MS1)				Source:	E403053-0	)4	Prepared: 0	3/07/24 A	Analyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120			
Matrix Spike Dup (2410076-MSD1)				Source:	E403053-0	)4	Prepared: 0	3/07/24 A	Analyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120	0.212	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**

	Mack Energy	Project Name:	West Mount Spill D	
-	7 W. Compress Road	Project Number:	20046-0001	Reported:
-	Artesia NM, 88210	Project Manager:	Natalie Gladden	03/08/24 14:09

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

	1		
Page	1	of	)
Page _		01	

	paller.	į.	Sain:	49.7	lah	Use On	W.			TA			rogran
it: Mach Energy ect: West Mount Stru D	Bill To Attention: ENERGY STAFFING SERV	ICES	I an V	VO#	( 1	Job	Numbe	er de	10	2D   3D	Standard	CWA	SDW
ect Manager:	Address: 2724 NW COUNTY RD		EIL	030	53	100	40-1	0001		X	Name of Grant A	4	RCF
ress:	City, State, Zip HOBBS, NM 88240					Analy	sis and	Method	1	1 1		chi -	KCR
State, Zip	Phone: 575-393-9048											State	1
ne:	Email: NATALIE@ENERGYSTAFFINGLL		3015	3015							NMIC	O UT AZ	TX
il:	BRITTNEY@ENERGYSTAFFINGL	LC.COM	by 8	by	3021	010	300.		NW	×	~		
ort due by:  No. of		Lab	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260 Metals 6010	Chloride 300.0		верос	верос		Remarks	5
pled Sampled Matrix Consiners Sample 10	71	Number	DR	SR	18	× E	Ü	+	X	89			
03/05 5 1 500 1	- 2'				-			-	F				
/ / 1 5w 2	- 2'	2							1/				
5w 3	~ 2 '	3	Name of Persons										
1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	- 2'	U		177									
	7 '	5		1	1		11		1				
5 Sw 5	- 6	3			-	-	+-	-	+				
5w 6	- 2'	6	as est						11				
1 / Sw 7	- 2'	7							11				
03/05 5 1 52 8	-31	8							X				
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		Rep. 16											
ditional Instructions:													
ield sampler), attest to the validity and authenticity of this sample.		elling the sam	ple Icca	tion,		San	ncles requ cked in ice	iring therma at an avg te	al preser mp abo	vetion must be se C but less tha	received on ice the an 6 °C on subseque	ed day they are sar ent days.	ngled cr
e or time of collection is considered fraud and may be grounds for l	gal action. Sampled by: Signature)			frime	- 0		-			Lab Use (	Only		
inquished by: (Signature)  Date  O3/05/24	Middle Court	3-6	24		120	R	eceive	d on ice	. (	YIN		420	
linquished by: (Signature) Date	SOO Received by (Signature)	Date 3.		Time	700				-		T3		

Printed: 3/7/2024 9:35:55AM

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If

Client: Mack Energy	Date Received:	03/07/24 06	5:30	Work Order ID:	E403053
Phone: (575) 390-6397	Date Logged In:	03/06/24 16	i:47	Logged In By:	Alexa Michaels
Email: Natalie@energystaffingllc.com	Due Date:	03/08/24 17	7:00 (1 day TAT)		
Chain of Custody (COC)					
1. Does the sample ID match the COC?		Yes			
2. Does the number of samples per sampling site location mat	ch the COC	Yes			
3. Were samples dropped off by client or carrier?		Yes	Carrier: C	<u>ourier</u>	
4. Was the COC complete, i.e., signatures, dates/times, reques	ited analyses?	No			
<ol> <li>Were all samples received within holding time?         Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disuession.     </li> </ol>		Yes	,	Commer	nts/Resolution
Sample Turn Around Time (TAT)				Decidat manager and ti	ma sampled not
6. Did the COC indicate standard TAT, or Expedited TAT?		Yes		Project manager and ti	<del>-</del>
Sample Cooler				documented on COC b	y client
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			
<ol> <li>Was the sample received on ice? If yes, the recorded temp is 4°C,         Note: Thermal preservation is not required, if samples are minutes of sampling     </li> <li>If no visible ice, record the temperature. Actual sample</li> </ol>	e received w/i 15	Yes			
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 contain	ers collected?	Yes			
Field Label					
20. Were field sample labels filled out with the minimum info	rmation:				
Sample ID?		Yes			
Date/Time Collected? Collectors name?		Yes	_	·	
Sample Preservation		Yes			
21. Does the COC or field labels indicate the samples were pr	reserved?	No			
22. Are sample(s) correctly preserved?	osci voa.	NA			
24. Is lab filteration required and/or requested for dissolved m	etals?	No			
		110			
Multiphase Sample Matrix  26. Does the sample have more than one phase, i.e., multipha	ra?	No			
27. If yes, does the COC specify which phase(s) is to be analy					
• • • • • •	/2 <b>cu</b> :	NA			
Subcontract Laboratory					
28. Are samples required to get sent to a subcontract laborator		No			
<ol><li>Was a subcontract laboratory specified by the client and if</li></ol>	so who?	NA S	Subcontract Lab	: NA	
27. Was a sacconated incornior, specified by an enem and					

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

envirotech Inc.

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

## **Analytical Report**

Mack Energy

Project Name: West Mount Spill D

Work Order: E403054

Job Number: 20046-0001

Received: 3/7/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/8/24

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: 3/8/24

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount Spill D

Workorder: E403054

Date Received: 3/7/2024 6:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/7/2024 6:30:00AM, under the Project Name: West Mount Spill D.

The analytical test results summarized in this report with the Project Name: West Mount Spill D 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 reguarding 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

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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## **Sample Summary**

1	Mack Energy	Project Name:	West Mount Spill D	Donoutoda
7	W. Compress Road	Project Number:	20046-0001	Reported:
1	Artesia NM, 88210	Project Manager:	Natalie Gladden	03/08/24 14:07

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
SP7-8'	E403054-01A Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SP8-8'	E403054-02A Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SP9-8'	E403054-03A Soil	03/05/24	03/07/24	Glass Jar, 2 oz.
SP10-8'	E403054-04A Soil	03/05/24	03/07/24	Glass Jar, 2 oz.



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:07:58PM

#### SP7-8' E403054-01

	E403034-01				
Recult			Prepared	Analyzed	Notes
Result	Limit	Dilution	Trepared	Maryzea	rotes
mg/kg	mg/kg	Anal	yst: BA		Batch: 2410075
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
ND	0.0500	1	03/07/24	03/07/24	
ND	0.0250	1	03/07/24	03/07/24	
	96.0 %	70-130	03/07/24	03/07/24	
mg/kg	mg/kg	Anal	yst: BA		Batch: 2410075
ND	20.0	1	03/07/24	03/07/24	
	87.8 %	70-130	03/07/24	03/07/24	
mg/kg	mg/kg	Anal	yst: KM		Batch: 2410074
35.1	25.0	1	03/07/24	03/08/24	
109	50.0	1	03/07/24	03/08/24	
	102 %	50-200	03/07/24	03/08/24	
mg/kg	mg/kg	Anal	vst: IY		Batch: 2410076
	88				
	ND ND ND ND ND ND ND ND ND 109	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           MD         0.0250           MD         0.0250           MD         20.0250           MB/kg         mg/kg           ND         20.0           87.8 %         mg/kg           mg/kg         mg/kg           35.1         25.0           109         50.0	Reporting           Result         Limit         Dilution           mg/kg         mg/kg         Analy           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           MD         0.0250         1           MD         0.0250         1           96.0 %         70-130         70-130           mg/kg         mg/kg         Analy           ND         20.0         1           87.8 %         70-130         70-130           mg/kg         mg/kg         Analy           35.1         25.0         1           109         50.0         1	Reporting Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: BA           ND         0.0250         1         03/07/24           ND         0.0250         1         03/07/24           ND         0.0250         1         03/07/24           ND         0.0250         1         03/07/24           ND         0.0500         1         03/07/24           ND         0.0250         1         03/07/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         03/07/24           mg/kg         mg/kg         Analyst: KM           35.1         25.0         1         03/07/24           109         50.0         1         03/07/24           109         50.0         1         03/07/24	Reporting           Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: BA           ND         0.0250         1         03/07/24         03/07/24           ND         0.0250         1         03/07/24         03/07/24           ND         0.0250         1         03/07/24         03/07/24           ND         0.0500         1         03/07/24         03/07/24           ND         0.0250         1         03/07/24         03/07/24           ND         0.0250         1         03/07/24         03/07/24           ND         0.0250         1         03/07/24         03/07/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         03/07/24         03/07/24           87.8 %         70-130         03/07/24         03/07/24           mg/kg         mg/kg         Analyst: KM           35.1         25.0         1         03/07/24         03/08/24           109         50.0         1         03/07/24         03/08/24           109         50.0         1         03/07/24<



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:07:58PM

#### **SP8-8'**

#### E403054-02

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/08/24	
Toluene	ND	0.0250	1	03/07/24	03/08/24	
o-Xylene	ND	0.0250	1	03/07/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/08/24	
Surrogate: 4-Bromochlorobenzene-PID		96.1 %	70-130	03/07/24	03/08/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.0 %	70-130	03/07/24	03/08/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	43.8	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	137	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		106 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2410076
Chloride	150	20.0	1	03/07/24	03/07/24	



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:07:58PM

#### SP9-8'

#### E403054-03

Batch: 2410075  4 4 4 4 4
4 4 4 4 4
4 4 4 4
4 4 4
4 4 4
4 4
4
4
Batch: 2410075
1
1
Batch: 2410074
1
1
4
Batch: 2410076
1
/24 /24 /24 /24 /24



Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:07:58PM

#### SP10-8'

#### E403054-04

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	rst: BA		Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/08/24	
Toluene	ND	0.0250	1	03/07/24	03/08/24	
o-Xylene	ND	0.0250	1	03/07/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/08/24	
Surrogate: 4-Bromochlorobenzene-PID		95.3 %	70-130	03/07/24	03/08/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	rst: BA		Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.0 %	70-130	03/07/24	03/08/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	rst: KM		Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		110 %	50-200	03/07/24	03/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	rst: IY		Batch: 2410076
Amons by ETA 300.0/7030A						



		<b>₹</b> € 8.		ry Dat							
Mack Energy 7 W. Compress Road		Project Name: Project Number:		est Mount Sp 046-0001	ill D				Reported:		
Artesia NM, 88210		Project Manager:	Na	atalie Gladder	1			3/8/2024 2:07:58PM			
		Volatile O	rganics b	y EPA 802	21B			Analyst: BA			
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit			
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes		
Blank (2410075-BLK1)							Prepared: 0	3/07/24 A	nalyzed: 03/07/24		
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	7.87		8.00		98.4	70-130					
LCS (2410075-BS1)							Prepared: 0	3/07/24 A	nalyzed: 03/07/24		
Benzene	5.11	0.0250	5.00		102	70-130					
Ethylbenzene	4.99	0.0250	5.00		99.9	70-130					
Toluene	5.12	0.0250	5.00		102	70-130					
o-Xylene	5.06	0.0250	5.00		101	70-130					
p,m-Xylene	10.2	0.0500	10.0		102	70-130					
Total Xylenes	15.3	0.0250	15.0		102	70-130					
Surrogate: 4-Bromochlorobenzene-PID	7.91		8.00		98.9	70-130					
Matrix Spike (2410075-MS1)				Source:	E403053-	05	Prepared: 0	3/07/24 A	nalyzed: 03/07/24		
Benzene	5.06	0.0250	5.00	ND	101	54-133					
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133					
Toluene	5.06	0.0250	5.00	ND	101	61-130					
o-Xylene	5.01	0.0250	5.00	ND	100	63-131					
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131					
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131					
Surrogate: 4-Bromochlorobenzene-PID	7.82		8.00		97.8	70-130					
Matrix Spike Dup (2410075-MSD1)				Source:	E403053-	05	Prepared: 0	3/07/24 A	nalyzed: 03/07/24		
Benzene	5.40	0.0250	5.00	ND	108	54-133	6.56	20			
Ethylbenzene	5.29	0.0250	5.00	ND	106	61-133	6.76	20			
Toluene	5.41	0.0250	5.00	ND	108	61-130	6.72	20			
o-Xylene	5.38	0.0250	5.00	ND	108	63-131	7.16	20			
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131	6.72	20			
Total Xylenes	16.2	0.0250	15.0	ND	108	63-131	6.87	20			

8.00

7.87

98.4

70-130



Surrogate: 4-Bromochlorobenzene-PID

Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	-
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:07:58PM

Artesia NM, 88210		Project Manage	r: Na	italie Gladder	1			3/8	3/2024 2:07:58PM			
	Non	halogenated	Organics l	by EPA 80	15D - GI	RO		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			
Blank (2410075-BLK1)							Prepared: 0	3/07/24 Anal	yzed: 03/07/24			
Gasoline Range Organics (C6-C10)	ND	20.0										
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.12		8.00		89.0	70-130						
LCS (2410075-BS2)							Prepared: 0	3/07/24 Anal	yzed: 03/07/24			
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.1	70-130						
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.23		8.00		90.4	70-130						
Matrix Spike (2410075-MS2)				Source:	E403053-	05	Prepared: 0	3/07/24 Anal	yzed: 03/07/24			
Gasoline Range Organics (C6-C10)	44.6	20.0	50.0	ND	89.1	70-130						
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.19		8.00		89.8	70-130						
Matrix Spike Dup (2410075-MSD2)				Source:	E403053-	05	Prepared: 03/07/24 Analyzed: 03/07/24					
Gasoline Range Organics (C6-C10)	44.8	20.0	50.0	ND	89.6	70-130	0.477	20				
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.20		8.00		89.9	70-130						



Mack Energy	Project Name:	West Mount Spill D	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	3/8/2024 2:07:58PM

Artesia NM, 88210		Project Manage	r: Na	italie Gladder	1			:	3/8/2024 2:07:58PN
	Nonhal	logenated Or		Analyst: KM					
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410074-BLK1)							Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	50.8		50.0		102	50-200			
LCS (2410074-BS1)							Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
urrogate: n-Nonane	50.5		50.0		101	50-200			
Matrix Spike (2410074-MS1)				Source:	E403035-	05	Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
urrogate: n-Nonane	47.7		50.0		95.3	50-200			
Matrix Spike Dup (2410074-MSD1)				Source:	E403035-	05	Prepared: 0	3/07/24 An	alyzed: 03/07/24
Diesel Range Organics (C10-C28)	279	25.0	250	ND	111	38-132	0.439	20	
urrogate: n-Nonane	51.2		50.0		102	50-200			



Mack Energy 7 W. Compress Road Artesia NM, 88210		Project Name: West Mount Spill D Project Number: 20046-0001 Project Manager: Natalie Gladden							<b>Reported:</b> 3/8/2024 2:07:58PM
. Hessa 1111, 60210				300.0/9056A					Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2410076-BLK1)							Prepared: 0	3/07/24 A	nalyzed: 03/07/24
Chloride	ND	20.0							
LCS (2410076-BS1)							Prepared: 02	3/07/24 A	nalyzed: 03/07/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2410076-MS1)				Source:	E403053-	04	Prepared: 0	3/07/24 A	nalyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120			
Matrix Spike Dup (2410076-MSD1)				Source:	E403053-	04	Prepared: 0	3/07/24 A	nalyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120	0.212	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**

Mack Energy	Project Name:	West Mount Spill D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	03/08/24 14:07

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Project Information
Client: Maci En
Project: West
Project Manager:
Address:

Chain of Custody

	1	1
Page	( of	1
1 000		_

Received by OCD: 11/14/2025 2:08:56 PM

Client: Mac Energy					Bill To	-1-			La	ab Us	se Onl	y	-4/			TA	EPA Pr	ogram			
	West		+ 5001	0		Attent	ion: ENERGY STAFFING SE	RVICES	Lab	WO#	_			umber 46-0	100	1D	2D	3D	Standard	CWA	SDWA
	lanager:				1.37		ss: 2724 NW COUNTY RD		E	to"	305	4	200	46-0	001		~				
Address:	11.40				-11	City, S	tate, Zip HOBBS, NM 8824	10					Analys	is and N	letho	d			100		RCRA
City, Stat	e, Zip				124	Phone	: 575-393-9048												12.46.5		
Phone:					1	Email:	NATALIE@ENERGYSTAFFING	ELLC.COM	315	315										State	
Email:							BRITTNEY@ENERGYSTAFFIN	GLLC.COM	)y 8(	ογ 8(c	21	0	0	0.00		Z			and the same of th	UT AZ	TX
Report d	ue by:								RO	RO	y 80	826	601	Je 30		1	¥		7		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID				Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC	ВСВОС			Remarks	
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Addition	nal Instruc	tions:						N. Carlot		_	-	_							_1		
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Condi	en i	Mussi		3.6.24	100	00	heyligh of Hall									oor als	CC 11	VOA	100		
Sample Ma	trix: S - Soil, S	- Solid, Sg	- Sludge, A -	Aqueous, O - 0	Other		//	Contain	er lyp	e.g.	glass	, p -	poly/pi	sod of at	the eli	ent a	nenco	The	poort for the ar	alvsis of the	ahove
Note: San	nples are dis	arded 30	days after r	esults are re	ported unle	ess other	arrangements are made. Hazardo this COC. The liability of the labora	ous samples wi	to the	eturne	ed to C	id for	on the	report	the th	ent ex	ense.	men	cport for the ar	iorysis of title	anove
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#### **Envirotech Analytical Laboratory**

#### Sample Receipt Checklist (SRC)

Printed: 3/7/2024 9:16:58AM

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: Mack Energy	Date Received:	03/07/24 06:3	0	Work Order ID:	E403054
Phone: (575) 390-6397	Date Logged In:	03/06/24 16:53	2	Logged In By:	Alexa Michaels
Email: Natalie@energystaffingllc.com	Due Date:	03/08/24 17:0	0 (1 day TAT)		
Chain of Custody (COC)					
1. Does the sample ID match the COC?		Yes			
2. Does the number of samples per sampling site location	match the COC	Yes			
3. Were samples dropped off by client or carrier?		Yes	Carrier: C	'ourier	
4. Was the COC complete, i.e., signatures, dates/times, rec	quested analyses?	No		- Courter	
5. Were all samples received within holding time?		Yes			
Note: Analysis, such as pH which should be conducted i.e, 15 minute hold time, are not included in this distributed.			1	Commen	ts/Resolution
Sample Turn Around Time (TAT)		Vaa		Project manager and tir	ne sampled was not
6. Did the COC indicate standard TAT, or Expedited TAT	•	Yes		documented on COC by	=
Sample Cooler		V		documented on COC b	y chem.
7. Was a sample cooler received?		Yes			
8. If yes, was cooler received in good condition?		Yes			
9. Was the sample(s) received intact, i.e., not broken?		Yes			
10. Were custody/security seals present?		No			
11. If yes, were custody/security seals intact?		NA			
12. Was the sample received on ice? If yes, the recorded temp is 4 Note: Thermal preservation is not required, if sample minutes of sampling	s are received w/i 15	Yes			
13. If no visible ice, record the temperature. Actual same	ipie temperature: 400	<u>L</u>			
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 contain	ers?	Yes			
19. Is the appropriate volume/weight or number of sample cor		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	d0	Ma			
21. Does the COC or field labels indicate the samples wer	e preserveu?	No NA			
<ul><li>22. Are sample(s) correctly preserved?</li><li>24. Is lab filteration required and/or requested for dissolve</li></ul>	od metale?				
•	e monny i	No			
Multiphase Sample Matrix	-baa-9				
26. Does the sample have more than one phase, i.e., multip		No			
27. If yes, does the COC specify which phase(s) is to be a	naryzeu?	NA			
Subcontract Laboratory					
28. Are samples required to get sent to a subcontract labor	-	No NA Gui		. 374	
	id it so who?	NA Su	bcontract Lab	: NA	
29. Was a subcontract laboratory specified by the client an					

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

## **Analytical Report**

Mack Energy

Project Name: West Mount D

Work Order: E404020

Job Number: 20046-0001

Received: 4/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 4/5/24

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: 4/5/24

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount D

Workorder: E404020

Date Received: 4/4/2024 7:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/4/2024 7:00:00AM, under the Project Name: West Mount D.

The analytical test results summarized in this report with the Project Name: West Mount D 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 reguarding 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

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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## **Sample Summary**

Mack Energy	Project Name:	West Mount D	Reported:
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	04/05/24 15:14

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
Sp. 7-12'	E404020-01A Soil	04/02/24	04/04/24	Glass Jar, 2 oz.
Sp. 8-12'	E404020-02A Soil	04/02/24	04/04/24	Glass Jar, 2 oz.
Sw. 7 -4'	E404020-03A Soil	04/02/24	04/04/24	Glass Jar, 2 oz.
Sw. 8 -5'	E404020-04A Soil	04/02/24	04/04/24	Glass Jar, 2 oz.



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

#### Sp. 7-12' E404020-01

	E404020-01				
	1 0				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analy	vst: BA		Batch: 2414050
ND	0.0250	1	04/04/24	04/05/24	
ND	0.0250	1	04/04/24	04/05/24	
ND	0.0250	1	04/04/24	04/05/24	
ND	0.0250	1	04/04/24	04/05/24	
ND	0.0500	1	04/04/24	04/05/24	
ND	0.0250	1	04/04/24	04/05/24	
	94.6 %	70-130	04/04/24	04/05/24	
mg/kg	mg/kg	Analy	vst: BA		Batch: 2414050
ND	20.0	1	04/04/24	04/05/24	
	90.7 %	70-130	04/04/24	04/05/24	
mg/kg	mg/kg	Analy	st: KM		Batch: 2414039
ND	25.0	1	04/04/24	04/04/24	
ND	50.0	1	04/04/24	04/04/24	
	112 %	50-200	04/04/24	04/04/24	
mg/kg	mg/kg	Analy	st: DT		Batch: 2414060
ND	20.0	1	04/04/24	04/04/24	
	mg/kg ND ND ND ND ND ND ND ND ND Mg/kg ND mg/kg	Result         Reporting Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0500           ND         0.0250           94.6 %           mg/kg         mg/kg           ND         20.0           90.7 %         mg/kg           MD         25.0           ND         50.0           112 %         mg/kg           mg/kg         mg/kg	Reporting           Result         Limit         Dilution           mg/kg         Mg/kg         Analy           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           MD         0.0250         1           94.6 %         70-130         70-130           mg/kg         mg/kg         Analy           ND         20.0         1           Mg/kg         mg/kg         Analy           ND         25.0         1           ND         50.0         1           112 %         50-200           mg/kg         Mg/kg         Analy	Reporting           Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: BA           ND         0.0250         1         04/04/24           ND         0.0250         1         04/04/24           ND         0.0250         1         04/04/24           ND         0.0250         1         04/04/24           ND         0.0500         1         04/04/24           ND         0.0250         1         04/04/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         04/04/24           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         04/04/24           ND         50.0         1         04/04/24           ND         50.0         1         04/04/24           ND         50.0         1         04/04/24           ND         50.0         1         04/04/24           Mg/kg         mg/kg         Analyst: DT	Reporting           Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: BA           ND         0.0250         1         04/04/24         04/05/24           ND         0.0500         1         04/04/24         04/05/24           ND         0.0250         1         04/04/24         04/05/24           MD         0.0250         1         04/04/24         04/05/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         04/04/24         04/05/24           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         04/04/24         04/05/24           ND         50.0         1         04/04/24         04/04/24           ND         50.0         1         04/04/24         04/04/24           ND         50.0         1         04/04/24

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

## Sp. 8-12'

E404020-02						
Reporting						
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2414050
Benzene	ND	0.0250	1	04/04/24	04/05/24	
Ethylbenzene	ND	0.0250	1	04/04/24	04/05/24	
Toluene	ND	0.0250	1	04/04/24	04/05/24	
o-Xylene	ND	0.0250	1	04/04/24	04/05/24	
p,m-Xylene	ND	0.0500	1	04/04/24	04/05/24	
Total Xylenes	ND	0.0250	1	04/04/24	04/05/24	
Surrogate: 4-Bromochlorobenzene-PID		95.7 %	70-130	04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	ılyst: BA		Batch: 2414050
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.1 %	70-130	04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	ılyst: KM		Batch: 2414039
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/04/24	
Surrogate: n-Nonane		113 %	50-200	04/04/24	04/04/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	ılyst: DT		Batch: 2414060
Chloride	ND	20.0	1	04/04/24	04/04/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

Sw. 7 -4'

		E404020-03				
		Reporting	;			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	rst: BA		Batch: 2414050
Benzene	ND	0.0250	1	04/04/24	04/05/24	
Ethylbenzene	ND	0.0250	1	04/04/24	04/05/24	
Toluene	ND	0.0250	1	04/04/24	04/05/24	
o-Xylene	ND	0.0250	1	04/04/24	04/05/24	
p,m-Xylene	ND	0.0500	1	04/04/24	04/05/24	
Total Xylenes	ND	0.0250	1	04/04/24	04/05/24	
Surrogate: 4-Bromochlorobenzene-PID		95.4 %	70-130	04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg mg/kg Analyst: BA		Batch: 2414050			
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.6 %	70-130	04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2414039
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/04/24	
Surrogate: n-Nonane		116 %	50-200	04/04/24	04/04/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	rst: DT		Batch: 2414060
Chloride	47.7	20.0	1	04/04/24	04/04/24	·



## **Sample Data**

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

Sw. 8 -5'

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		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	ılyst: BA		Batch: 2414050
Benzene	ND	0.0250	1	04/04/24	04/05/24	
Ethylbenzene	ND	0.0250	1	04/04/24	04/05/24	
Toluene	ND	0.0250	1	04/04/24	04/05/24	
o-Xylene	ND	0.0250	1	04/04/24	04/05/24	
p,m-Xylene	ND	0.0500	1	04/04/24	04/05/24	
Total Xylenes	ND	0.0250	1	04/04/24	04/05/24	
Surrogate: 4-Bromochlorobenzene-PID		95.2 %	70-130	04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	nlyst: BA		Batch: 2414050
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.3 %	70-130	04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2414039
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/04/24	
Surrogate: n-Nonane		116 %	50-200	04/04/24	04/04/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: DT		Batch: 2414060
·		<u> </u>		04/04/24	04/04/24	



		QC SI	umma	ny Data	a				
Mack Energy 7 W. Compress Road		Project Name: Project Number:	20	est Mount D 0046-0001					Reported:
Artesia NM, 88210		Project Manager:	Na	atalie Gladder	1				4/5/2024 3:14:05PM
		Volatile O	rganics b	y EPA 802	21B				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2414050-BLK1)							Prepared: 0	4/04/24 A	analyzed: 04/05/24
Benzene	ND	0.0250					1 .		
Ethylbenzene	ND	0.0250							
Foluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.67		8.00		95.8	70-130			
LCS (2414050-BS1)							Prepared: 0	4/04/24 A	analyzed: 04/05/24
Benzene	5.33	0.0250	5.00		107	70-130			
Ethylbenzene	5.17	0.0250	5.00		103	70-130			
Toluene	5.32	0.0250	5.00		106	70-130			
-Xylene	5.26	0.0250	5.00		105	70-130			
o,m-Xylene	10.6	0.0500	10.0		106	70-130			
Total Xylenes	15.8	0.0250	15.0		105	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.71		8.00		96.3	70-130			
Matrix Spike (2414050-MS1)				Source:	E404020-	02	Prepared: 0	4/04/24 A	analyzed: 04/05/24
Benzene	5.02	0.0250	5.00	ND	100	54-133			
thylbenzene	4.85	0.0250	5.00	ND	97.1	61-133			
oluene	5.00	0.0250	5.00	ND	100	61-130			
-Xylene	4.94	0.0250	5.00	ND	98.7	63-131			
,m-Xylene	9.92	0.0500	10.0	ND	99.2	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.78		8.00		97.2	70-130			
Matrix Spike Dup (2414050-MSD1)				Source:	E404020-	02	Prepared: 0	4/04/24 A	analyzed: 04/05/24
Benzene	5.03	0.0250	5.00	ND	101	54-133	0.162	20	
Ethylbenzene	4.88	0.0250	5.00	ND	97.6	61-133	0.508	20	
Coluene	5.02	0.0250	5.00	ND	100	61-130	0.319	20	
o-Xylene	4.97	0.0250	5.00	ND	99.3	63-131	0.602	20	
V-1	0.08	0.0500	10.0	ND	9.00	62 121	0.520	20	

10.0

15.0

8.00

0.0500

0.0250

ND

ND

99.8

99.6

63-131

63-131

70-130

0.530

0.554

20

20



p,m-Xylene Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

9.98

14.9

7.72

Mack Energy	Project Name:	West Mount D	Reported:
7 W. Compress Road	Project Number:	20046-0001	·
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

Artesia NM, 88210		Project Manage	r: Na	talie Gladder	ı			4/5	/2024 3:14:05PM
	Non	halogenated	Organics l	by EPA 80	15D - Gl	RO			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
Blank (2414050-BLK1)							Prepared: 0-	4/04/24 Analy	/zed: 04/05/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			
LCS (2414050-BS2)							Prepared: 0-	4/04/24 Analy	zed: 04/05/24
Gasoline Range Organics (C6-C10)	42.9	20.0	50.0		85.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.2	70-130			
Matrix Spike (2414050-MS2)				Source:	E404020-	02	Prepared: 0-	4/04/24 Analy	zed: 04/05/24
Gasoline Range Organics (C6-C10)	35.3	20.0	50.0	ND	70.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			
Matrix Spike Dup (2414050-MSD2)				Source:	E404020-	02	Prepared: 0	4/04/24 Analy	zed: 04/05/24
Gasoline Range Organics (C6-C10)	36.9	20.0	50.0	ND	73.9	70-130	4.42	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.36		8.00		92.1	70-130			



Mack Energy	Project Name:	West Mount D	Reported:
7 W. Compress Road	Project Number:	20046-0001	·
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

Artesia NM, 88210		Project Manage	r: Na	atalie Gladder	1			4/	5/2024 3:14:05PM
	Nonha	logenated Or	ganics by	EPA 80151	) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2414039-BLK1)							Prepared: 0	4/04/24 Ana	lyzed: 04/04/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	63.1		50.0		126	50-200			
LCS (2414039-BS1)							Prepared: 0	4/04/24 Ana	lyzed: 04/04/24
Diesel Range Organics (C10-C28)	309	25.0	250		124	38-132			
Surrogate: n-Nonane	61.8		50.0		124	50-200			
Matrix Spike (2414039-MS1)				Source:	E404014-	03	Prepared: 0	4/04/24 Ana	lyzed: 04/04/24
Diesel Range Organics (C10-C28)	322	25.0	250	ND	129	38-132			
Surrogate: n-Nonane	64.3		50.0		129	50-200			
Matrix Spike Dup (2414039-MSD1)				Source:	E404014-	03	Prepared: 0	4/04/24 Ana	lyzed: 04/04/24
Diesel Range Organics (C10-C28)	323	25.0	250	ND	129	38-132	0.439	20	
Surrogate: n-Nonane	64.1		50.0		128	50-200			

Mack Energy 7 W. Compress Road		Project Name: Project Number:		Vest Mount D 10046-0001					Reported:
Artesia NM, 88210		Project Manager:		atalie Gladder	1				4/5/2024 3:14:05PM
		Anions	by EPA 3	300.0/9056 <i>A</i>	<b>\</b>				Analyst: DT
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2414060-BLK1)							Prepared: 0	4/04/24 A	nalyzed: 04/04/24
Chloride	ND	20.0							
LCS (2414060-BS1)							Prepared: 0	4/04/24 A	nalyzed: 04/04/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2414060-MS1)				Source:	E404022-	02	Prepared: 0	4/04/24 A	nalyzed: 04/04/24
Chloride	441	20.0	250	191	99.6	80-120			
Matrix Spike Dup (2414060-MSD1)				Source:	E404022-	02	Prepared: 0	4/04/24 A	nalyzed: 04/04/24
Chloride	425	20.0	250	191	93.5	80-120	3.53	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**

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	04/05/24 15:14

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Project Information

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Chain of Custody

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Client: N	TACK 8	nerau				Bill To		di Ne	324	L	ab Us	se On	ly	Transfer			TA	AT	EPA P	rogram
Project:	WEST 1	MOUNT	D			Attention: ENERGY STAFFING SER	VICES	Lab	WO	#,00	6	Job N	Vum	-0001	1D	2D	3D	Standard	CWA	SDWA
	/lanager:				7	Address: 2724 NW COUNTY RD		E	40	40.5	.0				1	1		-		DCDA
Address:						City, State, Zip HOBBS, NM 88240			-	_	-	Analy	sis ar	nd Metho	d	1		W. Carlo		RCRA
City, Stat	e, Zip				4	Phone: 575-393-9048		-										2 4 20	Chaha	
Phone:					A VI	Email: NATALIE@ENERGYSTAFFINGI	LC.COM	015	015						1			1111 60	State	Try
Email:					1	BRITTNEY@ENERGYSTAFFING	LLC.COM	by 8	8 40	121	99	0	0.00		Σ	-		NM CO	UT AZ	TX
Report o	ue by:				10.45			- 0g	080	80	/82	601	Je 3(			×		V		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Numbe	DRO/ORO by 8015	GRO/DRO by 8015	ВТЕХ БУ 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC	BGDOC			Remarks	
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Additio	nal Instru	ctions:																		
Mark Land			· management	ticity of this sam		aware that tampering with or intentionally mislab		ple loca	ition,									eceived on ice the da 6 °C on subsequent of		oled or received
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Relinquis	led by: (Stef	nature)	Dat		155	Received by: (Signature)	Date	3-1	Tim	_		T1			T2	uig.		T3		
	ned by: (Sign	nature)	Date		ime	Received by (Signature)	Date 4/4	1/24	. Tim			1	Ter	np°C_	251			74 4		
Sample M	trive S - Soil 6	ed - Solid Se	- Sludge A	Aqueous, O - Oth	nor.		Contain	er Tv		•		nolv/n	lastic	, ag - am	ber gl	ass, v	- VOA	1		
Note: San	nnles are die	carded 30	days after r	esults are reno	rted unle	ess other arrangements are made. Hazardou	s samples w	ill be r	eturn	ed to	lient	or dispo	osed	of at the cl	ient e	pense	e. The	report for the ar	nalysis of the	e above
samples i	s applicable	only to the	se samples	received by th	e laborat	ory with this COC. The liability of the laborate	ory is limited	to the	e amo	unt pa	id for	on the	repor	rt.						
-											-	-					-		4	100



Printed: 4/4/2024 9:01:35AM

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

nstructions:	Please take note of any NO checkmarks.	

In:

	Date Received:	04/04/24 0	7:00	Wor	k Order ID:	E404020
Phone: (575) 390-6397	Date Logged In:	04/03/24 10	6:42	Log	ged In By:	Alexa Michaels
mail: Natalie@energystaffingllc.com	Due Date:	04/05/24 1	7:00 (1 day TAT)	_		
Chain of Custody (COC)						
. Does the sample ID match the COC?		Yes				
Does the number of samples per sampling site location ma	tch the COC	Yes				
Were samples dropped off by client or carrier?		Yes	Carrier: C	Courier		
. Was the COC complete, i.e., signatures, dates/times, reque	sted analyses?	No	<u>.</u>			
Were all samples received within holding time?	•	Yes				
Note: Analysis, such as pH which should be conducted i i.e, 15 minute hold time, are not included in this disucssi					Commen	ts/Resolution
ample Turn Around Time (TAT)						
Did the COC indicate standard TAT, or Expedited TAT?		Yes		Project Manag	er and Ti	me sampled not
ample Cooler				documented or	n the CO	C by client
Was a sample cooler received?		Yes				=
If yes, was cooler received in good condition?		Yes				
. Was the sample(s) received intact, i.e., not broken?		Yes				
D. Were custody/security seals present?		No				
1. If yes, were custody/security seals intact?		_				
• •		NA				
2. Was the sample received on ice? If yes, the recorded temp is 4°C Note: Thermal preservation is not required, if samples a minutes of sampling 3. If no visible ice, record the temperature. Actual sample	e received w/i 15	Yes				
	poi.u.u.o.	_				
ample Container  4. Are aqueous VOC samples present?		No				
		No NA				
5. Are VOC samples collected in VOA Vials?		NA NA	ľ			
6. Is the head space less than 6-8 mm (pea sized or less)?						
7. Was a trip blank (TB) included for VOC analyses?	n	NA Voc	ľ			
8. Are non-VOC samples collected in the correct containers		Yes	1			
9. Is the appropriate volume/weight or number of sample contains	ners collected?	Yes	ł			
ield Label	.•					
Were field sample labels filled out with the minimum info	ormation:	Ves				
Sample ID? Date/Time Collected?		Yes				
Collectors name?		Yes Yes				
ample Preservation		169				
1. Does the COC or field labels indicate the samples were p	reserved?	No				
2. Are sample(s) correctly preserved?		NA				
<ol> <li>Are sample(s) correctly preserved?</li> <li>Is lab filteration required and/or requested for dissolved r</li> </ol>	netals?	No				
-						
fultiphase Sample Matrix						
6. Does the sample have more than one phase, i.e., multipha		No				
7. If yes, does the COC specify which phase(s) is to be analy	yzed?	NA				
ubcontract Laboratory						
8. Are samples required to get sent to a subcontract laborato	ry?	No				
• • •		NA	Subcontract Lab	: NA		
<ol><li>Was a subcontract laboratory specified by the client and i</li></ol>						

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

## **Analytical Report**

Mack Energy

Project Name: West Mount D

Work Order: E406072

Job Number: 20046-0001

Received: 6/10/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 6/11/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 6/11/24

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount D

Workorder: E406072

Date Received: 6/10/2024 6:15:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/10/2024 6:15:00AM, under the Project Name: West Mount D.

The analytical test results summarized in this report with the Project Name: West Mount D 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 reguarding 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

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Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

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## Sample Summary

Mack Energy	Project Name:	West Mount D	Donoutoda
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/11/24 16:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP9 12'	E406072-01A	Soil	06/06/24	06/10/24	Glass Jar, 2 oz.



## **Sample Data**

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/11/2024 4:10:03PM

#### SP9 12' E406072-01

		E400072-01					
Analyte	Result	Reporting Limit	Dilu	ıtion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	IY		Batch: 2424004
Benzene	ND	0.0250	1		06/10/24	06/11/24	
Ethylbenzene	ND	0.0250	1	[	06/10/24	06/11/24	
Toluene	ND	0.0250	1	1	06/10/24	06/11/24	
o-Xylene	ND	0.0250	1	l	06/10/24	06/11/24	
p,m-Xylene	ND	0.0500	1	1	06/10/24	06/11/24	
Total Xylenes	ND	0.0250	1	[	06/10/24	06/11/24	
Surrogate: Bromofluorobenzene		98.3 %	70-130		06/10/24	06/11/24	
Surrogate: 1,2-Dichloroethane-d4		93.6 %	70-130		06/10/24	06/11/24	
Surrogate: Toluene-d8		96.8 %	70-130		06/10/24	06/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	IY		Batch: 2424004
Gasoline Range Organics (C6-C10)	ND	20.0	1	[	06/10/24	06/11/24	
Surrogate: Bromofluorobenzene		98.3 %	70-130		06/10/24	06/11/24	
Surrogate: 1,2-Dichloroethane-d4		93.6 %	70-130		06/10/24	06/11/24	
Surrogate: Toluene-d8		96.8 %	70-130		06/10/24	06/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2424007
Diesel Range Organics (C10-C28)	ND	25.0	1	[	06/10/24	06/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	l	06/10/24	06/11/24	
Surrogate: n-Nonane		111 %	50-200		06/10/24	06/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2424011
11110113 by E111 500:0/705011							



West Mount D Mack Energy Project Name: Reported: 7 W. Compress Road Project Number: 20046-0001 Artesia NM, 88210 Project Manager: Natalie Gladden 6/11/2024 4:10:03PM **Volatile Organic Compounds by EPA 8260B** Analyst: IY Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2424004-BLK1) Prepared: 06/10/24 Analyzed: 06/10/24 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 ND 0.0250 Total Xylenes Surrogate: Bromofluorobenzene 0.502 0.500 100 70-130 Surrogate: 1,2-Dichloroethane-d4 0.489 0.500 97.7 70-130 0.500 95.8 70-130 Surrogate: Toluene-d8 0.479 LCS (2424004-BS1) Prepared: 06/10/24 Analyzed: 06/10/24 2.45 0.0250 2.50 97.8 70-130 Benzene 2.42 2.50 70-130 96.6 Ethylbenzene 0.0250 2.31 0.0250 2.50 92.3 70-130 70-130 2.51 0.0250 2.50 100 o-Xylene 5.01 100 70-130 p,m-Xylene 0.0500 5.00 7.52 0.0250 7.50 100 70-130 Total Xylenes Surrogate: Bromofluorobenzene 0.508 0.500 102 70-130 0.500 96.6 70-130 Surrogate: 1,2-Dichloroethane-d4 0.483 70-130 Surrogate: Toluene-d8 0.489 0.500 Matrix Spike (2424004-MS1) Source: E406068-04 Prepared: 06/10/24 Analyzed: 06/10/24 2.67 0.0250 2.50 ND 48-131 45-135 Ethylbenzene 2.64 0.0250 2.50 ND 106 48-130 Toluene 2.53 0.0250 2.50 ND 101 2.78 0.0250 2.50 ND 111 43-135 o-Xylene ND 111 43-135 p,m-Xylene 5.53 0.0500 5.00 Total Xylenes 8.31 0.0250 7.50 ND 111 43-135 0.508 0.500 102 70-130 Surrogate: Bromofluorobenzene 0.500 98.7 70-130 Surrogate: 1,2-Dichloroethane-d4 0.494 0.500 70-130 0.490 Surrogate: Toluene-d8 Matrix Spike Dup (2424004-MSD1) Source: E406068-04 Prepared: 06/10/24 Analyzed: 06/10/24 2.44 0.0250 2.50 ND 97.6 48-131 8.96 23 0.0250 2.50 ND 96.7 45-135 8.83 27 Ethylbenzene ND 92.4 48-130 8.97 24 2.31 2.50 Toluene 0.0250 o-Xylene 3.06 0.0250 2.50 ND 122 43-135 9.60 27 5.00 ND 122 43-135 27 6.10 9.77 p,m-Xylene 0.0500 27 9.16 0.0250 7.50 ND 122 43-135 9.71 Total Xylenes Surrogate: Bromofluorobenzene 0.606 0.500 121 70-130



0.500

0.500

0.484

0.486

96.7

97.2

70-130

70-130

Surrogate: 1,2-Dichloroethane-d4

Surrogate: Toluene-d8

Analyte

## **QC Summary Data**

Mack EnergyProject Name:West Mount DReported:7 W. Compress RoadProject Number:20046-0001Artesia NM, 88210Project Manager:Natalie Gladden6/11/2024 4:10:03PM

Non	halogenated (	Organics l	by EPA 801	15D - G	RO			Analyst: IY
	Reporting	Spike	Source		Rec	DDD	RPD	

	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2424004-BLK1)							Prepared: 00	5/10/24 Anal	yzed: 06/10/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.7	70-130			
Surrogate: Toluene-d8	0.479		0.500		95.8	70-130			
LCS (2424004-BS2)							Prepared: 0	5/10/24 Anal	yzed: 06/10/24
Gasoline Range Organics (C6-C10)	48.0	20.0	50.0		96.0	70-130	·	·	
Surrogate: Bromofluorobenzene	0.511		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.474		0.500		94.8	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.5	70-130			
Matrix Spike (2424004-MS2)				Source:	E406068-0	)4	Prepared: 0	5/10/24 Anal	yzed: 06/10/24
Gasoline Range Organics (C6-C10)	47.5	20.0	50.0	ND	94.9	70-130			
Surrogate: Bromofluorobenzene	0.510		0.500		102	70-130			
0 ,	0.510 0.472		0.500 0.500		102 94.4	70-130 70-130			
Surrogate: 1,2-Dichloroethane-d4									
Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8	0.472		0.500	Source:	94.4	70-130 70-130	Prepared: 00	5/10/24 Anal	yzed: 06/10/24
Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Matrix Spike Dup (2424004-MSD2)	0.472	20.0	0.500	Source:	94.4 99.6	70-130 70-130	Prepared: 00	5/10/24 Anal	yzed: 06/10/24
Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8  Matrix Spike Dup (2424004-MSD2)  Gasoline Range Organics (C6-C10)	0.472 0.498	20.0	0.500 0.500		94.4 99.6 <b>E406068-</b> (	70-130 70-130	•		yzed: 06/10/24
Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8  Matrix Spike Dup (2424004-MSD2) Gasoline Range Organics (C6-C10) Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4	0.472 0.498 46.8	20.0	0.500 0.500 50.0		94.4 99.6 <b>E406068-0</b> 93.7	70-130 70-130 <b>)4</b> 70-130	•		yzed: 06/10/24



Mack Energy	Project Name:	West Mount D	Reported:
7 W. Compress Road	Project Number:	20046-0001	·
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/11/2024 4:10:03PM

Artesia NM, 88210		Project Manager	r: Na	talie Gladder	1			(	5/11/2024 4:10:03PN
	Nonha	logenated Or	ganics by	EPA 8015I	) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2424007-BLK1)							Prepared: 0	5/10/24 An	alyzed: 06/11/24
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	49.0		50.0		98.0	50-200			
LCS (2424007-BS1)							Prepared: 0	6/10/24 An	alyzed: 06/11/24
Diesel Range Organics (C10-C28)	248	25.0	250		99.3	38-132			
urrogate: n-Nonane	50.2		50.0		100	50-200			
Matrix Spike (2424007-MS1)				Source:	E406068-	04	Prepared: 0	6/10/24 An	alyzed: 06/11/24
Diesel Range Organics (C10-C28)	263	25.0	250	ND	105	38-132			
urrogate: n-Nonane	49.2		50.0		98.4	50-200			
Matrix Spike Dup (2424007-MSD1)				Source:	E406068-	04	Prepared: 0	6/10/24 An	alyzed: 06/11/24
Diesel Range Organics (C10-C28)	262	25.0	250	ND	105	38-132	0.258	20	
Gurrogate: n-Nonane	50.5		50.0		101	50-200			



Mack Energy		Project Name:		est Mount D					Reported:
7 W. Compress Road Artesia NM, 88210		Project Number: Project Manager:		0046-0001 atalie Gladden					6/11/2024 4:10:03PM
		Anions	by EPA 3	800.0/9056A					Analyst: DT
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2424011-BLK1)							Prepared: 0	06/10/24 A	nalyzed: 06/10/24
Chloride	ND	20.0							
LCS (2424011-BS1)							Prepared: 0	06/10/24 A	nalyzed: 06/10/24
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2424011-MS1)				Source: 1	E406067-0	07	Prepared: 0	06/10/24 A	nalyzed: 06/10/24
Chloride	521	20.0	250	273	99.3	80-120			
Matrix Spike Dup (2424011-MSD1)				Source: 1	E406067-0	07	Prepared: 0	06/10/24 A	nalyzed: 06/10/24
Chloride	516	20.0	250	273	96.9	80-120	1.13	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**

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/11/24 16:10

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Project Information

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of Z	ven by
sowa SDWA	received by OCD.
RCRA	
ГХ	2020
	11/17/2025 2.00.50 I

ent: While Chart Mark Staffing St. Attention: ENERGY STAFFING St.				FS	b US	e Only	V				TAT		EPA PI	rogram
ject: West Mount	ERVICES	Lab	WOH	ł		Joh N	umhar	- 0	1D 2D 3D Standard			andard	CWA	SDWA
Landers Covall Address 2724 NW COUNTY RD		EU	106	40	L	20	046.	000		6	1	_		
dress: City, State, Zip HOBBS, NM 882	240		-			Analys	is and N	lethod	1					RCRA
/ State 7in Phone: 575-393-9048													G1 1	
one: Email: NATALIE@ENERGYSTAFFIN	GLLC.COM	315	210							1		wal co	State	TTVI
	BRITTNEY@ENERGYSTAFFINGLLC.COM			2   x			NM CO	UI AZ	TX					
port due by:		OKO.	OKO	3y 8C	V 82	s 60.	de 3		1	1		101		
Time Date Matrix No of Container. Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	- Company	верос	ВСООС			Remarks	
96/24 D 1 3P9 12'	1								9					
							-	January Land Constitution of the Constitution						
		-		-				-	-				-	
	W15-5			-										
		$\dagger$		-	1				400				**	
				1	T									
dditional Instructions:			1											
field sampler), attest to the validity and authenticity of this sample. Fam aware that tampering with or intentionally mis te or time of collection is considered fraud and may be grounds for legal action.  Sampled by OS	slabelling the same	Na	Mon.	7		Samp	les requirin ed in ice at a	therma n avg ter	preserv np above	etion mi e 0 but lo	at be receives than 6 °C	ed on ice the da on subsequent	y they are san days	pled or recei
linguished by Bignarure)  Date 6/6/24 Time Wichelle Gonzal		24	Tim		O	Rec	eived c	n ice:		Lab U	se Only			
Minquished by: (Signature)  Date 1 2-24 Time 1 800 Received by: (Signature)	Date	7.74	Tim	18	w				<u>T2</u>			<u>T3</u>		
Plinquished by: (Signature)  Date  C-3-17  Time  Received by: (Signature)	Date Oll	0/24	/ Tin	6:	15	AV	G Temp	°C	4					
mple Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other	7 Contain	ier Ty	pe: g	- glas	ss, p -	poly/	plastic, a	g - am	ber gl	ass, v	- VOA			
mple Matrix: S - Soil, Sd - Soild, Sg - Sudge, A - Aqueous, d - Olinei ofe: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazai unpoles is applicable only to those samples received by the laboratory with this COC. The liability of the labo	rdous samples w	vill be	returr	red to	client	or disp	osed of a	it the c	lient ex	kpense	. The rep	port for the a	malysis of fi	ie above

Printed: 6/10/2024 9:28:29AM

#### **Envirotech Analytical Laboratory**

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.

	W 15					
Client:	Mack Energy	Date Received:	06/10/24		Work Order ID:	E406072
Phone:	(575) 390-6397	Date Logged In:	06/10/24		Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/11/24	17:00 (1 day TAT)		
Chain of	f Custody (COC)					
	the sample ID match the COC?		Yes			
	the number of samples per sampling site location materials	ch the COC	Yes			
	samples dropped off by client or carrier?		Yes	Carrier: C	Couier	
	ne COC complete, i.e., signatures, dates/times, reques	sted analyses?	No		<u> </u>	
5. Were a	all samples received within holding time?		Yes			
	Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssion.			ŗ	Comme	nts/Resolution
	Turn Around Time (TAT) e COC indicate standard TAT, or Expedited TAT?		Yes		Project manager and ti	me sampled not
Sample (	• •				listed on COC. Sample	es do not have
	sample cooler received?		Yes		sampler name.	
	was cooler received in good condition?		Yes		zamprei manie.	
9. Was th	ne sample(s) received intact, i.e., not broken?		Yes			
	custody/security seals present?		No			
	s, were custody/security seals intact?		NA			
	he sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling		Yes			
13. If no	visible ice, record the temperature. Actual sample	temperature: 4°	<u>C</u>			
	<u>Container</u>		-			
14. Are a	aqueous VOC samples present?		No			
15. Are V	VOC samples collected in VOA Vials?		NA			
16. Is the	e 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 r	non-VOC samples collected in the correct containers	?	Yes			
19. Is the	appropriate volume/weight or number of sample contain	ners collected?	Yes			
Field La	<u>bel</u>					
	field sample labels filled out with the minimum info	rmation:				
	Sample ID? Date/Time Collected?		Yes			
	Collectors name?		Yes No			
	Preservation		140			
	the COC or field labels indicate the samples were pr	eserved?	No			
22. Are s	sample(s) correctly preserved?		NA			
	filteration required and/or requested for dissolved n	netals?	No			
<u>Mu</u> ltiph	ase Sample Matrix					
	the sample have more than one phase, i.e., multipha	se?	No			
	s, does the COC specify which phase(s) is to be analy		NA			
Subcont	ract Laboratory					
	samples required to get sent to a subcontract laborato	rv?	No			
	a subcontract laboratory specified by the client and in	-	NA	Subcontract Lab	: NA	
Client I	<u>nstruction</u>					
Siona	ture of client authorizing changes to the COC or sample dis	nosition			Date	– 🥝 envirotech I

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

## MACK ENERGY: WEST MOUNT SPILL D DELINEATION SITE PHOTOS

















From: OCDOnline@state.nm.us < OCDOnline@state.nm.us >

Sent: Monday, August 19, 2024 2:46 PM

To: Natalie Gladden <natalie@energystaffingllc.com>

Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 375250

To whom it may concern (c/o Natalie Gladden for MACK ENERGY CORP),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2329138800.

The sampling event is expected to take place:

When: 08/21/2024 @ 07:00

**Where:** N-19-15S-29E 0 FNL 0 FEL (32.997533,-104.070702)

Additional Information: CONTACT NATALIE GLADDEN 575-390-6397

Additional Instructions: CONTACT NATALIE GLADDEN 575-390-6397

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC.

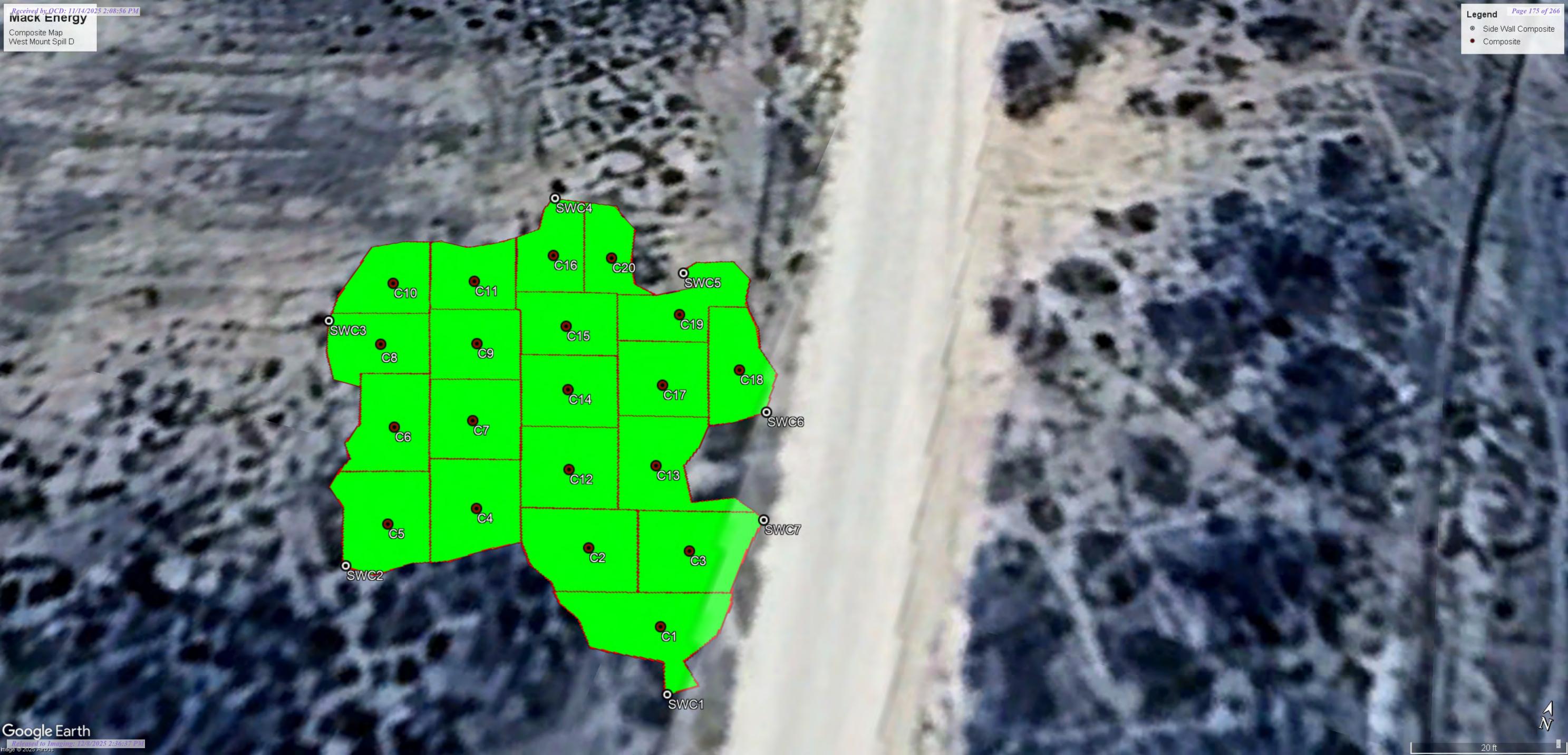
Released to Imaging: 12/8/2025 2:36:37 PM

Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

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

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

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



Company: MACK Location Name: WEST MOUNT SPILL D

Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
6	240	L	ND	ND	ND	ND	ND	68.6	8/21/2024
6	160	L	ND	ND	ND	ND	ND	ND	8/21/2024
6	240	L	ND	ND	ND	ND	ND	28.5	8/21/2024
6	240	_	ND	ND	ND	ND	ND	20.7	8/21/2024
O	240	L	IND	NU	NU	ND	ND	20.7	0/21/2024
10	240	L	ND	ND	ND	ND	ND	ND	8/21/2024
10	240	L	ND	ND	ND	ND	ND	23.7	8/21/2024
10	160	L	ND	ND	ND	ND	ND	27	8/21/2024
10	160		ND	ND	ND	ND	ND	75.6	9/21/2024
10	160	L	ND	ND	ND	ND	ND	/5.6	8/21/2024
10	320	L	ND	ND	ND	ND	ND	ND	8/21/2024
10	320	L	ND	ND	ND	ND	ND	ND	8/21/2024
10	240	L	ND	ND	ND	ND	ND	24.7	8/21/2024
10	160	_	ND	ND	ND	ND	ND	57.6	8/21/2024
10	100	L	ND	ND	ND	ND	ND	37.0	0/21/2024
6	160	L	ND	ND	ND	ND	ND	51.1	8/21/2024
6	160	L	ND	ND	ND	ND	ND	48.9	8/21/2024
6	160	L	ND	ND	ND	ND	ND	51.9	8/21/2024
6	160	_	ND	ND	ND	ND	ND	42.2	8/22/2024
O	100	L	IND	ND	ND	ND	ND	42.2	0/22/2024
6	160	L	ND	ND	ND	ND	ND	55	8/22/2024
6	240	L	ND	ND	ND	ND	ND	80.6	8/22/2024
6	160	L	ND	ND	ND	ND	ND	ND	8/22/2024
	240		ND	ND	ND	ND	ND	67.0	0/22/2024
O	240	L	ND	ND	טא	ND	ND	07.9	8/22/2024
6	160	L	ND	ND	ND	ND	ND	64.1	8/22/2024
	6 6 6 10 10 10 10 10 10 6 6 6 6 6 6 6	6 240 6 160 6 240 10 240 10 240 10 160 10 160 10 320 10 320 10 320 10 160 6 160 6 160 6 160 6 160 6 160 6 160 6 160 6 160 6 160 6 160	6 240 L 6 160 L 6 240 L 6 240 L 6 240 L 10 240 L 10 240 L 10 160 L 10 320 L 10 320 L 10 320 L 10 320 L 10 160 L	6 240 L ND 6 160 L ND 6 240 L ND 6 240 L ND 6 240 L ND 10 240 L ND 10 240 L ND 10 160 L ND 10 320 L ND 10 320 L ND 10 160 L ND	6 240 L ND ND 6 160 L ND ND 6 240 L ND ND 10 240 L ND ND 10 160 L ND ND 10 320 L ND ND 10 240 L ND ND 10 320 L ND ND 10 160 L ND ND 10 160 L ND ND 10 160 L ND ND 10 320 L ND ND 10 320 L ND ND 10 160 L ND ND	6 240 L ND ND ND ND 6 160 L ND ND ND ND 6 240 L ND ND ND ND 10 240 L ND ND ND ND 10 160 L ND ND ND ND 10 320 L ND ND ND ND 10 320 L ND ND ND ND 10 320 L ND ND ND ND 10 40 L ND ND ND ND 10 6 160 L ND ND ND ND 10 160 L ND ND ND ND 10 160 L ND ND ND ND 10 10 160 L ND ND ND ND 10 10 10 10 L ND ND ND ND	6	6	6

SWCOMP2	6	240	L	ND	ND	ND	ND	ND	88	8/22/2024
SWCOMP3	6	240	L	ND	ND	ND	ND	ND	86.9	8/22/2024
SWCOMP4	6	160	L	ND	ND	ND	ND	ND	ND	8/22/2024
SWCOMP5	6	160	L	ND	ND	ND	ND	ND	ND	8/22/2024
SWCOMP6	6	240	L	ND	ND	ND	ND	ND	83.9	8/22/2024
SWCOMP7	6	160	L	ND	ND	ND	ND	ND	63	8/22/2024

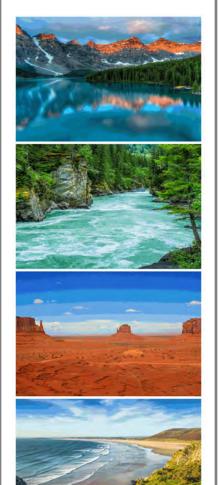
**CLIENTS:** MACK ENERGY

LOCATION: WEST MOUNT SPILL D

SAMPLE ID	LAT	LONG
C1	32.997399°	-104.070720°
C2	32.997421°	-104.070765°
C3	32.997432°	-104.070721°
C4	32.997423°	-104.070822°
C5	32.997406°	-104.070857°
C6	32.997447°	-104.070879°
C7	32.997460°	-104.070845°
C8	32.997484°	-104.070910°
C9	32.997497°	-104.070864°
C10	32.997517°	-104.070924°
C11	32.997529°	-104.070884°
C12	32.997451°	-104.070790°
C13	32.997464°	-104.070752°
C14	32.997487°	-104.070809°
C15	32.997518°	-104.070826°
C16	32.997554°	-104.070852°
C17	32.997502°	-104.070766°
C18	32.997520°	-104.070733°
C19	32.997540°	-104.070774°
C20	32.997561°	-104.070822°
SWC1	32.997375°	-104.070706°
SWC2	32.997385°	-104.070865°
SWC3	32.997489°	-104.070943°
SWC4	32.997588°	-104.070869°
SWC5	32.997563°	-104.070782°
SWC6	32.997503°	-104.070712°
SWC7	32.997454°	-104.070694°

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

## **Analytical Report**

Mack Energy

Project Name: West Mount D

Work Order: E408194

Job Number: 20046-0001

Received: 8/23/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 8/26/24

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: 8/26/24

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount D

Workorder: E408194

Date Received: 8/23/2024 5:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/23/2024 5:30:00AM, under the Project Name: West Mount D.

The analytical test results summarized in this report with the Project Name: West Mount D 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 reguarding 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

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## Sample Summary

Mack Energy	Project Name:	West Mount D	Denouted
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	08/26/24 16:22

Client Sample ID	Lab Sample ID Ma	trix Sampled	Received	Container
Sp. Comp. 1 - 6'	E408194-01A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 2 - 6'	E408194-02A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 3 - 6'	E408194-03A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 4 - 6'	E408194-04A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 5 - 10'	E408194-05A Se	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 6 - 10'	E408194-06A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 7 - 10'	E408194-07A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 8 - 10'	E408194-08A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 9 - 10'	E408194-09A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 10 - 10'	E408194-10A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 11 - 10'	E408194-11A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 12 - 10'	E408194-12A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 13 - 6'	E408194-13A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 14 - 6'	E408194-14A S	oil 08/21/24	08/23/24	Glass Jar, 2 oz.
Sp. Comp. 15 - 6'	E408194-15A Se	oil 08/21/24	08/23/24	Glass Jar, 2 oz.



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

Sp. Comp. 1 - 6' E408194-01

		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	g/kg mg/kg		Analyst: RKS			Batch: 2434078
Benzene	ND	0.0500		2	08/23/24	08/23/24	
Ethylbenzene	ND	0.0500		2	08/23/24	08/23/24	
Toluene	ND	0.0500		2	08/23/24	08/23/24	
o-Xylene	ND	0.0500		2	08/23/24	08/23/24	
p,m-Xylene	ND	0.100		2	08/23/24	08/23/24	
Total Xylenes	ND	0.0500		2	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		98.0 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2434078	
Gasoline Range Organics (C6-C10)	ND	40.0		2	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		98.0 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0		1	08/23/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0		1	08/23/24	08/23/24	
Surrogate: n-Nonane		79.6 %	50-200		08/23/24	08/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2434084
Chloride	68.6	20.0		1	08/23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 2 - 6' E408194-02

		2.0017.02					
Analyte	Result	Reporting Limit		ution	Prepared	Analyzed	Notes
Anaryte	Result	Limit	Dii	ution	rrepared	Anaryzeu	Notes
Volatile Organic Compounds by EPA 8260B		mg/kg		Analyst:	: RKS		Batch: 2434078
Benzene	ND	0.0250		1	08/23/24	08/23/24	
Ethylbenzene	ND	0.0250		1	08/23/24	08/23/24	
Toluene	ND	0.0250		1	08/23/24	08/23/24	
o-Xylene	ND	0.0250		1	08/23/24	08/23/24	
p,m-Xylene	ND	0.0500		1	08/23/24	08/23/24	
Total Xylenes	ND	0.0250		1	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		100 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		97.5 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2434078		
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		100 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		97.5 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	: KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0		1	08/23/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0		1	08/23/24	08/23/24	
Surrogate: n-Nonane		77.4 %	50-200		08/23/24	08/23/24	
Anions by EPA 300.0/9056A	s by EPA 300.0/9056A mg/kg mg/kg			Analyst:	: DT		Batch: 2434084
Chloride	ND	20.0		1	08/23/24	08/23/24	_



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 3 - 6' E408194-03

	Reporting					
Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
mg/kg	mg/kg		Analyst: R	RKS		Batch: 2434078
ND	0.0500	2	2	08/23/24	08/23/24	
ND	0.0500	2	2	08/23/24	08/23/24	
ND	0.0500	2	2	08/23/24	08/23/24	
ND	0.0500	2	2	08/23/24	08/23/24	
ND	0.100	2	2	08/23/24	08/23/24	
ND	0.0500	2	2	08/23/24	08/23/24	
	100 %	70-130		08/23/24	08/23/24	
	96.3 %	70-130		08/23/24	08/23/24	
	97.2 %	70-130		08/23/24	08/23/24	
mg/kg	mg/kg	Analyst: RKS		Batch: 2434078		
ND	40.0	2	2	08/23/24	08/23/24	
	100 %	70-130		08/23/24	08/23/24	
	96.3 %	70-130		08/23/24	08/23/24	
	97.2 %	70-130		08/23/24	08/23/24	
mg/kg	mg/kg		Analyst: K	KM		Batch: 2434074
ND	25.0	1		08/23/24	08/23/24	
ND	50.0	1	l	08/23/24	08/23/24	
	78.7 %	50-200		08/23/24	08/23/24	
mg/kg	mg/kg		Analyst: [	)T		Batch: 2434084
28.5	20.0	1		08/23/24	08/23/24	
	ND ND ND ND ND ND ND ND Mg/kg ND Mg/kg ND Mg/kg	Result         Limit           mg/kg         mg/kg           ND         0.0500           ND         0.0500           ND         0.0500           ND         0.100           ND         0.0500           IOO %         96.3 %           97.2 %         mg/kg           MD         40.0           IOO %         96.3 %           97.2 %         mg/kg           mg/kg         mg/kg           ND         25.0           ND         50.0           78.7 %         mg/kg           mg/kg         mg/kg	Result         Limit         Dilu           mg/kg         mg/kg           ND         0.0500         2           ND         0.0500         2           ND         0.0500         2           ND         0.0500         2           ND         0.100         2           ND         0.0500         2           100 %         70-130           96.3 %         70-130           97.2 %         70-130           96.3 %         70-130           96.3 %         70-130           96.3 %         70-130           97.2 %         70-130           mg/kg         mg/kg           ND         25.0           ND         50.0           78.7 %         50-200           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Analyst: R           ND         0.0500         2           ND         0.0500         2           ND         0.0500         2           ND         0.100         2           ND         0.0500         2           ND         0.0500         2           ND         70-130         96.3 %           97.2 %         70-130         70-130           mg/kg         mg/kg         Analyst: R           ND         40.0         2           mg/kg         70-130         97.2 %           mg/kg         70-130         97.2 %           ng/kg         Analyst: R         ND           ng/kg         1         ND           78.7 %         50-200         1           mg/kg         mg/kg         Analyst: R	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: RKS           ND         0.0500         2         08/23/24           ND         0.0500         2         08/23/24           ND         0.0500         2         08/23/24           ND         0.0500         2         08/23/24           ND         0.100         2         08/23/24           ND         0.0500         2         08/23/24           ND         70-130         08/23/24           96.3 %         70-130         08/23/24           97.2 %         70-130         08/23/24           ND         40.0         2         08/23/24           ND         40.0         2         08/23/24           96.3 %         70-130         08/23/24           96.3 %         70-130         08/23/24           97.2 %         70-130         08/23/24           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         08/23/24           ND         50.0         1         08/23/24           ND         50.0         1         08/23/24      <	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: RKS           ND         0.0500         2         08/23/24         08/23/24           ND         0.100         2         08/23/24         08/23/24           ND         0.0500         2         08/23/24         08/23/24           ND         0.0500         2         08/23/24         08/23/24           ND         0.0500         2         08/23/24         08/23/24           96.3 %         70-130         08/23/24         08/23/24           97.2 %         70-130         08/23/24         08/23/24           mg/kg         mg/kg         Analyst: RKS           ND         40.0         2         08/23/24         08/23/24           96.3 %         70-130         08/23/24         08/23/24           97.2 %         70-130         08/23/24         08/23/24           08/23/24 </td



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 4 - 6' E408194-04

		L400174-04					
	D 1	Reporting			n 1		N.
Analyte	Result	Limit	Dilut	tion I	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	Analyst: RKS	S		Batch: 2434078
Benzene	ND	0.0250	1	. (	08/23/24	08/23/24	
Ethylbenzene	ND	0.0250	1	. (	08/23/24	08/23/24	
Toluene	ND	0.0250	1	. (	08/23/24	08/23/24	
o-Xylene	ND	0.0250	1	. (	08/23/24	08/23/24	
p,m-Xylene	ND	0.0500	1	. (	08/23/24	08/23/24	
Total Xylenes	ND	0.0250	1	. (	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		101 %	70-130	(	08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	(	08/23/24	08/23/24	
Surrogate: Toluene-d8		97.7 %	70-130	(	08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2434078		
Gasoline Range Organics (C6-C10)	ND	20.0	1	. (	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		101 %	70-130	(	08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	(	08/23/24	08/23/24	
Surrogate: Toluene-d8		97.7 %	70-130	(	08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	Analyst: KM	[		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	. (	08/23/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	. (	08/23/24	08/23/24	
Surrogate: n-Nonane		76.1 %	50-200	(	08/23/24	08/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	I	Analyst: DT			Batch: 2434084
Chloride	28.7	20.0	1	. (	08/23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 5 - 10' E408194-05

		E400174-03					
Analyte	Result	Reporting Limit		ıtion	Prepared	Analyzed	Notes
Analyte	Result	Lillit	Dilu	111011	1 repared	Analyzeu	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2434078
Benzene	ND	0.0250	1	1	08/23/24	08/23/24	
Ethylbenzene	ND	0.0250	1	1	08/23/24	08/23/24	
Toluene	ND	0.0250	1	1	08/23/24	08/23/24	
o-Xylene	ND	0.0250	1	1	08/23/24	08/23/24	
p,m-Xylene	ND	0.0500	1	1	08/23/24	08/23/24	
Total Xylenes	ND	0.0250	1	1	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		94.4 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		96.6 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RKS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		94.4 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		96.6 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/23/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	1	08/23/24	08/23/24	
Surrogate: n-Nonane		63.4 %	50-200		08/23/24	08/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2434084
Chloride	ND	20.0	1	1	08/23/24	08/23/24	<u> </u>



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 6 - 10' E408194-06

		E408194-06					
		Reporting	5.1				
Analyte	Result	Limit	Dılu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: l	RKS		Batch: 2434078
Benzene	ND	0.0250	1	1	08/23/24	08/23/24	
Ethylbenzene	ND	0.0250	1	1	08/23/24	08/23/24	
Toluene	ND	0.0250	1	1	08/23/24	08/23/24	
o-Xylene	ND	0.0250	1	1	08/23/24	08/23/24	
p,m-Xylene	ND	0.0500	1	1	08/23/24	08/23/24	
Total Xylenes	ND	0.0250	1	1	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		104 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		96.7 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		98.7 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: l	RKS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		104 %	70-130		08/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		96.7 %	70-130		08/23/24	08/23/24	
Surrogate: Toluene-d8		98.7 %	70-130		08/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: l	KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	1	08/23/24	08/24/24	
Surrogate: n-Nonane		76.8 %	50-200		08/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: l	DT		Batch: 2434084
Chloride	23.7	20.0	1	1	08/23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 7 - 10' E408194-07

		E408194-07					
		Reporting					
Analyte	Result	Limit	Dilut	tion Pr	epared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	Analyst: RKS			Batch: 2434078
Benzene	ND	0.0500	2	2 08	3/23/24	08/23/24	
Ethylbenzene	ND	0.0500	2	2 08	3/23/24	08/23/24	
Toluene	ND	0.0500	2	2 08	3/23/24	08/23/24	
o-Xylene	ND	0.0500	2	2 08	3/23/24	08/23/24	
p,m-Xylene	ND	0.100	2	2 08	3/23/24	08/23/24	
Total Xylenes	ND	0.0500	2	2 08	3/23/24	08/23/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08	3/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08	3/23/24	08/23/24	
Surrogate: Toluene-d8		98.3 %	70-130	08	3/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	I	Analyst: RKS			Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	40.0	2	2 08	3/23/24	08/23/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08	3/23/24	08/23/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08	3/23/24	08/23/24	
Surrogate: Toluene-d8		98.3 %	70-130	08	3/23/24	08/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	Analyst: KM			Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	08	3/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	. 08	3/23/24	08/24/24	
Surrogate: n-Nonane		75.2 %	50-200	08	3/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	I	Analyst: DT			Batch: 2434084
Chloride	27.0	20.0	1	. 08	3/23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### **Sp. Comp. 8 - 10'**

E408194-08							
Reporting							
Analyte	Result	Limit	Dilut	tion Prepared	Analyzed	Notes	
Volatile Organic Compounds by EPA 8260B		mg/kg	I	Analyst: RKS		Batch: 2434078	
Benzene	ND	0.0500	2	08/23/24	08/23/24		
Ethylbenzene	ND	0.0500	2	08/23/24	08/23/24		
Toluene	ND	0.0500	2	08/23/24	08/23/24		
o-Xylene	ND	0.0500	2	08/23/24	08/23/24		
p,m-Xylene	ND	0.100	2	08/23/24	08/23/24		
Total Xylenes	ND	0.0500	2	08/23/24	08/23/24		
Surrogate: Bromofluorobenzene		102 %	70-130	08/23/24	08/23/24		
Surrogate: 1,2-Dichloroethane-d4		98.8 %	70-130	08/23/24	08/23/24		
Surrogate: Toluene-d8		98.8 %	70-130	08/23/24	08/23/24		
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	I	Analyst: RKS		Batch: 2434078	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/23/24	08/23/24		
Surrogate: Bromofluorobenzene		102 %	70-130	08/23/24	08/23/24		
Surrogate: 1,2-Dichloroethane-d4		98.8 %	70-130	08/23/24	08/23/24		
Surrogate: Toluene-d8		98.8 %	70-130	08/23/24	08/23/24		
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	Analyst: KM		Batch: 2434074	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/24	08/24/24		
Oil Range Organics (C28-C36)	ND	50.0	1	08/23/24	08/24/24		
Surrogate: n-Nonane		79.0 %	50-200	08/23/24	08/24/24		
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: DT		Batch: 2434084	

20.0

08/23/24

08/23/24

75.6



Chloride

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 9 - 10' E408194-09

		12400174-07					
Analyte	Result	Reporting Limit	Dilu	tion	Prepared	Analyzed	Notes
Analyte	Result	Liinit	Dilu	IIIOII	rrepareu	Anaryzed	inotes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: 1	RKS		Batch: 2434078
Benzene	ND	0.0250	1	1	08/23/24	08/24/24	
Ethylbenzene	ND	0.0250	1	l	08/23/24	08/24/24	
Toluene	ND	0.0250	1	l	08/23/24	08/24/24	
o-Xylene	ND	0.0250	1	l	08/23/24	08/24/24	
p,m-Xylene	ND	0.0500	1	l	08/23/24	08/24/24	
Total Xylenes	ND	0.0250	1	l	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		99.2 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: 1	RKS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	l	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		99.2 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	ı	Analyst: 1	KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1		08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	l	08/23/24	08/24/24	
Surrogate: n-Nonane		77.1 %	50-200		08/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: 1	DT		Batch: 2434084
Chloride	ND	20.0	1		08/23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 10 - 10' E408194-10

	_	Reporting	_			
Analyte	Result	Limit	Diluti	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: RKS		Batch: 2434078
Benzene	ND	0.0250	1	08/23/24	08/24/24	
Ethylbenzene	ND	0.0250	1	08/23/24	08/24/24	
Toluene	ND	0.0250	1	08/23/24	08/24/24	
o-Xylene	ND	0.0250	1	08/23/24	08/24/24	
p,m-Xylene	ND	0.0500	1	08/23/24	08/24/24	
Total Xylenes	ND	0.0250	1	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	08/23/24	08/24/24	
Surrogate: Toluene-d8		98.4 %	70-130	08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	А	Analyst: RKS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	08/23/24	08/24/24	
Surrogate: Toluene-d8		98.4 %	70-130	08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/24	08/24/24	_
Oil Range Organics (C28-C36)	ND	50.0	1	08/23/24	08/24/24	
Surrogate: n-Nonane		76.4 %	50-200	08/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: DT		Batch: 2434084
Chloride	ND	20.0	1	08/23/24	08/23/24	·

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 11 - 10' E408194-11

		E400174-11					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	:: RKS		Batch: 2434078
Benzene	ND	0.0500		2	08/23/24	08/24/24	
Ethylbenzene	ND	0.0500		2	08/23/24	08/24/24	
Toluene	ND	0.0500		2	08/23/24	08/24/24	
o-Xylene	ND	0.0500		2	08/23/24	08/24/24	
p,m-Xylene	ND	0.100		2	08/23/24	08/24/24	
Total Xylenes	ND	0.0500		2	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		96.0 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	:: RKS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	40.0		2	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		96.0 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	:: KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0		1	08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0		1	08/23/24	08/24/24	
Surrogate: n-Nonane		77.6 %	50-200		08/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	:: DT		Batch: 2434084
Chloride	24.7	20.0		1	08/23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 12 - 10' E408194-12

		E-100174-12					
Analyte	Result	Reporting Limit	Dilut	tion Pres	pared	Analyzed	Notes
,					pared	7 maryzeu	
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: RKS			Batch: 2434078
Benzene	ND	0.0250	1	08/2	23/24	08/24/24	
Ethylbenzene	ND	0.0250	1	08/2	23/24	08/24/24	
Toluene	ND	0.0250	1	08/2	23/24	08/24/24	
o-Xylene	ND	0.0250	1	08/2	23/24	08/24/24	
p,m-Xylene	ND	0.0500	1	08/2	23/24	08/24/24	
Total Xylenes	ND	0.0250	1	08/2	23/24	08/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/2	23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	08/2	23/24	08/24/24	
Surrogate: Toluene-d8		98.9 %	70-130	08/2	23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	Analyst: RKS			Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/2	23/24	08/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/2	23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	08/2	23/24	08/24/24	
Surrogate: Toluene-d8		98.9 %	70-130	08/2	23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: KM			Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	08/2	23/24	08/24/24	_
Oil Range Organics (C28-C36)	ND	50.0	1	08/2	23/24	08/24/24	
Surrogate: n-Nonane		77.9 %	50-200	08/2	23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: DT			Batch: 2434084
Chloride	57.6	20.0	1	08/2	23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 13 - 6' E408194-13

	_	Reporting	_	_	_		
Analyte	Result	Limit	Dilut	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	Analyst: RI	KS		Batch: 2434078
Benzene	ND	0.0250	1	l	08/23/24	08/24/24	
Ethylbenzene	ND	0.0250	1	Į.	08/23/24	08/24/24	
Toluene	ND	0.0250	1	ļ.	08/23/24	08/24/24	
o-Xylene	ND	0.0250	1	Į.	08/23/24	08/24/24	
p,m-Xylene	ND	0.0500	1	Į.	08/23/24	08/24/24	
Total Xylenes	ND	0.0250	1		08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		98.7 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	Analyst: RI	KS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1		08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		98.7 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	Analyst: Kl	М		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1		08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1		08/23/24	08/24/24	
Surrogate: n-Nonane		77.3 %	50-200		08/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	I	Analyst: D	Γ		Batch: 2434084
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Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 14 - 6' E408194-14

		E408194-14					
Anglyta	Result	Reporting Limit		ıtion	Prepared	Analyzad	Notes
Analyte	Result	Limit	Dill	liion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	: RKS		Batch: 2434078
Benzene	ND	0.0250	1	1	08/23/24	08/24/24	
Ethylbenzene	ND	0.0250	1	1	08/23/24	08/24/24	
Toluene	ND	0.0250	1	1	08/23/24	08/24/24	
o-Xylene	ND	0.0250	1	1	08/23/24	08/24/24	
p,m-Xylene	ND	0.0500	1	1	08/23/24	08/24/24	
Total Xylenes	ND	0.0250	1	1	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		97.4 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	: RKS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		97.4 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	: KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	1	08/23/24	08/24/24	
Surrogate: n-Nonane		79.4 %	50-200		08/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	: DT		Batch: 2434084
Chloride	48.9	20.0	1	1	08/23/24	08/23/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

#### Sp. Comp. 15 - 6' E408194-15

		E400174-13					
Andre	Dl/	Reporting		<b></b>	D 1	A a la a . l	Nata
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2434078
Benzene	ND	0.0250	1	1	08/23/24	08/24/24	
Ethylbenzene	ND	0.0250	1	1	08/23/24	08/24/24	
Toluene	ND	0.0250	1	1	08/23/24	08/24/24	
o-Xylene	ND	0.0250	1	1	08/23/24	08/24/24	
p,m-Xylene	ND	0.0500	1	1	08/23/24	08/24/24	
Total Xylenes	ND	0.0250	1	1	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		97.6 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RKS		Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	l	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/23/24	08/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/23/24	08/24/24	
Surrogate: Toluene-d8		97.6 %	70-130		08/23/24	08/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	,	Analyst:	KM		Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	1	08/23/24	08/24/24	
Surrogate: n-Nonane		79.4 %	50-200		08/23/24	08/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2434084
Chloride	51.9	20.0	1	1	08/23/24	08/23/24	



West Mount D Mack Energy Project Name: Reported: 7 W. Compress Road Project Number: 20046-0001 Artesia NM, 88210 Project Manager: Natalie Gladden 8/26/2024 4:22:39PM **Volatile Organic Compounds by EPA 8260B** Analyst: RKS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2434078-BLK1) Prepared: 08/23/24 Analyzed: 08/23/24 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 ND 0.0250 Total Xylenes Surrogate: Bromofluorobenzene 0.507 0.500 101 70-130 Surrogate: 1,2-Dichloroethane-d4 0.483 0.500 96.6 70-130 0.500 97.8 70-130 Surrogate: Toluene-d8 0.489 LCS (2434078-BS1) Prepared: 08/23/24 Analyzed: 08/23/24 2.50 0.0250 2.50 100 70-130 Benzene 2.50 98.4 70-130 2.46 Ethylbenzene 0.0250 2.32 0.0250 2.50 92.9 70-130 2.43 97.2 70-130 0.0250 2.50 o-Xylene 4.89 5.00 97.8 70-130 p,m-Xylene 0.0500 7.32 0.0250 7.50 97.6 70-130 Total Xylenes Surrogate: Bromofluorobenzene 0.510 0.500 102 70-130 0.500 97.7 70-130 Surrogate: 1,2-Dichloroethane-d4 0.489 70-130 Surrogate: Toluene-d8 0.489 0.500 Matrix Spike (2434078-MS1) Source: E408194-05 Prepared: 08/23/24 Analyzed: 08/23/24 2.61 0.0250 2.50 ND 48-131 45-135 Ethylbenzene 2.58 0.0250 2.50 ND 103 48-130 Toluene 2.44 0.0250 2.50 ND 97.7 2.59 0.0250 2.50 ND 103 43-135 o-Xylene ND 103 43-135 p,m-Xylene 5.16 0.0500 5.00 Total Xylenes 7.74 0.0250 7.50 ND 103 43-135 0.516 0.500 103 70-130 Surrogate: Bromofluorobenzene 0.500 93.7 70-130 Surrogate: 1,2-Dichloroethane-d4 0.469 0.500 70-130 0.491 98.1 Surrogate: Toluene-d8 Matrix Spike Dup (2434078-MSD1) Source: E408194-05 Prepared: 08/23/24 Analyzed: 08/23/24 2.37 0.0250 2.50 ND 94.8 48-131 9.68 23



Ethylbenzene

Toluene

o-Xylene

p,m-Xylene

Total Xylenes

Surrogate: Toluene-d8

Surrogate: Bromofluorobenzene

Surrogate: 1,2-Dichloroethane-d4

2.32

2.20

2.25

4.50

6.75

0.503

0.493

0.485

0.0250

0.0250

0.0250

0.0500

0.0250

2.50

2.50

2.50

5.00

7.50

0.500

0.500

0.500

ND

ND

ND

ND

ND

88.2

90.1

90.0

90.0

101

98.5

45-135

48-130

43-135

43-135

43-135

70-130

70-130

70-130

10.5

10.3

13.8

13.6

13.7

27

24

27

27

27

Mack EnergyProject Name:West Mount DReported:7 W. Compress RoadProject Number:20046-0001Artesia NM, 88210Project Manager:Natalie Gladden8/26/2024 4:22:39PM

Artesia NM, 88210		Project Manager	r: Na	ıtalie Gladder	1			8/20	5/2024 4:22:39PM
	Non	halogenated	Organics l	by EPA 80	15D - G	RO		A	nalyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2434078-BLK1)							Prepared: 0	8/23/24 Analy	vzed: 08/23/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.507		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.483		0.500		96.6	70-130			
Surrogate: Toluene-d8	0.489		0.500		97.8	70-130			
LCS (2434078-BS2)							Prepared: 0	8/23/24 Analy	zed: 08/23/24
Gasoline Range Organics (C6-C10)	44.2	20.0	50.0		88.4	70-130			
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.4	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			
Matrix Spike (2434078-MS2)				Source:	E408194-	05	Prepared: 0	8/23/24 Analy	zed: 08/23/24
Gasoline Range Organics (C6-C10)	42.5	20.0	50.0	ND	85.0	70-130			
Surrogate: Bromofluorobenzene	0.532		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			

Surrogate: Toluene-d8	0.502		0.500		100	70-130			
Matrix Spike Dup (2434078-MSD2)				Source:	E408194-0	05	Prepared: 08	8/23/24 Analyzed: 08/23/24	
Gasoline Range Organics (C6-C10)	41.2	20.0	50.0	ND	82.4	70-130	3.05	20	
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.458		0.500		91.6	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

Mack Energy	Project Name:	West Mount D	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/26/2024 4:22:39PM

Artesia NM, 88210		Project Manage	r: Na	ıtalie Gladder	ı			8	8/26/2024 4:22:39PM
	Nonha	logenated Or	ganics by l	EPA 8015I	) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2434074-BLK1)							Prepared: 0	8/23/24 An	alyzed: 08/23/24
tiesel Range Organics (C10-C28)	ND	25.0							
vil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	39.0		50.0		78.0	50-200			
.CS (2434074-BS1)							Prepared: 0	8/23/24 An	alyzed: 08/23/24
riesel Range Organics (C10-C28)	176	25.0	250		70.4	38-132			
urrogate: n-Nonane	35.6		50.0		71.1	50-200			
Matrix Spike (2434074-MS1)				Source:	E408194-	01	Prepared: 0	8/23/24 An	alyzed: 08/23/24
riesel Range Organics (C10-C28)	184	25.0	250	ND	73.7	38-132			
urrogate: n-Nonane	38.1		50.0		76.1	50-200			
Matrix Spike Dup (2434074-MSD1)				Source:	E408194-	01	Prepared: 0	8/23/24 An	alyzed: 08/23/24
tiesel Range Organics (C10-C28)	185	25.0	250	ND	73.9	38-132	0.354	20	
urrogate: n-Nonane	39.0		50.0		78.1	50-200			

Mack Energy		Project Name:		est Mount D					Reported:
7 W. Compress Road Artesia NM, 88210		Project Number: Project Manager:		046-0001 atalie Gladden					8/26/2024 4:22:39PM
		Anions	by EPA 3	00.0/9056A					Analyst: DT
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2434084-BLK1)							Prepared: 0	8/23/24 A	analyzed: 08/23/24
Chloride	ND	20.0							
LCS (2434084-BS1)							Prepared: 0	8/23/24 A	analyzed: 08/23/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2434084-MS1)				Source:	E408194-0	02	Prepared: 0	8/23/24 A	analyzed: 08/23/24
Chloride	270	20.0	250	ND	108	80-120			
Matrix Spike Dup (2434084-MSD1)				Source:	E408194-0	02	Prepared: 0	8/23/24 A	analyzed: 08/23/24
Chloride	270	20.0	250	ND	108	80-120	0.0904	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**

Γ	Mack Energy	Project Name:	West Mount D	
l	7 W. Compress Road	Project Number:	20046-0001	Reported:
	Artesia NM, 88210	Project Manager:	Natalie Gladden	08/26/24 16:22

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Project Information

Chain of Custody

Olada a		1	-	-	Lah	Use	Onl	V			TA		EPA Pr	
Mathemary	Bill To	ICES		1011	Lati			lumber	10	120	3D	Standard	CWA	SDWA
1: West Mount CC	Attention: ENERGY STAFFING SERV	-)	Lab V	TO V	ICIL	-		46-000	-	V				265.
t Manager:	Address: 2724 NW COUNTY RD  City State Zip HOBBS, NM 88240		lar.	00		A	nalv	sis and Meth	od					RCRA
SS:	ILILY, JEDICE, EIP		- 1	-7	-1	T	1							
tate, Zip	Phone: 575-393-9048	C'C'CIM		in	***************************************	-	1						State	1
	Email: NATALIE@ENERGYSTAFFINGLE	VE CONT	27 8015	801				3	5	1		NM CO	UT AZ	1X
	BRITTNEY@ENERGYSTAFFINGL	.L.C.L.:JM	740	yd C	802.1	0978	0100	900	NN	1		V		1
t due by:	**	Lab	/OH	SRO/DRO by 8015	BTEX by 8021	2	Metals 5010	chlaride 300.V	SOODE	30096	1		Remarks	
Date Matrix No of Sample ID		Number	DRO/ORO	SRO	BTE	VOC by 8260	S	5	n a	96	1			-
ed Sampled Contents	A 1 - 1	1							1	1				
08/21 S 1 Sp. Comp	. 1 - 6'	2								1				
So Come	. 2-U'	-	1	-			-	1-1-1	-	1	-	+ + -		
		3		-						4				
	p. 3-U'	L												
Sp. Com	p. 4- le'	17	-	1-	-	-	-	1	-	1	-			
Sa Con	p. 5-10'	5		and determined			1_		_		_	+		
1 37 00.	121	6		-						V				4
Sp. Cun	ip. 6-10'	17		+	1	-	+	1		1				
So Con	1p. 7- 10'				-	-	-			-	+	-		
	A. C.	8								V				
p con	p 8-10'	9								V				
Sp. Con	p. 9-10'	1	-	-	-	+	-	+		1	1			
08/21 S 1 So. Com	in Inl	10				1								
tional Instructions:	P. 10													www.nlcri.cr.tece.vi
	a tam aware that tampering with or intentionally mistal	delling the	nple lac	ation,			Sa	mples requiring the	nermal p	above C	on must	be received on ice th than 6°C on subsequ	e day iney are : ent days	entitle of testis
sampler), attest to the validity and authenticity of this sampl time of collection is considered fraud and may be grounds to	riegal action. Sampled by: SCINC	MU X	CIE	-			-					Only		
wished to (Signature) Date 21/2/1	Received by: (Signature)	Date	17-1	4	13	45	R	Received on	ice:		/ N	A CONTRACT OF THE CONTRACT OF		
Date Tu	Received by (Signature)	8.2			11/1	30	-	m		72		<u>T3</u>		
Juli 6/2 8229	1630 like Misso	Date Date	ال • ال	1	ime			I.A.		1				
Duished by (Signature)	17114 MAN LAND	8-2	3-2	11)	05	30	) [	AVG Temp	C	1		104		
July 1690 B.CL.CY	My 10 Mars 10 Mars				g - gla	ass, p	· po	ly/plastic, ag	- ami	per gla	SS, V	The report for t	he analysis	of the above
le Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, C - Others: Samples are discarded 30 days after results are report.	ted unless other arrangements are made. Hazard	aur camples	d Hive	ereti	rned t	o clier	nt or o	disposed of al	the cit	enrex	hense	THE LEBOT OF		
Samples are discarded 30 days after results are reported in Samples are discarded by the Samples received by the	laboratory with this COC. The liability of the labor	atory is limit	ed to	he ar	nount	paid (	01 011	the report.			-	@	SEE.	
they by children thank the remain activities and the second	A Committee of the Comm							er. k.				SECOND COLOR	No. Chillips All	The same of the sa

Project Information

Chain of Custody

		-		1 - 1	Use	Only	V.			TAT		EPA Pr	
ent: MACK ENOUGY	BIN TO	-	6107	Lan			y Jumber	1D	2D V		Standard	CWA	SDWA
pject: WEST MOUNT CC	Attention: ENERGY STAFFING SERVICES	Lab	NO#	94			46-0001						
pject Manager:	Address: 2724 NW COUNTY RD  City, State, Zip. HOBBS, NM 88240	In 1	UD	27	A	nalvs	sis and Method	,	LL				RCRA
dress:			T	T	T	1							
y, State, Zip	Phone: 575-393-9048	-	in		400	1			-			State	FVI
one:	Email: NATALIE@ENERGYSTAFFINGLEC.COM	by 8015	30.1				0,0	5			NM CO	UT AZ	18
ail:	BRITTNEY@ENERGYSTAFFINGLLC.COM	, do	GRO/DRC by 8015	BTEX by 8021	0978	Metals 6010	oride 300.0	N. N.	× ×				
port due by.	Lab	108	10/	y by	à	Sie	Die	BGDOC	00009			Remarks	
fine Date Matrix No of Sample ID	Numt	1 9	GRO	BTE)	VOC by 8260	Neg	H	86	96				
08/21 S 1 Sp. Comp	11- 10'		_					V	1				
Sp. Com		2						V		-	-		
So Cum	13-101	3					1000	-	1				
3. 3.	20 14-101	1						1	1	1			- HI-THE
Sp. Cov	ND 15 16'							L	1				
08/21 S 1 Sp Cor	mp. 15 le							and the same of					-12
					1	+							
				+	-	+		-					
			-	-	-	-		-	-	-			
						-		+	-	-			
Additional Instructions:							mples requiring ther		V all subs	and the	takanyan an ice the	day they are	ampled or receive
(field sampler), attest to the validity and authenticity of this sample ate or time of collection is considered fraud and may be grounds for	I am aware that tampering with or intentionally mistabelling the	sample lo	cation	,		Sar	reples requiring ther icked in ice at an ave	temp a	shove 0 b	ur less th	an 6 °C on subsequ	ent days	
(field sampler), attest to the variously and authemotive during sample are or time of collection is considered traud and may be grounds to	riegal action. Sampled by: SUP I WA	Terr			-	-		-		Use			
Relinquished by (Signature) Date   14 Tim	Received by: (Signature)	12-1	4		45	R	Received on id	e;		/ N			
Relinquished by. (Signifure)	Received by: (Signature) Dat	12.2	4	16:	36		<u> </u>	-	<u>T2</u>		<u>T3</u>		
Relinguished by (Signature) Date Tin	Received by: (Signature)	72-1	U	lime 05	30	1	AVG Temp <sup>©</sup> C	. 4	1		-		
Sample Matrix S Soil, Sd Solid, Sg Sludge, A Aqueous, Q Other Note: Samples are discarded 30 days after results are report	2245 beylyp & Adle 8	ntainer	Type	-	the state of the state of			1	er glas	s, v - V	OA The report for t	he analysis	of the above
Sample Matrix, 5 Soil, 50 - Soild, 5g - Studge, A - Aqueods, 6 - Office Matrix, Samples are discarded 30 days after results are repor	ed unless other arrangements are made. Hazardous sam	oles will I	be reti	urned t	to clier	nt or o	oisposed of at it the report.	is said	- in a wide,	-4-0-5-			
Note: Samples are discarded 30 days after results are report samples is applicable only to those samples received by the	laboratory with this COC. The liability of the laboratory is l	mited to	the a	mount	Maio I	OI OII	or .				irc		
single- in opposite	Page 27 of 30					15		. m	es estima. Y	102 697	ESS UNION ASSESSED	the "test" List	NO LOS

Printed: 8/23/2024 11:28:04AM

#### **Envirotech Analytical Laboratory**

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:	Mack Energy	Date Received:	08/23/24 05:	30	Work Order ID:	E408194
Phone:	(575) 390-6397	Date Logged In:	08/22/24 16::	50	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	08/26/24 17:	00 (1 day TAT)		
Chain of	Custody (COC)					
	e sample ID match the COC?		No			
	e number of samples per sampling site location mat	ch the COC	Yes			
	imples dropped off by client or carrier?		Yes	Carrier: C	<u>Courier</u>	
	c COC complete, i.e., signatures, dates/times, reques	sted analyses?	No			
5. Were al	l samples received within holding time? Note: Analysis, such as pH which should be conducted ir i.e, 15 minute hold time, are not included in this disucssion		Yes	,	Comme	nts/Resolution
	urn Around Time (TAT) COC indicate standard TAT, or Expedited TAT?		Yes		Project manager and ti	me sampled are
Sample C			140		missing on COC by cl	-
	ample cooler received?		Yes		-	<u> </u>
	was cooler received in good condition?		Yes		samples is different that	in the one on the
• /	e sample(s) received intact, i.e., not broken?				COC by client.	
	* * * *		Yes			
	custody/security seals present?		No			
•	were custody/security seals intact?		NA			
	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes			
		temperature. 1	<u>~</u>			
Sample C	ueous VOC samples present?		No			
	OC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
	trip blank (TB) included for VOC analyses?		NA			
	on-VOC samples collected in the correct containers'	)	Yes			
	appropriate volume/weight or number of sample contain		Yes			
Field Lab		iers conecteur	168			
	field sample labels filled out with the minimum info	rmation:				
	imple ID?	illiation.	Yes			
	ate/Time Collected?		Yes	l		
C	ollectors name?		No			
Sample P	<u>reservation</u>					
21. Does t	he COC or field labels indicate the samples were pr	reserved?	No			
22. Are sa	mple(s) correctly preserved?		NA			
24. Is lab	filteration required and/or requested for dissolved m	netals?	No			
Multipha	se Sample Matrix					
26. Does t	he sample have more than one phase, i.e., multipha	se?	No			
27. If yes,	does the COC specify which phase(s) is to be analy	zed?	NA			
Subcontr	act Laboratory					
	mples required to get sent to a subcontract laborato	rv?	No			
	subcontract laboratory specified by the client and if	-		ubcontract Lab	·NA	
		. 50	1111 01	accontract Lac	, 1471	
Client In	struction					

Date

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Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

# **Analytical Report**

Mack Energy

Project Name: West Mount D

Work Order: E408201

Job Number: 20046-0001

Received: 8/26/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 8/27/24

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: 8/27/24

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: West Mount D

Workorder: E408201

Date Received: 8/26/2024 7:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/26/2024 7:00:00AM, under the Project Name: West Mount D.

The analytical test results summarized in this report with the Project Name: West Mount D 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 reguarding 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

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## Sample Summary

Mack Energy	Project Name:	West Mount D	Donoutoda
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	08/27/24 11:30

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP. Comp. 16 - 6'	E408201-01A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SP. Comp. 17 - 6'	E408201-02A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SP. Comp. 18 - 6'	E408201-03A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SP. Comp. 19 - 6'	E408201-04A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SP. Comp. 20 - 6'	E408201-05A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SW. Comp. 1 - 6'	E408201-06A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SW. Comp. 2 - 6'	E408201-07A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SW. Comp. 3 - 6'	E408201-08A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SW. Comp. 4 - 6'	E408201-09A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SW. Comp. 5 - 6'	E408201-10A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SW. Comp. 6 - 6'	E408201-11A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.
SW. Comp. 7 - 6'	E408201-12A	Soil	08/22/24	08/26/24	Glass Jar, 2 oz.

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SP. Comp. 16 - 6' E408201-01

		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B		mg/kg		Analyst:	: BA		Batch: 2435006
Benzene	ND	0.0250		1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250		1	08/26/24	08/26/24	
Toluene	ND	0.0250		1	08/26/24	08/26/24	
o-Xylene	ND	0.0250		1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500		1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg Analys		Analyst:	: BA		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg mg/kg		Analyst: NV			Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0		1	08/26/24	08/26/24	
Oil Range Organics (C28-C36)	ND	50.0		1	08/26/24	08/26/24	
Surrogate: n-Nonane		83.3 %	50-200		08/26/24	08/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2435004
Chloride	42.2	20.0		1	08/26/24	08/26/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SP. Comp. 17 - 6' E408201-02

		E400201-02					
	D 1	Reporting		.•			N.
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2435006
Benzene	ND	0.0250	1	1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	l	08/26/24	08/26/24	
Toluene	ND	0.0250	1	l	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	l	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg Analyst: BA			Batch: 2435006		
Gasoline Range Organics (C6-C10)	ND	20.0	1	l	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/26/24	08/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	l	08/26/24	08/26/24	
Surrogate: n-Nonane		84.6 %	50-200		08/26/24	08/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2435004
Chloride	55.0	20.0	1	1	08/26/24	08/26/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SP. Comp. 18 - 6' E408201-03

		E408201-03					
Analyte	Result	Reporting Limit		ıtion	Prepared	Analyzed	Notes
						rmaryzou	
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst			Batch: 2435006
Benzene	ND	0.0250		1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250		1	08/26/24	08/26/24	
Toluene	ND	0.0250		1	08/26/24	08/26/24	
o-Xylene	ND	0.0250		1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500		1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		98.4 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg Analyst: BA			Batch: 2435006		
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		98.4 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0		1	08/26/24	08/26/24	
Oil Range Organics (C28-C36)	ND	50.0	:	1	08/26/24	08/26/24	
Surrogate: n-Nonane		84.4 %	50-200		08/26/24	08/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2435004
Chloride	80.6	20.0		1	08/26/24	08/26/24	



Mack Energy		Project Name:	West Mount D	
7 W. Compre	ss Road	Project Number:	20046-0001	Reported:
Artesia NM,	88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SP. Comp. 19 - 6' E408201-04

		L400201-04				
Analyte	Result	Reporting Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: BA		Batch: 2435006
Benzene	ND	0.0250	1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	08/26/24	08/26/24	
Toluene	ND	0.0250	1	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		105 %	70-130	08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		94.7 %	70-130	08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130	08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		105 %	70-130	08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		94.7 %	70-130	08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130	08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	08/26/24	08/26/24	-
Oil Range Organics (C28-C36)	ND	50.0	1	08/26/24	08/26/24	
Surrogate: n-Nonane		86.2 %	50-200	08/26/24	08/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: DT		Batch: 2435004
Chloride	ND	20.0	1	08/26/24	08/26/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SP. Comp. 20 - 6' E408201-05

		E400201-03					
Analyte	Result	Reporting Limit	Dilu	tion	Prepared	Analyzed	Notes
Marye						7 thatyzed	
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	1	Analyst: I	BA		Batch: 2435006
Benzene	ND	0.0250	1	l	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	l	08/26/24	08/26/24	
Toluene	ND	0.0250	1	l	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	l	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	!	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	l	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		99.1 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	1	Analyst: I	BA		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1		08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		99.1 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: N	IV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1		08/26/24	08/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1		08/26/24	08/26/24	
Surrogate: n-Nonane		88.1 %	50-200		08/26/24	08/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	1	Analyst: I	DΤ		Batch: 2435004
Chloride	67.9	20.0	1		08/26/24	08/26/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SW. Comp. 1 - 6' E408201-06

Analyte	Result	Reporting Limit	Dilut	tion Pre	pared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: BA			Batch: 2435006
Benzene	ND	0.0250	1	-	26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	08/	26/24	08/26/24	
Toluene	ND	0.0250	1	08/	26/24	08/26/24	
o-Xylene	ND	0.0250	1	08/	26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	08/	26/24	08/26/24	
Total Xylenes	ND	0.0250	1	08/	26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/	26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		92.2 %	70-130	08/	26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130	08/	26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	Analyst: BA			Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/	26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/	26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		92.2 %	70-130	08/	26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130	08/	26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: NV			Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	08/	26/24	08/26/24	-
Oil Range Organics (C28-C36)	ND	50.0	1	08/	26/24	08/26/24	
Surrogate: n-Nonane		88.9 %	50-200	08/	26/24	08/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT			Batch: 2435004
Chloride	64.1	20.0	1	08/	26/24	08/26/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SW. Comp. 2 - 6' E408201-07

		E400201-07					
		Reporting					
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	٠	Analyst: I	ВА		Batch: 2435006
Benzene	ND	0.0250	1	Į.	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	l	08/26/24	08/26/24	
Toluene	ND	0.0250	1	l	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	l	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	l	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	l	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		99.6 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: I	ВА		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1	l	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		99.6 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		108 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: 1	NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/26/24	08/26/24	_
Oil Range Organics (C28-C36)	ND	50.0	1	l	08/26/24	08/26/24	
Surrogate: n-Nonane		93.7 %	50-200		08/26/24	08/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: I	OT		Batch: 2435004
Chloride	88.0	20.0	1	1	08/26/24	08/26/24	<del></del>



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SW. Comp. 3 - 6' E408201-08

		Reporting		·			
Analyte	Result	Limit	Dilu	ıtion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: 1	BA		Batch: 2435006
Benzene	ND	0.0250	1	1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	1	08/26/24	08/26/24	
Toluene	ND	0.0250	1	l	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	l	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	l	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		104 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		94.9 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: 1	BA		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		104 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		94.9 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: 1	NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/26/24	08/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	1	08/26/24	08/27/24	
Surrogate: n-Nonane		84.9 %	50-200		08/26/24	08/27/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: 1	DT		Batch: 2435004
Chloride	86.9	20.0	1	1	08/26/24	08/26/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SW. Comp. 4 - 6' E408201-09

D 1	Reporting	F.''				27.
Result	Limit	Dili	ution	Prepared	Analyzed	Notes
mg/kg	mg/kg		Analyst:	BA		Batch: 2435006
ND	0.0250		1	08/26/24	08/26/24	
ND	0.0250		1	08/26/24	08/26/24	
ND	0.0250		1	08/26/24	08/26/24	
ND	0.0250		1	08/26/24	08/26/24	
ND	0.0500		1	08/26/24	08/26/24	
ND	0.0250		1	08/26/24	08/26/24	
	102 %	70-130		08/26/24	08/26/24	
	92.9 %	70-130		08/26/24	08/26/24	
	105 %	70-130		08/26/24	08/26/24	
mg/kg	mg/kg		Analyst:	BA		Batch: 2435006
ND	20.0		1	08/26/24	08/26/24	
	102 %	70-130		08/26/24	08/26/24	
	92.9 %	70-130		08/26/24	08/26/24	
	105 %	70-130		08/26/24	08/26/24	
mg/kg	mg/kg		Analyst:	NV		Batch: 2435002
ND	25.0	•	1	08/26/24	08/27/24	_
ND	50.0		1	08/26/24	08/27/24	
	86.8 %	50-200		08/26/24	08/27/24	
mg/kg	mg/kg		Analyst:	DT		Batch: 2435004
ND	20.0		1	08/26/24	08/26/24	<del></del>
	ND Mg/kg ND Mg/kg	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           ND         0.0250           IO2 %         92.9 %           105 %         mg/kg           ND         20.0           IO2 %         92.9 %           105 %         mg/kg           Mg/kg         mg/kg           ND         25.0           ND         50.0           86.8 %         mg/kg           mg/kg         mg/kg	Result         Limit         Dil           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           ND         0.0250           IO2 %         70-130           92.9 %         70-130           IO5 %         70-130           mg/kg         mg/kg           ND         20.0           IO2 %         70-130           92.9 %         70-130           IO5 %         70-130           mg/kg         mg/kg           ND         25.0           ND         50.0           86.8 %         50-200           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Analyst:           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           ND         70-130         1           92.9 %         70-130         70-130           mg/kg         mg/kg         Analyst:           ND         20.0         1           102 %         70-130         1           mg/kg         mg/kg         Analyst:           ND         25.0         1           ND         50.0         1           86.8 %         50-200           mg/kg         Mg/kg         Analyst:	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: BA           ND         0.0250         1         08/26/24           ND         0.0250         1         08/26/24           ND         0.0250         1         08/26/24           ND         0.0500         1         08/26/24           ND         0.0250         1         08/26/24           ND         0.0250         1         08/26/24           ND         70-130         08/26/24           92.9 %         70-130         08/26/24           105 %         70-130         08/26/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         08/26/24           92.9 %         70-130         08/26/24           92.9 %         70-130         08/26/24           105 %         70-130         08/26/24           mg/kg         mg/kg         Analyst: NV           ND         25.0         1         08/26/24           ND         50.0         1         08/26/24           ND         50.0         1         08/26/24 <t< td=""><td>Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: BA         ND         0.0250         1         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24         08/26/24           ND         0.0500         1         08/26/24         08/26/24         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24           102 %         70-130         08/26/24         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24</td></t<>	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: BA         ND         0.0250         1         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24         08/26/24           ND         0.0500         1         08/26/24         08/26/24         08/26/24         08/26/24           ND         0.0250         1         08/26/24         08/26/24         08/26/24           102 %         70-130         08/26/24         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24           mg/kg         mg/kg         Analyst: BA           ND         20.0         1         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24           92.9 %         70-130         08/26/24         08/26/24



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

SW. Comp. 5 - 6' E408201-10

		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	: BA		Batch: 2435006
Benzene	ND	0.0250		1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250		1	08/26/24	08/26/24	
Toluene	ND	0.0250		1	08/26/24	08/26/24	
o-Xylene	ND	0.0250		1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500		1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	: BA		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		107 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	: NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0		1	08/26/24	08/27/24	
Oil Range Organics (C28-C36)	ND	50.0		1	08/26/24	08/27/24	
Surrogate: n-Nonane		89.4 %	50-200		08/26/24	08/27/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	: DT		Batch: 2435004
· · · · · · · · · · · · · · · · · · ·	ND	20.0		1	08/26/24	08/26/24	<u> </u>

Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

#### SW. Comp. 6 - 6' E408201-11

		2100201 11					
Austra	Dk	Reporting		4:	D 4	A a harman 1	Nister
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2435006
Benzene	ND	0.0250		1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250		1	08/26/24	08/26/24	
Toluene	ND	0.0250		1	08/26/24	08/26/24	
o-Xylene	ND	0.0250		1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500		1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		109 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130		08/26/24	08/26/24	
Surrogate: Toluene-d8		109 %	70-130		08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0		1	08/26/24	08/27/24	
Oil Range Organics (C28-C36)	ND	50.0		1	08/26/24	08/27/24	
Surrogate: n-Nonane		89.4 %	50-200		08/26/24	08/27/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	DT		Batch: 2435004
Chloride	83.9	20.0		1	08/26/24	08/26/24	



Mack Energy	Project Name:	West Mount D	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

SW. Comp. 7 - 6' E408201-12

		2.00201 12				
Analyte	Result	Reporting Limit	Diluti	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: BA		Batch: 2435006
Benzene	ND	0.0250	1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	08/26/24	08/26/24	
Toluene	ND	0.0250	1	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130	08/26/24	08/26/24	
Surrogate: Toluene-d8		104 %	70-130	08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	Analyst: BA		Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/26/24	08/26/24	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130	08/26/24	08/26/24	
Surrogate: Toluene-d8		104 %	70-130	08/26/24	08/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: NV		Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	08/26/24	08/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/26/24	08/27/24	
Surrogate: n-Nonane		86.9 %	50-200	08/26/24	08/27/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: DT		Batch: 2435004

West Mount D Mack Energy Project Name: Reported: 7 W. Compress Road Project Number: 20046-0001 Artesia NM, 88210 Project Manager: Natalie Gladden 8/27/2024 11:30:02AM **Volatile Organic Compounds by EPA 8260B** Analyst: BA Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2435006-BLK1) Prepared: 08/26/24 Analyzed: 08/26/24 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 ND 0.0250 Total Xylenes Surrogate: Bromofluorobenzene 0.525 0.500 105 70-130 Surrogate: 1,2-Dichloroethane-d4 0.506 0.500 101 70-130 0.500 106 70-130 Surrogate: Toluene-d8 0.529 LCS (2435006-BS1) Prepared: 08/26/24 Analyzed: 08/26/24 2.33 0.0250 2.50 93.3 70-130 Benzene 2.38 2.50 70-130 95.2 Ethylbenzene 0.0250 2.39 0.0250 2.50 95.5 70-130 2.24 89.8 70-130 0.0250 2.50 o-Xylene 4.53 5.00 90.5 70-130 p,m-Xylene 0.0500 6.77 0.0250 7.50 90.3 70-130 Total Xylenes Surrogate: Bromofluorobenzene 0.498 0.500 99.5 70-130 0.500 96.8 70-130 Surrogate: 1,2-Dichloroethane-d4 0.484 70-130 Surrogate: Toluene-d8 0.500 0.528 Matrix Spike (2435006-MS1) Source: E408205-01 Prepared: 08/26/24 Analyzed: 08/26/24 2.28 0.0250 2.50 ND 91.2 48-131 45-135 Ethylbenzene 2.32 0.0250 2.50 ND 92.8 48-130 Toluene 2.32 0.0250 2.50 ND 92.6 2.24 0.0250 2.50 ND 89.8 43-135 o-Xylene 4.54 ND 90.9 43-135 p,m-Xylene 0.0500 5.00 Total Xylenes 6.79 0.0250 7.50 ND 90.5 43-135 Surrogate: Bromofluorobenzene 0.507 0.500 101 70-130 0.500 94.0 70-130 Surrogate: 1,2-Dichloroethane-d4 0.470 0.500 70-130 0.522 Surrogate: Toluene-d8 Matrix Spike Dup (2435006-MSD1) Source: E408205-01 Prepared: 08/26/24 Analyzed: 08/26/24 2.28 0.0250 2.50 ND 91.3 48-131 0.110 23 2.36 0.0250 2.50 ND 94.2 45-135 1.52 27 Ethylbenzene ND 93.9 48-130 1.35 24 2.35 2.50 Toluene 0.0250 o-Xylene 2.30 0.0250 2.50 ND 92.1 43-135 2.62 27 5.00 ND 91.8 43-135 1.05 27 4.59 p,m-Xylene 0.0500 27 6.89 0.0250 7.50 ND 91.9 43-135 1.57 Total Xylenes Surrogate: Bromofluorobenzene 0.509 0.500 102 70-130



0.500

0.500

0.469

0.525

93.8

70-130

70-130

Surrogate: 1,2-Dichloroethane-d4

Surrogate: Toluene-d8

Mack EnergyProject Name:West Mount DReported:7 W. Compress RoadProject Number:20046-0001Artesia NM, 88210Project Manager:Natalie Gladden8/27/2024 11:30:02AM

Analy	ıst.	BA

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

	Resuit	Lillin	LCVCI	resurt	KCC	Limits	ICI D	Lillit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2435006-BLK1)							Prepared: 0	8/26/24 Aı	nalyzed: 08/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.525		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.506		0.500		101	70-130			
Surrogate: Toluene-d8	0.529		0.500		106	70-130			
LCS (2435006-BS2)							Prepared: 0	8/26/24 Aı	nalyzed: 08/26/24
Gasoline Range Organics (C6-C10)	51.5	20.0	50.0		103	70-130			·
Surrogate: Bromofluorobenzene	0.518		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.6	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			
Matrix Spike (2435006-MS2)				Source:	E408205-	01	Prepared: 0	8/26/24 Aı	nalyzed: 08/26/24
Gasoline Range Organics (C6-C10)	49.7	20.0	50.0	ND	99.4	70-130			
Surrogate: Bromofluorobenzene	0.500		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.532		0.500		106	70-130			
Matrix Spike Dup (2435006-MSD2)				Source:	E408205-	01	Prepared: 0	8/26/24 Aı	nalyzed: 08/26/24
Gasoline Range Organics (C6-C10)	50.1	20.0	50.0	ND	100	70-130	0.705	20	
Surrogate: Bromofluorobenzene	0.528		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.483		0.500		96.6	70-130			
Surrogate: Toluene-d8	0.548		0.500		110	70-130			



Mack Energy	Project Name:	West Mount D	Reported:
7 W. Compress Road	Project Number:	20046-0001	•
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/27/2024 11:30:02AM

Artesia NM, 88210		Project Manage	r: Na	atalie Gladder	ı			8/2	27/2024 11:30:02AM		
Nonhalogenated Organics by EPA 8015D - DRO/ORO Analyst: NV											
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit			
	mg/kg	mg/kg	mg/kg	mg/kg	%	% %	%	%	Notes		
Blank (2435002-BLK1)							Prepared: 0	8/26/24 Ana	lyzed: 08/26/24		
Diesel Range Organics (C10-C28)	ND	25.0									
Oil Range Organics (C28-C36)	ND	50.0									
Surrogate: n-Nonane	36.4		50.0		72.7	50-200					
LCS (2435002-BS1)							Prepared: 0	8/26/24 Ana	lyzed: 08/26/24		
Diesel Range Organics (C10-C28)	187	25.0	250		74.7	38-132					
Surrogate: n-Nonane	41.6		50.0		83.2	50-200					
Matrix Spike (2435002-MS1)				Source:	E408201-0	01	Prepared: 0	8/26/24 Ana	lyzed: 08/26/24		
Diesel Range Organics (C10-C28)	181	25.0	250	ND	72.4	38-132					
Surrogate: n-Nonane	41.7		50.0		83.3	50-200					
Matrix Spike Dup (2435002-MSD1)				Source:	E408201-0	01	Prepared: 0	8/26/24 Ana	lyzed: 08/26/24		
Diesel Range Organics (C10-C28)	191	25.0	250	ND	76.4	38-132	5.44	20			
Surrogate: n-Nonane	41.7		50.0		83.4	50-200					



Mack Energy 7 W. Compress Road		Project Name: Project Number:		Vest Mount D					Reported:
Artesia NM, 88210		Project Manager	: N	atalie Gladder	ı				8/27/2024 11:30:02AM
		Anions	by EPA 3	300.0/9056 <i>A</i>	1				Analyst: DT
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2435004-BLK1)							Prepared: 0	8/26/24 A	nalyzed: 08/26/24
Chloride	ND	20.0							
LCS (2435004-BS1)							Prepared: 0	8/26/24 A	nalyzed: 08/26/24
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2435004-MS1)				Source:	E408200-0	01	Prepared: 0	8/26/24 A	nalyzed: 08/26/24
Chloride	448	20.0	250	174	109	80-120			
Matrix Spike Dup (2435004-MSD1)				Source:	E408200-0	01	Prepared: 0	8/26/24 A	nalyzed: 08/26/24
Chloride	499	20.0	250	174	130	80-120	10.9	20	M1

#### 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**

Γ	Mack Energy	Project Name:	West Mount D	
l	7 W. Compress Road	Project Number:	20046-0001	Reported:
	Artesia NM, 88210	Project Manager:	Natalie Gladden	08/27/24 11:30

M1 Matrix spike recovery was above acceptance limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Project Information

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Chain of Custody

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oject: West Mount D	Attention: ENERGY STAFFING SERVICE	KS L	LLUD 60 OI				of Individe			1D	2D	, 3D	Standard	CWA	SUVER	
oject Manager:	Address: 2724 NW COUNTY RD	E	F408201 2			10046-0001		1	/			+	RCRA			
ddress:	City, State, Zip HOBBS, NM 88240			-		An	alys	is and	Metho	d			-		1.0	
ty, State, Zip	Phone: 575-393-9048		- Line			a de la constante de la consta	1						-	State	-	
ione:	Email: NATALIE@ENERGYSTAFFINGLIGG	MO	015	970	1	et e							NM &	100000000000000000000000000000000000000	TX	
nail:	Email: NATALL@ENERGYSTAFFINGLLC.COM BRITTNEY@ENERGYSTAFFINGLLC.COM BRITTNEY@ENERGYSTAFFINGLLC															
eport due by:			ORC	OXO	0	78 40	15.60	77		18	0			Remark		
Time Date Matrix No of Sample Sample	1	Lab Vumber	DRO/ORO by 8015	GRO/A	S EX	VOC by 8260	Metals 6010	Chloride 300.0	_	BGDUC	36300	-		Kemark		
08/2 5 1 SP.	Comp. 16-6'	1	1	1	1	1				1	1	-				
	Comp. 17-61	2							_	~	1	-		- Andrew		
	Comp. 18-0'	3									1	-				
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	Comp. 70- 10'	5					grade of the			0	1					
		6		1/2						V	1					
	). Comp. 1 - 6'	7								\	1					
	). Comp. 2-6'	8								1	1					
	2. Comp. 3-6'	9									1	/				
08/22 5 1 514	Sw. Comp. 4-6'										1					
Additional Instructions:	s. Comp. 5-6'		1	.)(		<u></u>	.h	J								
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Date 4	Time Deficient MV (MEDALITE)	Date X-17	124	Time	40	00	Re	eceive	ed on i	e:	Lal		Only			
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Relinit Sished by (Signature)  Relinit Sished by (Signature)				8-23 W 1700 T1 T2 T3  Date Time AVG Temp °C 4												
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samples is applicable only to those samples receive	are reported unless other arrangements are mode ed by the laboratory with this COC. The liability of the laborator	ry is limited	i to th	e amou	nur in	910 101	Ont	116 (154)	MA.	The Research Street			fre	76		

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Chain of Custody

Page Z of Z

Mary Conserva					Bill To	Lab Use Only						1,711					rogram			
Client: Mack Energy Project: W(St Mount D Project Manager: Address: City, State, Zip Phone: Email:			+D		Attention: ENERGY STAFFING SERVICES Address: 2724 NW COUNTY RD City, State, Zip HOBBS, NM 88240 Phone: 575-393-9048 Email: NATALLE@ENERGYSTAFFINGLEC.COM			lab WO# Job				ob Number		1D	2D 3D		D Standard		CWA	SDWA
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eport d	ue by.						2	HCL	20	178	901	20		1	1					1
Time Jampled	Date Sampled	Matrix	No of Containers	Sample ID	Lat Num		DRO/ONO by 8015	GRO/DRO by 8013	BTEX by 8022.	VOC 5y 8260	Metals 6010	Chleride 300.0		RGDUC	30099				Remarks	5
	08/2	5	1	SW. Comp	20-10'	11								~	1					
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Printed: 8/26/2024 8:02:04AM

#### **Envirotech Analytical Laboratory**

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:	Mack Energy	Date Received:	08/26/24	07:00	Work	Order ID:	E408201
Phone:	(575) 390-6397	Date Logged In:	08/23/24	15:43	Logg	ed In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	08/27/24	17:00 (1 day TAT)			
Chair of	Custoda (COC)						
	Custody (COC)		37				
	ne sample ID match the COC? ne number of samples per sampling site location ma	atch the COC	Yes				
	amples dropped off by client or carrier?	ich die COC	Yes	~ . ~			
	• ••	atad amalyaas?	Yes No	Carrier: <u>C</u>	Courier		
	e COC complete, i.e., signatures, dates/times, reque	ested analyses?	Yes				
3. Wele a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted i i.e, 15 minute hold time, are not included in this disucss		108			Comment	s/Resolution
	<u> [urn Around Time (TAT)</u>				D		
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes		Project manage		-
Sample (					missing on CO	C by clie	ent.
	sample cooler received?		Yes				
8. If yes,	was cooler received in good condition?		Yes				
9. Was th	e 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				
	e sample received on ice? If yes, the recorded temp is 4°C Note: Thermal preservation is not required, if samples a minutes of sampling visible ice, record the temperature. Actual sample	re received w/i 15	Yes C				
	Container _		_				
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers	<sub>3</sub> 9	Yes				
	appropriate volume/weight or number of sample contain		Yes				
Field Lal		mers concerca.	105				
	field sample labels filled out with the minimum inf	formation.					
	ample ID?		Yes				
D	ate/Time Collected?		Yes				
C	ollectors name?		No				
Sample F	<u>Preservation</u>						
21. Does	the COC or field labels indicate the samples were p	reserved?	No				
	ample(s) correctly preserved?		NA				
24. Is lab	filteration required and/or requested for dissolved i	metals?	No				
Multipha	se Sample Matrix						
26. Does	the sample have more than one phase, i.e., multipha	ase?	No				
27. If yes	, does the COC specify which phase(s) is to be anal	lyzed?	NA				
Subcontr	act Laboratory						
	amples required to get sent to a subcontract laborate	orv?	No				
	subcontract laboratory specified by the client and	-	NA	Subcontract Lab	o: NA		
Chent II	nstruction_						

Date

SITE PHOTOS: WEST MOUNT SPILL D
REMEDIATION AND FINAL PHOTOS











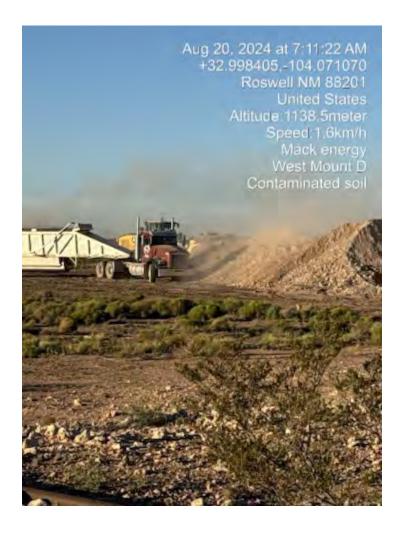


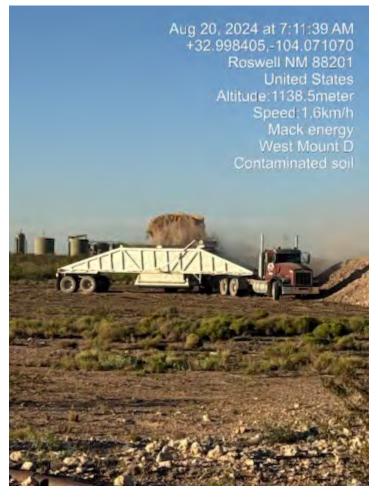




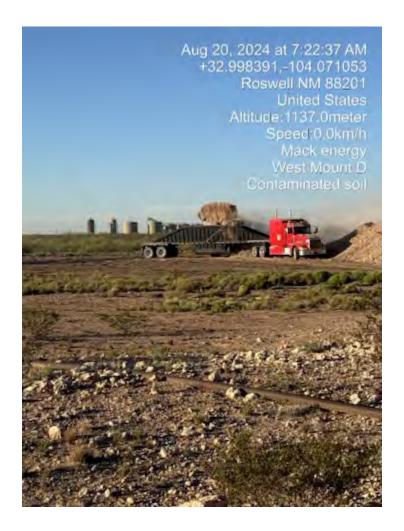


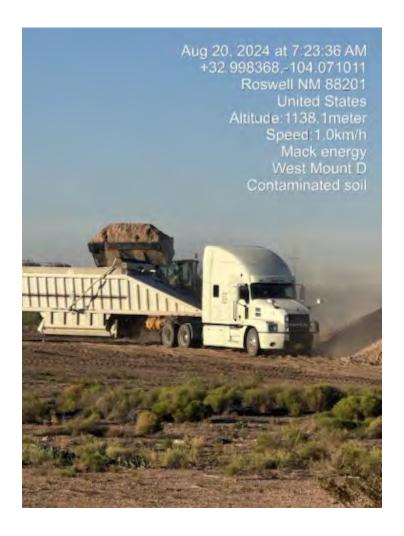


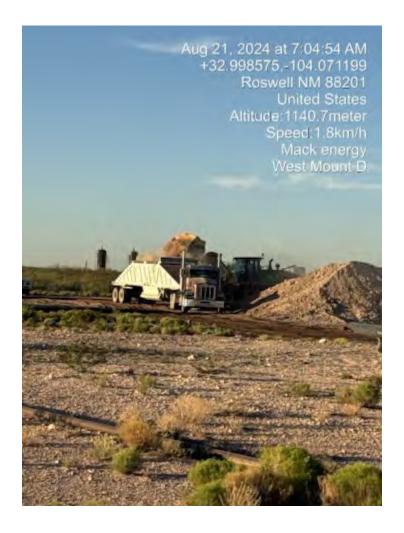


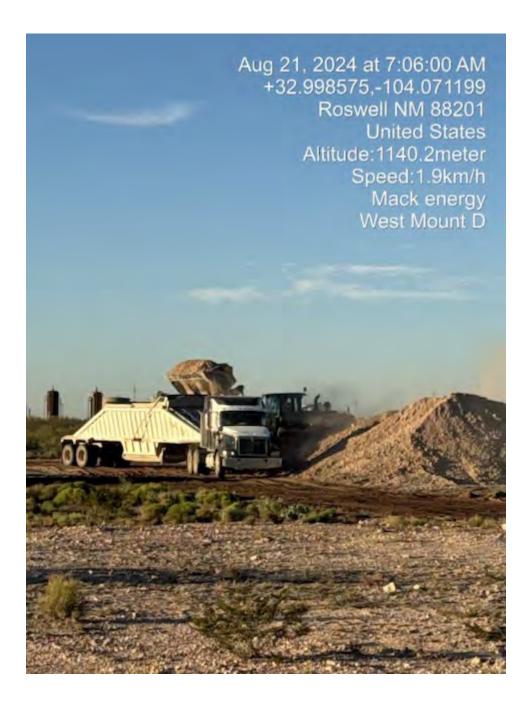


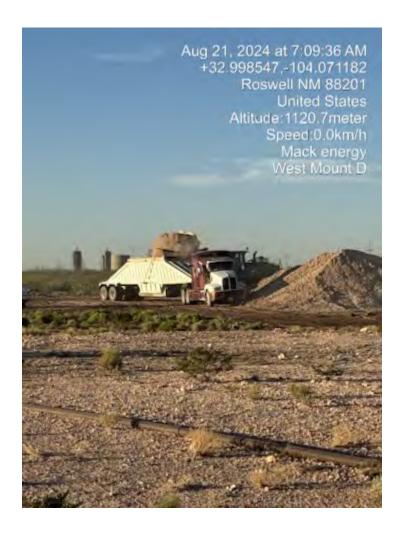


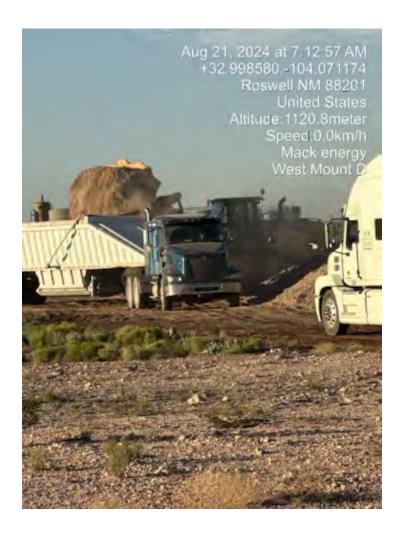


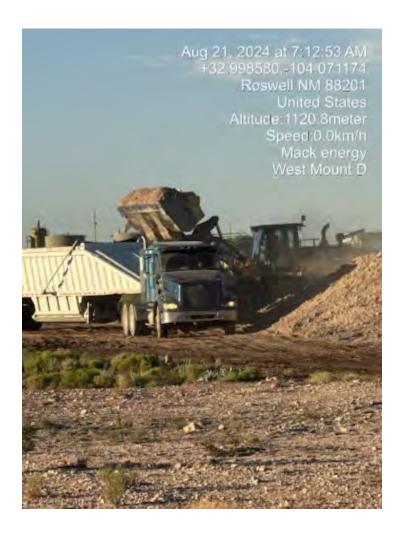






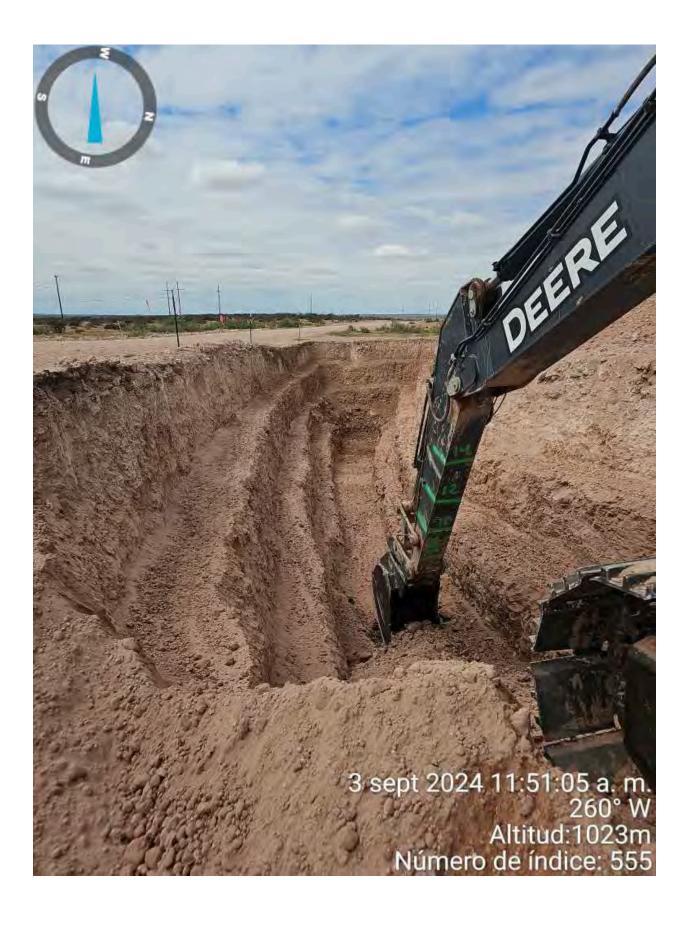






















# MACK ENERGY CORPORATION WEST MOUNT SPILL D RECLAMATION EXECUTIVE SUMMARY

API NO. 30-005-64381
UNIT LETTER N, SECTION 19, TOWNSHIP 15S, RANGE 29E
CHAVES COUNTY, NEW MEXICO

### **Reclamation Executive Summary**

Subject: Final Reclamation Summary – West Mount Spill D (Incident No. NAPP2329138800)

On December 26th, 2024 ESS initiated and completed reclamation activities at the West Mount Spill D site following the finalization of remediation efforts for the release that occurred on September 20, 2023 (Incident Number: NAPP2329138800).

A total of 216 cubic yards of topsoil was loaded and hauled from Kingston's Pit. The topsoil was evenly spread across the entire 3,919 square-foot impacted area. The site was then ripped, contoured, and sloped to match the natural grade. Reseeding was conducted using the Sandy Loam Seed Mix from Curtis and Curtis Seed, which covered the excavation area and disturbed area used for remediation and reclamation efforts consisting of 3,919 square-foot in accordance with State Land Office (SLO) Rules and Regulations.

A five-point composite was taken from the center of the excavation/backfill area located at 32.997533 -104.070702. Please find the reclamation composite map and confirmed lab analysis attached herein.

Final reclamation photos have been included with the Closure Report, which has been uploaded and submitted through the NMOCD Portal. The seed tag associated with the seeding event is also attached for your records.

Should you have any questions or require additional information regarding the completed reclamation activities at the West Mount Spill D site for Mack Energy, please feel free to contact me at (575) 390-6397 or (575) 393-9048, or via email at natalie@energystaffingllc.com.

Sincerely,

Natalie Gladden

**COO and Director of Environmental and Regulatory Services** 

talii Fladder

**Energy Staffing Services, LLC.** 

2724 NW County Road

Hobbs, NM 88240

Cell: 575-390-6397 Office: 575-393-9048

Email: natalie@energystaffingllc.com



### Mack Energy NMSLO Sandy Loam- 1.8 Ac Broadcasted Lot #: 68135

28.29

Item	% Pure Mix	Origin	Purity	Germ	Dormant	Total Germ:	Test Date
Little Bluestem, Aldous	9.72%	Kansas	61.69%	59.GO%	31.00%	90.00%	11/2024
Galleta, Viva	9.30%	Texas	86.14%	21.00%	73.00%	94.00%	9/2024
Blue Grama, Alma	7.36%	Texas	31.75%	94.00%	1.00%	95,00%	10/2024
Sideoats Grama, Niner	7.21%	Texas	71.10%	16:00%	81.00%	97.00%	12/2024
Four-wing Saltbush, Variety Not State	d 7.07%	New Me	xice1.52%	0.00%	0.00%	99.00%	11/2024
Winter Fat, Variety Not Stated	6.66%	New Me	xic <b>48</b> .97%	90.00%	200%	92.00%	8/2024
Palmer Penstemon, Variety Not State	d 3.72%	Utah	98.86%	15.00%	79.00%	94.00%	7/2024
Sand Dropseed, Variety Not Stated	3.61%	Oklahon	na 95.21%	92.00%	5.00%	97.00%	10/2024
Gaillardia Aristata, Variety Not Stated	3.61%	Oregon	89.09%	97.00%	0.00%	97.00%	6/2024
Blue Flax, Appar	3.60%	Washing	tor98.42%	97.00%	0.00%	97.00%	6/2024
Blackeyed Susan, Variety Not Stated	3.53%	Iowa	99.38%	99.00%	0.00%	99,00%	6/2024
Seed Total	65.39%				N.		
					N 3		
Inert Matter:	34.54%					114 .	
Other Crop:	0.08%			NIMEROS	andu Loan	1 9 AC Bros	docated
Weed Seed:	0.01%					n-1.8 AC Broa Bag into 3) 0.	

curtisseed: None

450046641 Primeria Ce, Clovis, NM 8810 1 ded bags @ 28 (575) 762-475







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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 526010

### **QUESTIONS**

Operator:	OGRID:
MACK ENERGY CORP	13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

### QUESTIONS

Prerequisites		
Incident ID (n#)	nAPP2329138800	
Incident Name	NAPP2329138800 WEST MOUNT SPILL D @ 30-005-64381	
Incident Type	Produced Water Release	
Incident Status	Reclamation Report Received	
Incident Well	[30-005-64381] WESTMOUNT FEDERAL COM #001H	

Location of Release Source		
Please answer all the questions in this group.		
Site Name	WEST MOUNT SPILL D	
Date Release Discovered	09/20/2023	
Surface Owner	State	

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

Nature and Volume of Release			
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.			
Crude Oil Released (bbls) Details	Not answered.		
Produced Water Released (bbls) Details	Cause: Human Error   Flow Line - Production   Produced Water   Released: 24 BBL   Recovered: 0 BBL   Lost: 24 BBL.		
Is the concentration of chloride in the produced water >10,000 mg/l	Yes		
Condensate Released (bbls) Details	Not answered.		
Natural Gas Vented (Mcf) Details	Not answered.		
Natural Gas Flared (Mcf) Details	Not answered.		
Other Released Details	Not answered.		
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.		

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

QUESTIONS, Page 2

Action 526010

QUESTIONS	(continued

Operator: MACK ENERGY CORP	OGRID: 13837	
P.O. Box 960 Artesia, NM 882110960	Action Number: 526010 Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)	
,		
QUESTIONS		
Nature and Volume of Release (continued)		
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.	
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No	
Reasons why this would be considered a submission for a notification of a major release	Unavailable.	
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	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 s	afety hazard that would result in injury.	
The source of the release has been stopped	True	
The impacted area has been secured to protect human health and the environment	True	
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True	
All free liquids and recoverable materials have been removed and managed appropriately	True	
If all the actions described above have not been undertaken, explain why	Not answered.	
	ation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.	
to report and/or file certain release notifications and perform corrective actions for releating OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 11/12/2025	

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

QUESTIONS, Page 3

Action 526010

**QUESTIONS** (continued)

Operator:	OGRID:
MACK ENERGY CORP	13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

### QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approva release discovery date.	l and beyond). This information must be provided to the appropriate district office no later than 90 days after the
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (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 ar	nd the following surface areas:
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 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	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to	the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes	
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contaminatio	n associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride (EPA 300.0 or SM4500 CI B)	15000	
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	180.8	
GRO+DRO (EPA SW-846 Method 8015M)	180.8	
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 complete which includes the anticipated timelines for beginning and completing the remediation.	ed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,	
On what estimated date will the remediation commence	08/09/2024	
On what date will (or did) the final sampling or liner inspection occur	08/21/2024	
On what date will (or was) the remediation complete(d)	01/07/2025	
What is the estimated surface area (in square feet) that will be reclaimed	3919	
What is the estimated volume (in cubic yards) that will be reclaimed	580.6	
What is the estimated surface area (in square feet) that will be remediated	3919	
What is the estimated volume (in cubic yards) that will be remediated	1060	
These estimated dates and measurements are recognized to be the best guess or calculation at the	ne time of submission and may (be) change(d) over time as more remediation efforts are completed.	

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

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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# 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 526010

QUESTIONS (continued)

Operator:	OGRID:
MACK ENERGY CORP	13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

### QUESTIONS

Remediation Plan (continued)		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:		
Yes		
fEEM0112338393 GANDY MARLEY LANDFARM/LANDFILL		
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.

Name: Natalie Gladden
Title: Environmental
Email: natalie@energystaffingllc.com

Date: 11/14/2025

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

QUESTIONS, Page 5

Action 526010

**QUESTIONS** (continued)

Operator:	OGRID:
MACK ENERGY CORP	13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

### QUESTIONS

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

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

QUESTIONS, Page 6

Action 526010

**QUESTIONS** (continued)

Operator:	OGRID:
MACK ENERGY CORP	13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

### QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	375250
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/21/2024
What was the (estimated) number of samples that were to be gathered	20
What was the sampling surface area in square feet	3919

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all re	emediation steps have been completed.
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	3919
What was the total volume (cubic yards) remediated	1060
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	3919
What was the total volume (in cubic yards) reclaimed	580.6
Summarize any additional remediation activities not included by answers (above)	none

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Name: Natalie Gladden
Title: Environmental
Email: natalie@energystaffingllc.com
Date: 11/14/2025

General Information Phone: (505) 629-6116

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

QUESTIONS, Page 7

Action 526010

**QUESTIONS** (continued)

Operator:  MACK ENERGY CORP	OGRID: 13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)
QUESTIONS	
Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	3919
What was the total volume of replacement material (in cubic yards) for this site	1396
	of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	01/13/2025
Summarize any additional reclamation activities not included by answers (above)	None
	reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form It field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13
to report and/or file certain release notifications and perform corrective actions for releate the OCD does not relieve the operator of liability should their operations have failed to water, human health or the environment. In addition, OCD acceptance of a C-141 report	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or ially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed ing notification to the OCD when reclamation and re-vegetation are complete.
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com

Date: 11/14/2025

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

QUESTIONS, Page 8

Action 526010

**QUESTIONS** (continued)

Operator:	OGRID:
MACK ENERGY CORP	13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

### QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation oblig	gations have been satisfied.
Requesting a restoration complete approval with this submission	No
Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.	

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

CONDITIONS

Action 526010

### **CONDITIONS**

Operator:	OGRID:
MACK ENERGY CORP	13837
P.O. Box 960	Action Number:
Artesia, NM 882110960	526010
	Action Type:
	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

### CONDITIONS

Created E	4	Condition Date
rhamle	We have received your reclamation/remediation closure report for Incident #NAPP2329138800 WEST MOUNT SPILL D, thank you. The reclamation/remediation closure report is approved.	12/8/2025