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**WEST MOUNT SPILL F  
CLOSURE REQUEST**

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

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**DATE OF RELEASE: 09/20/2023  
INCIDENT NO. NAPP2329733486**

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**11/18/2025  
Prepared by:**



**2724 NW COUNTY ROAD  
HOBBS, NM 88240**

November 18, 2025

New Mexico Energy, Mineral & Natural Resources  
NMOCD District I  
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811 S. First Street  
Artesia, NM 88210

Mack Energy Corporation  
11344 Lovington Hwy  
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**Subject: Closure Request for Mack Energy Corporation- West Mount Spill F**

**API No. 30-005-64381**  
**Incident No. NAPP2329733486**  
**Unit Letter C, Section 30, 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 F site (hereafter referred to as "Spill F"). 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 Form C-141 Release Notification and the spill calculator used to determine the release volume on October 24, 2023 (attachments provided). The NMOCD accepted the Form C-141 as official on the same date at 10:34 a.m. The incident was assigned number NAPP2329733486 (see attached correspondence).

This report provides a comprehensive summary of the spill assessment, site delineation, and remedial activities conducted at Spill F. It confirms that the closure criteria outlined under 19.15.29.12 of the New Mexico Administrative Code (NMAC; New Mexico Oil Conservation Division, 2018) have been met, and that all applicable regulatory requirements have been satisfied. This document serves as the final report submitted to the NMOCD in support of Mack Energy's request for closure of the referenced release.

## Incident Description

On September 20, 2023, Well Spring, a water transfer company, identified a failure in their lay-flat line, which resulted in the release of produced water into the pasture area at Spill F. Upon discovery of the release, ESS was notified and promptly dispatched personnel to the site to perform a comprehensive environmental site assessment. Based on measurements of the impacted area, it was determined that approximately 52.01 barrels of produced water were released, with no recoverable fluid observed, into the pasture area. Initial site photographs and measurements of the affected area were collected. Please refer to the attached initial site photos for additional details.

## Site Characterization

The release at Spill F occurred on State Land, located at latitude 32.993548 and longitude -104.06973, approximately 20.0 miles southeast of Hagerman, New Mexico. The site is legally described as Unit Letter C, Section 30, Township 15S, Range 29E, Chaves County, New Mexico. A schematic of the site is attached.

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

According to the United States Department of Agriculture, Natural Resources Conservation Service (NRCS), the soil in the Spill F area consists entirely of the Tencee-Sotim association (soil map attached). The FEMA National Flood Hazard Layer indicates a 0.2% chance of flooding, 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 F (karst map attached).

There are no surface water bodies in proximity to the site, and it is not located near a continuously flowing watercourse or lakebed within a half-mile radius of the release (watercourse map attached).

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

- **RA12428**, drilled in 2016, well depth 170 ft, groundwater depth 125 ft, located 6,475 meters from the site.
- **RA12429 POD 1**, drilled in 2016, well depth 62 ft, groundwater depth 27 ft, located 8,224 meters from the site.

- **RA09248**, drilled in 1996, well depth 150 ft, groundwater depth 45 ft, located 8,429 meters from the site.
- **RA10280**, drilled in 2002, well depth 70 ft, groundwater depth 40 ft, located 8,583 meters from the site.
- **L14514 POD 1**, drilled in 2018, well depth 208 ft, groundwater depth 77 ft, located 8,686 meters from the site.

An extended groundwater search conducted using the OSE POD Location Mapping System identified no additional wells within a half-mile radius of the release. Relevant NMOSE, OSE POD, and groundwater maps are attached for 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 F 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 F. 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 16, 2023, ESS personnel arrived at the Spill F site to establish delineation sample points, which were accurately located using GPS. Surface samples were collected, field-tested, logged, and submitted to Envirotech Laboratory for confirmation.

A total of 24 vertical sample points and 26 horizontal sample points were established across the impacted area. Samples were collected using a backhoe at 1-foot and 2-foot intervals. Bottom-hole samples were subsequently sent to the laboratory for further analysis and confirmation.

Delineation sample data, including laboratory results highlighted for emphasis, are provided below. Additional sample data, the delineation sample map, and complete laboratory analyses are attached to this report for reference.

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
SP1	SURF	1120	L	ND	ND	ND	ND	ND	998	11/16/2023
	2	480								
	4	800								
	6	320								
	8	160	L	ND	ND	ND	ND	ND	ND	6/19/2024
SP2	SURF	>4000	L	ND	ND	ND	ND	ND	10500	11/16/2023
	2	960								
	4	240								
	6	160	L	ND	ND	ND	ND	ND	ND	6/19/2024

SP3	SURF	240	L	ND	ND	ND	60.3	ND	129	11/16/2023
	2	2160								
	4	240								
	6	480								
	8	240	L	ND	ND	ND	ND	ND	ND	6/19/2024
SP4	SURF	>4000	L	ND	ND	ND	ND	ND	16100	11/16/2023
	2	1120								
	4	640								
	6	400								
	8	240	L	ND	ND	ND	ND	ND	ND	6/19/2024
SP5	SURF	320	L	ND	ND	ND	56	ND	151	11/16/2023
	2	1120								
	4	640								
	6	240								
	8	240	L	ND	ND	ND	ND	ND	ND	6/19/2024
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	23200	11/16/2023
	2	400								
	4	320	L	ND	ND	ND	ND	ND	80.9	6/21/2024
SP7	SURF	>4000	L	ND	ND	ND	ND	ND	14500	11/16/2023
	2	160								
	4	160	L	ND	ND	ND	ND	ND	93.5	6/21/2024
SP8	SURF	3760	L	ND	ND	ND	ND	ND	3780	11/16/2023
	2	2560								
	4	2160								
	6	240								
	8	160	L	ND	ND	ND	ND	ND	87.4	6/21/2024
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	7730	11/16/2023
	2	800								
	4	160								
	6	160	L	ND	ND	ND	ND	ND	34.3	6/19/2024
SP10	SURF	640	L	ND	ND	ND	ND	ND	5740	11/16/2023
	2	240								
	4	160	L	ND	ND	ND	ND	ND	24.7	6/19/2024

SP11	SURF	640	L	ND	ND	28	60.2	88.2	627	11/16/2023
	2	240								
	4	240	L	ND	ND	ND	ND	ND	26.1	6/19/2024
SP12	SURF	2240	H	ND	ND	43.4	108	151.4	4240	11/16/2023
	2	640								
	4	240								
	6	480								
	8	240	L	ND	ND	ND	ND	ND	123	6/19/2024
SP13	SURF	640	H	ND	ND	29.8	88.8	118.6	535	11/16/2023
	2	640								
	4	400								
	6	240	L	ND	ND	ND	ND	ND	ND	6/19/2024
SP14	SURF	>4000	L	ND	ND	27.4	60.8	88.2	12800	11/16/2023
	2	240								
	4	160	L	ND	ND	ND	ND	ND	132	6/19/2024
SP15	SURF	>4000	H	ND	ND	38.3	101	139.3	5450	11/16/2023
	2	240								
	4	480								
	6	240								
	8	160	L	ND	ND	ND	ND	ND	33.9	6/19/2024
SP16	SURF	>4000	L	ND	ND	ND	ND	ND	5670	11/16/2023
	2	160								
	4	160	L	ND	ND	ND	ND	ND	37.8	6/21/2024
SP17	SURF	1440	H	ND	ND	255	ND	255	2110	11/16/2023
	2	400								
	4	160	L	ND	ND	ND	ND	ND	36.2	6/21/2024
SP18	SURF	>4000	H	ND	ND	80.6	170	250.6	12100	11/16/2023
	2	240								
	4	240	L	ND	ND	ND	ND	ND	ND	6/21/2024
SP19	SURF	2320	H	ND	ND	72.5	176	248.5	2600	11/16/2023
	2	400								
	4	160	L	ND	ND	ND	ND	ND	43.7	6/24/2024

SP20	SURF	240	L	ND	ND	ND	ND	ND	205	11/16/2023
	2	560								
	4	240								
	6	160	L	ND	ND	ND	ND	ND	27.8	6/24/2024
SP21	SURF	>4000	L	ND	ND	ND	ND	ND	6230	11/16/2023
	2	1200								
	4	1760								
	6	1280								
	8	160								
	10	160	L	ND	ND	ND	ND	ND	116	6/24/2024
SP22	SURF	400	L	ND	ND	ND	ND	ND	31.7	11/16/2023
	2	480								
	4	400	L	ND	ND	ND	ND	ND	336	6/24/2024
SP23	SURF	880	L	ND	ND	27	ND	27	36	11/16/2023
	2	800								
	4	2640								
	6	560								
	8	160	L	ND	ND	ND	ND	ND	301	6/24/2024
SP24	SURF	400	H	ND	ND	56.8	114	170.8	54.4	11/16/2023
	2	560								
	4	400								
	6	240	L	ND	ND	ND	ND	ND	235	6/24/2024
SW1	SURF	160	L	ND	ND	ND	ND	ND	ND	11/16/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	43.8	6/19/2024
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	4050	11/16/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	27.3	6/19/2024
SW3	SURF	2800	H	ND	ND	38.2	82.4	120.6	3150	11/16/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	22.9	6/19/2024
SW4	SURF	400	L	ND	ND	ND	ND	ND	ND	11/16/2023
	1	400								



	2	160	L	ND	ND	ND	ND	ND	ND	6/19/2024
SW5	SURF	>4000	L	ND	ND	ND	ND	ND	4700	11/16/2023
	1	240								
	2	160	L	ND	ND	ND	ND	ND	28.4	6/20/2024
SW6	SURF	1320	L	ND	ND	ND	59.3	59.3	1220	11/16/2023
	1	160								
	2	80	L	ND	ND	ND	ND	ND	ND	6/21/2024
SW7	SURF	160	H	ND	ND	39.7	94.7	134.4	ND	11/16/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	ND	6/21/2024
SW8	SURF	240	L	ND	ND	ND	ND	ND	ND	11/16/2023
	1	160								
	2	80	L	ND	ND	ND	ND	ND	ND	6/20/2024
SW9	SURF	160	L	ND	ND	ND	ND	ND	68.3	11/16/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	ND	6/20/2024
SW10	SURF	160	H	ND	ND	63.4	122	185.4	76.2	11/16/2023
	1	160								
	2	80	L	ND	ND	ND	ND	ND	ND	6/20/2024
SW11	SURF	240	H	ND	ND	32.7	90.3	123	244	11/16/2023
	1	80								
	2	80	L	ND	ND	ND	ND	ND	ND	6/20/2024
SW12	SURF	160	H	ND	ND	64.7	167	231.7	41	11/16/2023
	1	80								
	2	80	L	ND	ND	ND	ND	ND	ND	6/20/2024
SW13	SURF	160	H	ND	ND	56.5	153	209.5	108	11/16/2023
	1	240								
	2	160	L	ND	ND	ND	ND	ND	54.7	6/20/2024
SW14	SURF	160	H	ND	ND	37.1	159	196.1	162	11/16/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	28.2	6/20/2024

SW15	SURF	160	H	ND	ND	31.8	95.4	127.2	117	11/16/2023
	1	480								
	2	320	L	ND	ND	ND	ND	ND	341	6/21/2024
SW16	SURF	400	H	ND	ND	59.9	102	161.9	461	11/16/2023
	1	720								
	2	640								
	3	640								
	4	400								
	5	240	L	ND	ND	ND	ND	ND	244	6/21/2024
SW17	SURF	1120	H	ND	ND	64	131	195	1160	11/16/2023
	1	640								
	2	240								
	3	160	L	ND	ND	ND	ND	ND	128	6/21/2024
SW18	SURF	160	H	ND	ND	27.6	86	113.6	168	11/16/2023
	1	320								
	2	240	L	ND	ND	ND	ND	ND	245	6/21/2024
SW19	SURF	160	H	ND	ND	34.4	85.2	119.6	86.4	11/16/2023
	1	240								
	2	160	L	ND	ND	ND	ND	ND	130	6/21/2024
SW20	SURF	160	H	ND	ND	43.6	105	148.6	ND	11/16/2023
	1	240								
	2	240	L	ND	ND	ND	ND	ND	ND	6/21/2024
SW21	SURF	2800	H	ND	ND	91.9	231	322.9	2640	11/16/2023
	1	160								
	2	80	L	ND	ND	ND	ND	ND	ND	6/21/2024
SW22	SURF	80	L	ND	ND	ND	ND	ND	22.6	11/16/2023
	1	320								
	2	240	L	ND	ND	ND	ND	ND	ND	6/21/2024
SW23	SURF	160	H	ND	ND	55.5	112	167.5	ND	11/16/2023
	1	240								
	2	160	L	ND	ND	ND	ND	ND	ND	6/24/2024

SW24	SURF	80	L	ND	ND	ND	ND	ND	ND	11/16/2023
	1	240								
	2	160	L	ND	ND	ND	ND	ND	27.3	6/24/2024
SW25	SURF	80	L	ND	ND	ND	ND	ND	ND	11/16/2023
	1	160								
	2	160	L	ND	ND	ND	ND	ND	ND	6/24/2024
SW26	SURF	>4000	L	ND	ND	ND	ND	ND	4390	11/16/2023
	1	480								
	2	400								
	3	160	L	ND	ND	ND	ND	ND	ND	6/24/2024

Please find the delineation photos attached to this report.

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

On August 26, 2024, ESS crews began collecting 200 square foot composite samples from the excavation area at Spill F. In total, 67 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- BTX	L- GRO	L- DRO	L- ORO	L- TPH	L- CHL	Dates
COMP1	6	160	L	ND	ND	ND	ND	ND	36.5	8/26/2024
COMP2	6	240	L	ND	ND	ND	ND	ND	67.2	8/26/2024
COMP3	6	160	L	ND	ND	ND	ND	ND	34.6	8/26/2024
COMP4	6	160	L	ND	ND	ND	ND	ND	33.2	8/26/2024
COMP5	6	240	L	ND	ND	ND	ND	ND	57.7	8/26/2024
COMP6	10	160	L	ND	ND	ND	ND	ND	ND	8/26/2024
COMP7	10	160	L	ND	ND	ND	ND	ND	ND	8/26/2024
COMP8	8	240	L	ND	ND	ND	ND	ND	56.1	8/26/2024



COMP9	8	240	L	ND	ND	ND	ND	ND	34.2	8/26/2024
COMP10	10	160	L	ND	ND	ND	ND	ND	ND	8/26/2024
COMP11	8	240	L	ND	ND	ND	ND	ND	43.8	8/26/2024
COMP12	10	160	L	ND	ND	ND	ND	ND	127	8/26/2024
COMP13	10	160	L	ND	ND	ND	ND	ND	ND	8/26/2024
COMP14	10	160	L	ND	ND	ND	ND	ND	133	8/26/2024
COMP15	8	160	L	ND	ND	ND	ND	ND	131	8/26/2024
COMP16	6	160	L	ND	ND	ND	ND	ND	32.8	8/27/2024
COMP17	4	160	L	ND	ND	ND	ND	ND	34.3	8/27/2024
COMP18	4	160	L	ND	ND	ND	ND	ND	38.3	8/27/2024
COMP19	4	160	L	ND	ND	ND	ND	ND	38.3	8/27/2024
COMP20	4	160	L	ND	ND	ND	ND	ND	40.5	8/27/2024
COMP21	4	160	L	ND	ND	ND	ND	ND	40.8	8/27/2024
COMP22	4	160	L	ND	ND	ND	ND	ND	35.2	8/27/2024
COMP23	4	160	L	ND	ND	ND	ND	ND	35.3	8/27/2024
COMP24	2	160	L	ND	ND	ND	ND	ND	41.4	8/27/2024
COMP25	2	160	L	ND	ND	ND	ND	ND	36.6	8/27/2024
COMP26	4	160	L	ND	ND	ND	ND	ND	37.9	8/27/2024
COMP27	6	160	L	ND	ND	ND	ND	ND	42.4	8/27/2024
COMP28	6	160	L	ND	ND	ND	ND	ND	42.3	8/27/2024

COMP29	4	160	L	ND	ND	ND	ND	ND	37.1	8/27/2024
COMP30	2	160	L	ND	ND	ND	ND	ND	40.5	8/27/2024
COMP31	8	240	L	ND	ND	ND	ND	ND	ND	8/28/2024
COMP32	8	240	L	ND	ND	ND	ND	ND	ND	8/28/2024
COMP33	8	240	L	ND	ND	ND	ND	ND	25.7	8/28/2024
COMP34	8	240	L	ND	ND	ND	ND	ND	23.6	8/28/2024
COMP35	8	240	L	ND	ND	ND	ND	ND	22.9	8/28/2024
COMP36	2	240	L	ND	ND	ND	ND	ND	20.4	8/28/2024
COMP37	2	240	L	ND	ND	ND	ND	ND	20.6	8/28/2024
COMP38	2	240	L	ND	ND	ND	ND	ND	ND	8/28/2024
SWCOMP1	6	160	L	ND	ND	ND	ND	ND	20.6	8/28/2024
SWCOMP2	6	160	L	ND	ND	ND	ND	ND	23.5	8/28/2024
SWCOMP3	6	160	L	ND	ND	ND	ND	ND	24	8/28/2024
SWCOMP4	8	160	L	ND	ND	ND	ND	ND	22.5	8/28/2024
SWCOMP5	8	160	L	ND	ND	ND	ND	ND	45.9	8/28/2024
SWCOMP6	8	160	L	ND	ND	ND	ND	ND	44.6	8/28/2024
SWCOMP7	4	160	L	ND	ND	ND	ND	ND	44.8	8/28/2024
SWCOMP8	4	160	L	ND	ND	ND	ND	ND	25.6	8/28/2024
SWCOMP9	4	160	L	ND	ND	ND	ND	ND	26.2	8/28/2024
SWCOMP10	4	160	L	ND	ND	ND	ND	ND	26.7	8/28/2024
SWCOMP11	6	160	L	ND	ND	ND	ND	ND	37.3	8/29/2024

SWCOMP12	4	160	L	ND	ND	ND	ND	ND	40.6	8/29/2024
SWCOMP13	8	160	L	ND	ND	ND	ND	ND	37.4	8/29/2024
SWCOMP14	8	160	L	ND	ND	ND	ND	ND	38.3	8/29/2024
SWCOMP15	8	160	L	ND	ND	ND	ND	ND	34	8/29/2024
SWCOMP16	8	160	L	ND	ND	ND	ND	ND	35.3	8/29/2024
SWCOMP17	2	160	L	ND	ND	ND	ND	ND	37.3	8/29/2024
SWCOMP18	6	160	L	ND	ND	ND	ND	ND	36.2	8/29/2024
SWCOMP19	4	160	L	ND	ND	ND	ND	ND	38.1	8/29/2024
SWCOMP20	4	160	L	ND	ND	ND	ND	ND	37.8	8/29/2024
SWCOMP21	4	160	L	ND	ND	ND	ND	ND	38.3	8/29/2024
SWCOMP22	4	160	L	ND	ND	ND	ND	ND	37.1	8/29/2024
SWCOMP23	10	160	L	ND	ND	ND	ND	ND	25.6	8/30/2024
SWCOMP24	10	160	L	ND	ND	ND	ND	ND	26.6	8/30/2024
SWCOMP25	10	160	L	ND	ND	ND	ND	ND	31.3	8/30/2024
SWCOMP26	10	160	L	ND	ND	ND	ND	ND	26.5	8/30/2024
SWCOMP27	10	160	L	ND	ND	ND	ND	ND	26.7	8/30/2024
SWCOMP28	10	160	L	ND	ND	ND	ND	ND	27.6	8/30/2024
SWCOMP29	10	160	L	ND	ND	ND	ND	ND	26.3	8/30/2024

Remediation photographs are attached to this report for reference.

The impacted area at Spill F measured approximately 7,087 square feet. During the remediation phase, a total of 2,540 cubic yards of contaminated soil was excavated and transported to

Gandy's Disposal for proper disposal. Additionally, 2,740 cubic yards of caliche were hauled from Gandy's Disposal to the site for backfilling, along with 636 cubic yards of topsoil sourced from the landowner's pit.

The site was contoured and sloped back to its natural grade, followed by reseeding. Backfilling and seeding activities were completed on January 14, 2025. Final post-remediation photographs are attached to this report.

### Closure Request

On behalf of Mack Energy, Energy Staffing Services, LLC (ESS) respectfully requests closure of incident NAPP2329733486, related to the produced water release at the West Mount Spill F pasture area. Mack Energy and ESS certify that all information provided in this report is accurate and complete, and that all applicable closure requirements for this release have been satisfied in accordance with NMOCD regulations.

For any questions or additional information regarding this closure request, please contact the undersigned at (575) 390-6397 or (575) 393-9048. Alternatively, inquiries may be sent via email to [natalie@energystaffingllc.com](mailto:natalie@energystaffingllc.com).

Sincerely,



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](mailto: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  
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  
Reclamation Executive Report



## 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 <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**

**Email: [natalie@energystaffingllc.com](mailto:natalie@energystaffingllc.com)**



**From:** Natalie Gladden

**Sent:** Tuesday, September 26, 2023 2:39 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:** 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](mailto:natalie@energystaffingllc.com)**



**From:** Natalie Gladden

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

**To:** ocdonline, emnrd, EMNRD <[EMNRD.OCDOnline@state.nm.us](mailto:EMNRD.OCDOnline@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)>; Velez, Nelson, EMNRD <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>; CFO\_Spill, BLM\_NM <[BLM\\_NM\\_CFO\\_Spill@blm.gov](mailto:BLM_NM_CFO_Spill@blm.gov)>; Amos, James A <[JAMOS@BLM.GOV](mailto:JAMOS@BLM.GOV)>; [staylor@blm.gov](mailto:staylor@blm.gov)

**Cc:** [mattbuckles@mec.com](mailto: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	
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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	
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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	
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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](mailto: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	NAPP2329733486
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party <b>MACK ENERGY CORPORATION</b>	OGRID <b>013837</b>
Contact Name <b>MATT BUCKLES</b>	Contact Telephone <b>575-703-1958</b>
Contact email <b>mattbuckles@mec.com</b>	Incident # (assigned by OCD)
Contact mailing address <b>11344 Lovington Highway, Artesia NM 88210</b>	

### Location of Release Source

Latitude **32.993548**Longitude **-104.06973**

(NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>WEST MOUNT SPILL F</b>	Site Type <b>PRODUCTION AREA</b>
Date Release Discovered <b>9/20/2023</b>	API# (if applicable) <b>30-005-64381</b>

Unit Letter	Section	Township	Range	County
<b>C</b>	<b>30</b>	<b>15S</b>	<b>29E</b>	<b>CHAVES</b>

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

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) <b>52.01</b>	Volume Recovered (bbls) <b>0BBLS</b>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The water transfer company Well Spring found a failure on their lay flat line, releasing the fluid to the pasture area.

Form C-141

State of New Mexico

Page 2

Oil Conservation Division

Incident ID	NAPP2329733486
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**

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  
**Email was sent to the OCD, Bratcher, Hamlet, Venegas, on 9/22 at 4:12pm**

## Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*


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

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

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

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

Printed Name: NATALIE GLADDEN Title: DIRECTOR OF ENVIRONMENTAL AND REGULATORY

Signature:  Date: 10/24/23

email: natalie@energystaffingll.com

Telephone: 575-390-6397

### OCD Only

Received by: Shelly Wells

Date: 10/24/2023

## MACK ENERGY - WEST MOUNT SPILL F

Soil Type	Porosity	Length	Width	Depth (.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	384.12	36.61	0.083	1167.1986	52.01	Medium Sand
Coarse Sand	0.26	10	10	0.083	8.3	0.38	Coarse Sand
Gravelly Sand	0.26	10	10	0.083	8.3	0.38	Gravelly 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	X	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 required (i.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)

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

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

CONDITIONS

Action 278718

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 278718
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS



Created By	Condition	Condition Date
scwells	None	10/24/2023



**MACK ENERGY**

WEST MOUNT SPILL F  
IMPACT MAP

**Legend**

-  Mack Energy- West Mount Spill F- 7087 SQ. FT.
-  WEST MOUNT SPILL F





**MACK ENERGY: WEST MOUNT SPILL F  
INITIAL SITE PHOTOS**

























## 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](#).

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

WEST MOUNT SPILL F

## 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 name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition		
		Favorable year	Normal year	Unfavorable year			Rangeland	Forest understory
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct dry wt</i>	<i>Pct dry wt</i>	
Aa—Alama loam								
Alama	Loamy (R070BC007NM)	1,200	—	650	Adonis blazingstar	30		
					black grama	15		
					other perennial grasses	15		
					blue grama	10		
					bush muhly	5		
					little bluestem	5		
					other shrubs	5		
					other perennial forbs	5		
					rabo de ardilla	5		
					threeawn	5		
					yucca	5		



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

6/4/2024  
Page 3 of 4

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

WEST MOUNT SPILL F

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition—Chaves County, New Mexico, Southern Part								
Map unit symbol and soil name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition		
		Favorable year	Normal year	Unfavorable year			Rangeland	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 (R070BB006NM)	800	600	375	alkali sacaton	45		
					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



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

6/4/2024  
Page 4 of 4

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



Natural Resources  
Conservation Service


Web Soil Survey  
National Cooperative Soil Survey

6/4/2024  
Page 1 of 3


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


## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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	9.6	100.0%
Totals for Area of Interest		9.6	100.0%

# National Flood Hazard Layer FIRMette



104°4'30"W 32°59'52"N



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

1:6,000

104°3'52"W 32°59'22"N

## Legend

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

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



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/4/2024 at 5:20 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.





**Legend**

- High
- Low
- Medium
- WEST MOUNT SPILL F





**MACK ENERGY**

WEST MOUNT SPILL E  
WETLANDS MAP

**Legend**

- PEM
- RIVERINE
- WEST MOUNT SPILL E







 WEST MOUNT SPILL F





# New Mexico Office of the State Engineer

## Wells with Well Log Information

No wells found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 586909.84

**Northing (Y):** 3650955.9

**Radius:** 1000

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.

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WELLS WITH WELL LOG INFORMATION



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 586909.84

Northing (Y): 3650955.9

Radius: 5000

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# New Mexico Office of the State Engineer

## Wells with Well Log Information

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

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

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

(NAD83 UTM in meters)

(in feet)

POD Number	POD			Source	q q q				X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number		
	Sub-Code	basin	County		6416	4	Sec	Tws											Rng	
<a href="#">RA 12428</a>	RA	CH	Shallow	4	2	1	21	15S	28E	580579	3652317		6475	07/28/2016	08/04/2016	08/08/2016	170	125	DONALD KUEHN III	1058
<a href="#">RA 12429 POD1</a>	RA	CH	Shallow	1	1	4	32	15S	28E	579093	3648401		8224	11/17/2016	11/17/2016	11/28/2016	62	27	EADES, ALAN	1044
<a href="#">RA 09248</a>	RA	CH	Shallow	1	4	3	17	15S	28E	578704	3652884*		8429	07/10/1996	07/13/1996	07/25/1996	150	45	RAYMOND ANDERSON	1344
<a href="#">RA 10280</a>	RA	CH	Shallow	4	3	3	17	15S	28E	578501	3652680*		8583	06/20/2002	07/15/2002	04/23/2003	70	40	CARREON, FERNANDO	1490
<a href="#">L 14514 POD1</a>	L	LE	Shallow	2	2	1	32	15S	36E	595494	3649622		8686	08/09/2018	08/10/2018	08/17/2018	208	77	JOHN GOERTZEN	1611
<a href="#">RA 09059</a>	RA	CH	Shallow	2	4	4	18	15S	28E	578099	3652875*		9017	11/13/1995	01/15/1996	02/08/1997	110	35	RAYMOND ANDERSON	1344

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 586909.84

Northing (Y): 3650955.9

Radius: 10000

\*UTM location was derived from PLSS - see Help

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# 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	580579	3652317

<b>Driller License:</b> 1058	<b>Driller Company:</b> KEY'S DRILLING & PUMP SERVICE
<b>Driller Name:</b> DONALD KUEHN III	
<b>Drill Start Date:</b> 07/28/2016	<b>Drill Finish Date:</b> 08/04/2016
<b>Log File Date:</b> 08/08/2016	<b>PCW Rcv Date:</b>
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>
<b>Casing Size:</b> 4.50	<b>Depth Well:</b> 170 feet
	<b>Plug Date:</b>
	<b>Source:</b> Shallow
	<b>Estimated Yield:</b> 15 GPM
	<b>Depth Water:</b> 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

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POD SUMMARY - RA 12428



# 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

<b>Driller License:</b> 1044	<b>Driller Company:</b> EADES WELL DRILLING & PUMP SERVICE
<b>Driller Name:</b> EADES, ALAN	
<b>Drill Start Date:</b> 11/17/2016	<b>Drill Finish Date:</b> 11/17/2016
<b>Log File Date:</b> 11/28/2016	<b>PCW Rcv Date:</b>
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>
<b>Casing Size:</b> 5.13	<b>Depth Well:</b> 62 feet
	<b>Depth Water:</b> 27 feet

Water Bearing Stratifications:	Top	Bottom	Description
	27	33	Sandstone/Gravel/Conglomerate
	33	62	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	22	62

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POD SUMMARY - RA 12429 POD1





# 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 09248	1	4	3	17	15S	28E	578704	3652884*

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

**Driller Name:** RAYMOND ANDERSON

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

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

**Plug Date:**

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

**PCW Rcv Date:**

**Source:** Shallow

**Pump Type:**

**Pipe Discharge Size:**

**Estimated Yield:** 2 GPM

**Casing Size:** 4.50

**Depth Well:** 150 feet

**Depth Water:** 45 feet

### Water Bearing Stratifications:

### Top Bottom Description

50	60	Sandstone/Gravel/Conglomerate
----	----	-------------------------------

### Casing Perforations:

### Top Bottom

45	100
----	-----

\*UTM location was derived from PLSS - see Help

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POD SUMMARY - RA 09248



# 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*

<b>Driller License:</b> 1490	<b>Driller Company:</b> FERNANDO'S WATER WELL
<b>Driller Name:</b> CARREON, FERNANDO	
<b>Drill Start Date:</b> 06/20/2002	<b>Drill Finish Date:</b> 07/15/2002
<b>Log File Date:</b> 04/23/2003	<b>PCW Rcv Date:</b>
<b>Pump Type:</b> SUBMER	<b>Pipe Discharge Size:</b> 1.25
<b>Casing Size:</b> 5.00	<b>Depth Well:</b> 70 feet
	<b>Depth Water:</b> 40 feet

Water Bearing Stratifications:	Top	Bottom	Description
	1	70	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	40	70

\*UTM location was derived from PLSS - see Help

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POD SUMMARY - RA 10280



# 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
20765	L 14514 POD1	2	2	1	32	15S	36E	595494	3649622 

**Driller License:** 1611 **Driller Company:** GOERTZEN DRILLING

**Driller Name:** JOHN GOERTZEN

**Drill Start Date:** 08/09/2018

**Drill Finish Date:** 08/10/2018

**Plug Date:**

**Log File Date:** 08/17/2018

**PCW Rcv Date:**

**Source:** Shallow

**Pump Type:**

**Pipe Discharge Size:**

**Estimated Yield:**

**Casing Size:** 5.00

**Depth Well:** 208 feet

**Depth Water:** 77 feet

### Water Bearing Stratifications:

Top	Bottom	Description
104	125	Sandstone/Gravel/Conglomerate
125	150	Sandstone/Gravel/Conglomerate
150	160	Sandstone/Gravel/Conglomerate
162	175	Other/Unknown
175	185	Sandstone/Gravel/Conglomerate
185	202	Sandstone/Gravel/Conglomerate
202	205	Other/Unknown
205	208	Other/Unknown

### Casing Perforations:

Top	Bottom
0	208

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POD SUMMARY - L 14514 POD1



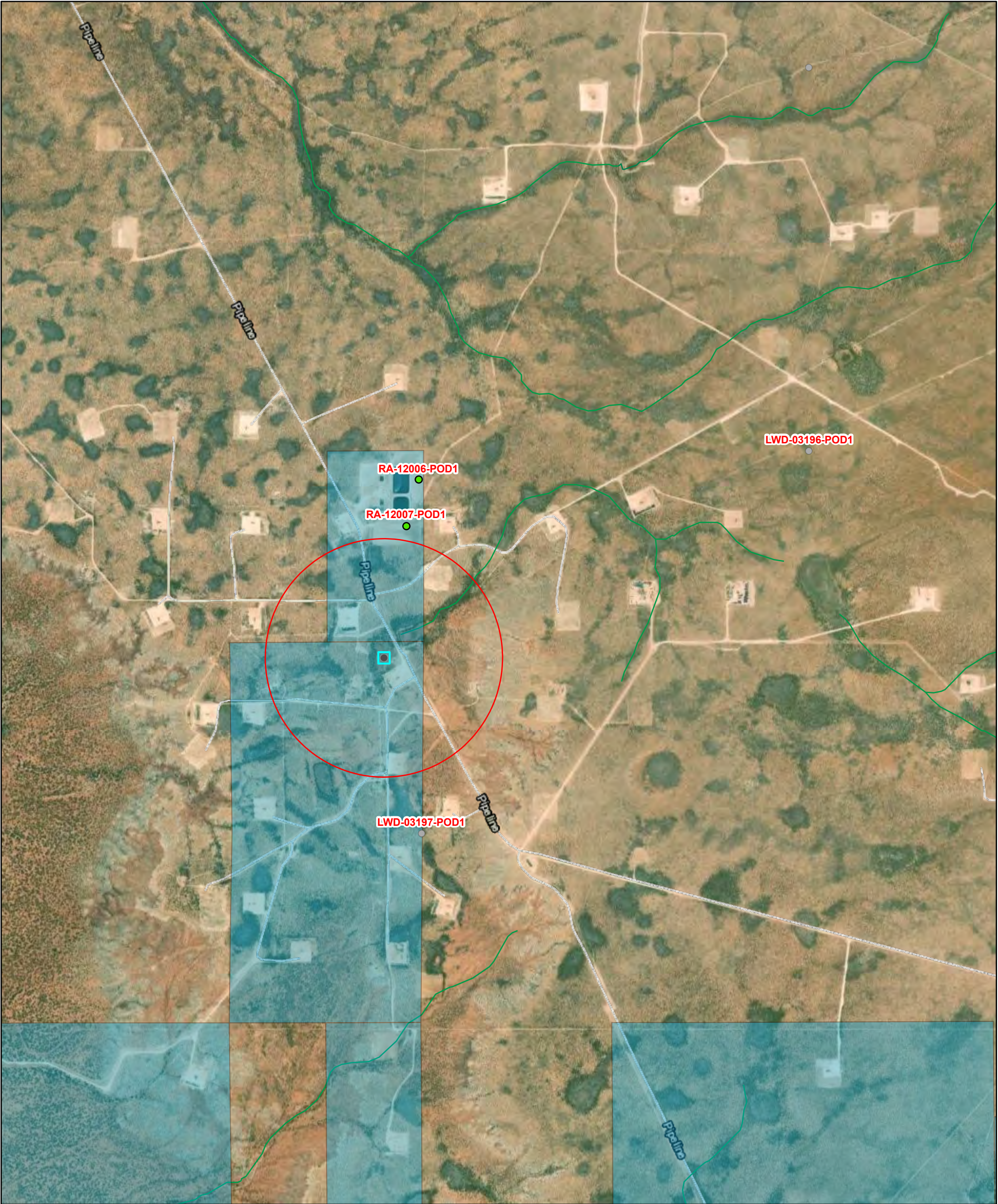
**Legend**

- L14514 POD1-8,686-77 FT
- RA09248-8,429-45 FT
- RA10280-8,583-40 FT
- RA12428-6,475-125 FT
- RA12429 POD1-8,224-27 FT
- WEST MOUNT SPILL F





# OSE POD Location Map



6/21/2024, 12:12:06 PM

GIS WATERS PODs

- Pending
- 

OSE District Boundary

New Mexico State Trust Lands

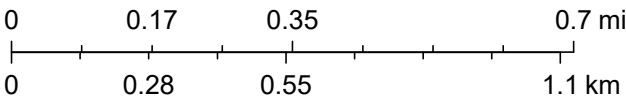
Both Estates

NHD Flowlines

— Artificial Path

— Stream River

1:18,056



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



**Company Name: MACK****Location Name: WEST MOUNT SPILL F****Release Date:**

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Soil	Notes
SP1	SURF	1120	L	ND	ND	ND	ND	ND	998		
	2	480									
	4	800									
	6	320									
	8	160	L	ND	ND	ND	ND	ND	ND		
SP2	SURF	>4000	L	ND	ND	ND	ND	ND	10500		
	2	960									
	4	240									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP3	SURF	240	L	ND	ND	ND	60.3	ND	129		
	2	2160									
	4	240									
	6	480									
	8	240	L	ND	ND	ND	ND	ND	ND		
SP4	SURF	>4000	L	ND	ND	ND	ND	ND	16100		
	2	1120									
	4	640									
	6	400									
	8	240	L	ND	ND	ND	ND	ND	ND		
SP5	SURF	320	L	ND	ND	ND	56	ND	151		
	2	1120									
	4	640									
	6	240									
	8	240	L	ND	ND	ND	ND	ND	ND		
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	23200		
	2	400									

	4	320	L	ND	ND	ND	ND	ND	80.9		
SP7	SURF	>4000	L	ND	ND	ND	ND	ND	14500		
	2	160									
	4	160	L	ND	ND	ND	ND	ND	93.5		
SP8	SURF	3760	L	ND	ND	ND	ND	ND	3780		
	2	2560									
	4	2160									
	6	240									
	8	160	L	ND	ND	ND	ND	ND	87.4		
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	7730		
	2	800									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	34.3		
SP10	SURF	640	L	ND	ND	ND	ND	ND	5740		
	2	240									
	4	160	L	ND	ND	ND	ND	ND	24.7		
SP11	SURF	640	L	ND	ND	28	60.2	88.2	627		
	2	240									
	4	240	L	ND	ND	ND	ND	ND	26.1		
SP12	SURF	2240	H	ND	ND	43.4	108	151.4	4240		
	2	640									
	4	240									
	6	480									
	8	240	L	ND	ND	ND	ND	ND	123		
SP13	SURF	640	H	ND	ND	29.8	88.8	118.6	535		
	2	640									
	4	400									



	6	240	L	ND	ND	ND	ND	ND	ND		
SP14	SURF	>4000	L	ND	ND	27.4	60.8	88.2	12800		
	2	240									
	4	160	L	ND	ND	ND	ND	ND	132		
SP15	SURF	>4000	H	ND	ND	38.3	101	139.3	5450		
	2	240									
	4	480									
	6	240									
	8	160	L	ND	ND	ND	ND	ND	33.9		
SP16	SURF	>4000	L	ND	ND	ND	ND	ND	5670		
	2	160									
	4	160	L	ND	ND	ND	ND	ND	37.8		
SP17	SURF	1440	H	ND	ND	255	ND	255	2110		
	2	400									
	4	160	L	ND	ND	ND	ND	ND	36.2		
SP18	SURF	>4000	H	ND	ND	80.6	170	250.6	12100		
	2	240									
	4	240	L	ND	ND	ND	ND	ND	ND		
SP19	SURF	2320	H	ND	ND	72.5	176	248.5	2600		
	2	400									
	4	160	L	ND	ND	ND	ND	ND	43.7		
SP20	SURF	240	L	ND	ND	ND	ND	ND	205		
	2	560									
	4	240									
	6	160	L	ND	ND	ND	ND	ND	27.8		
SP21	SURF	>4000	L	ND	ND	ND	ND	ND	6230		

	2	1200									
	4	1760									
	6	1280									
	8	160									
	10	160	L	ND	ND	ND	ND	ND	116		
SP22	SURF	400	L	ND	ND	ND	ND	ND	31.7		
	2	480									
	4	400	L	ND	ND	ND	ND	ND	336		
SP23	SURF	880	L	ND	ND	27	ND	27	36		
	2	800									
	4	2640									
	6	560									
	8	160	L	ND	ND	ND	ND	ND	301		
SP24	SURF	400	H	ND	ND	56.8	114	170.8	54.4		
	2	560									
	4	400									
	6	240	L	ND	ND	ND	ND	ND	235		
SW1	SURF	160	L	ND	ND	ND	ND	ND	ND		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	43.8		
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	4050		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	27.3		
SW3	SURF	2800	H	ND	ND	38.2	82.4	120.6	3150		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	22.9		
SW4	SURF	400	L	ND	ND	ND	ND	ND	ND		

	1	400									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW5	SURF	>4000	L	ND	ND	ND	ND	ND	4700		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	28.4		
SW6	SURF	1320	L	ND	ND	ND	59.3	59.3	1220		
	1	160									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW7	SURF	160	H	ND	ND	39.7	94.7	134.4	ND		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW8	SURF	240	L	ND	ND	ND	ND	ND	ND		
	1	160									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW9	SURF	160	L	ND	ND	ND	ND	ND	68.3		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW10	SURF	160	H	ND	ND	63.4	122	185.4	76.2		
	1	160									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW11	SURF	240	H	ND	ND	32.7	90.3	123	244		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW12	SURF	160	H	ND	ND	64.7	167	231.7	41		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	ND		



SW13	SURF	160	H	ND	ND	56.5	153	209.5	108		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	54.7		
SW14	SURF	160	H	ND	ND	37.1	159	196.1	162		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	28.2		
SW15	SURF	160	H	ND	ND	31.8	95.4	127.2	117		
	1	480									
	2	320	L	ND	ND	ND	ND	ND	341		
SW16	SURF	400	H	ND	ND	59.9	102	161.9	461		
	1	720									
	2	640									
	3	640									
	4	400									
	5	240	L	ND	ND	ND	ND	ND	244		
SW17	SURF	1120	H	ND	ND	64	131	195	1160		
	1	640									
	2	240									
	3	160	L	ND	ND	ND	ND	ND	128		
SW18	SURF	160	H	ND	ND	27.6	86	113.6	168		
	1	320									
	2	240	L	ND	ND	ND	ND	ND	245		
SW19	SURF	160	H	ND	ND	34.4	85.2	119.6	86.4		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	130		
SW20	SURF	160	H	ND	ND	43.6	105	148.6	ND		

	1	240									
	2	240	L	ND	ND	ND	ND	ND	ND		
SW21	SURF	2800	H	ND	ND	91.9	231	322.9	2640		
	1	160									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW22	SURF	80	L	ND	ND	ND	ND	ND	22.6		
	1	320									
	2	240	L	ND	ND	ND	ND	ND	ND		
SW23	SURF	160	H	ND	ND	55.5	112	167.5	ND		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW24	SURF	80	L	ND	ND	ND	ND	ND	ND		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	27.3		
SW25	SURF	80	L	ND	ND	ND	ND	ND	ND		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW26	SURF	>4000	L	ND	ND	ND	ND	ND	4390		
	1	480									
	2	400									
	3	160	L	ND	ND	ND	ND	ND	ND		



- Vertical Sample Points
- Horizontal Sample Points





**CLIENTS:** MACK ENERGY**LOCATION:** WEST MOUNT SPILL F

SAMPLE ID	LAT	LONG
Sp1	32.992633°	-104.069792°
Sp2	32.992658°	-104.069844°
Sp3	32.992594°	-104.069939°
Sp4	32.992697°	-104.069875°
Sp5	32.992736°	-104.069864°
Sp6	32.992797°	-104.069933°
Sp7	32.992775°	-104.069897°
Sp8	32.992685°	-104.069809°
Sp9	32.992736°	-104.069822°
Sp10	32.992828°	-104.069894°
Sp11	32.992856°	-104.069958°
Sp12	32.992925°	-104.069964°
Sp13	32.993008°	-104.069956°
Sp14	32.993080°	-104.069953°
Sp15	32.993133°	-104.069922°
Sp16	32.993169°	-104.069896°
Sp17	32.993205°	-104.069831°
Sp18	32.993280°	-104.069815°
Sp19	32.993368°	-104.069803°
Sp20	32.993432°	-104.069800°
Sp21	32.993496°	-104.069817°
Sp22	32.993487°	-104.069760°
Sp23	32.993542°	-104.069798°
Sp24	32.993573°	-104.069818°
SW1	32.993590°	-104.069859°
SW2	32.993511°	-104.069844°
SW3	32.993427°	-104.069842°
SW4	32.993333°	-104.069832°
SW5	32.993224°	-104.069833°
SW6	32.993140°	-104.069940°
SW7	32.993031°	-104.069974°
SW8	32.992938°	-104.069998°
SW9	32.992839°	-104.069994°
SW10	32.992746°	-104.069918°
SW11	32.992651°	-104.069915°
SW12	32.992624°	-104.069975°
SW13	32.992571°	-104.069937°
SW14	32.992624°	-104.069890°
SW15	32.992618°	-104.069777°
SW16	32.992735°	-104.069792°



SW17	32.992801°	-104.069858°
SW18	32.992868°	-104.069929°
SW19	32.992936°	-104.069936°
SW20	32.993038°	-104.069954°
SW21	32.993133°	-104.069907°
SW22	32.993183°	-104.069830°
SW23	32.993262°	-104.069800°
SW24	32.993368°	-104.069786°
SW25	32.993446°	-104.069751°
SW26	32.993545°	-104.069771°

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: Frack Line Spill 'F' West Mount

Work Order: E311153

Job Number: 20046-0001

Received: 11/18/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
11/22/23

5796 U.S. Hwy 64  
Farmington, NM 87401

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



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 11/22/23

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: Frack Line Spill 'F' West Mount  
Workorder: E311153  
Date Received: 11/18/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/18/2023 7:30:00AM, under the Project Name: Frack Line Spill 'F' West Mount.

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

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

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

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

Respectfully,

**Walter Hinchman**  
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## Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frack Line Spill 'F' West Mount Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/22/23 12:46
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 1 - Surf	E311153-01A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 2 - Surf	E311153-02A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 3 - Surf	E311153-03A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 4 - Surf	E311153-04A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 5 - Surf	E311153-05A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 6 - Surf	E311153-06A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 7 - Surf	E311153-07A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 8 - Surf	E311153-08A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 9 - Surf	E311153-09A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 10 - Surf	E311153-10A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 11 - Surf	E311153-11A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 12 - Surf	E311153-12A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 13 - Surf	E311153-13A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 14- Surf	E311153-14A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 15- Surf	E311153-15A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 16 - Surf	E311153-16A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 17- Surf	E311153-17A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 18 - Surf	E311153-18A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 19- Surf	E311153-19A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 20- Surf	E311153-20A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 21- Surf	E311153-21A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 22- Surf	E311153-22A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 23- Surf	E311153-23A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 24- Surf	E311153-24A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 25- Surf	E311153-25A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SW 26- Surf	E311153-26A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.





## Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frack Line Spill 'F' West Mount Project Number: 20046-0001 Project Manager: Natalie Gladden	<b>Reported:</b> 11/22/2023 12:46:29PM
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### SW 1 - Surf

**E311153-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
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<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2347010	
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
<i>Surrogate: Bromofluorobenzene</i>	<i>118 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/20/23</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>98.6 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/20/23</i>	
<i>Surrogate: Toluene-d8</i>	<i>110 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/20/23</i>	

<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2347010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
<i>Surrogate: Bromofluorobenzene</i>	<i>118 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/20/23</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>98.6 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/20/23</i>	
<i>Surrogate: Toluene-d8</i>	<i>110 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/20/23</i>	

<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: JL		Batch: 2347023	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
<i>Surrogate: n-Nonane</i>	<i>91.3 %</i>	<i>50-200</i>		<i>11/20/23</i>	<i>11/20/23</i>	

<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2347019	
Chloride	ND	20.0	1	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 2 - Surf

## E311153-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
Surrogate: n-Nonane		89.6 %	50-200	11/20/23	11/20/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	4050	40.0	2	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 3 - Surf

## E311153-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	38.2	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	82.4	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		78.7 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	3150	40.0	2	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 4 - Surf

## E311153-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		93.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		93.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
Surrogate: n-Nonane		85.4 %	50-200	11/20/23	11/20/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	ND	20.0	1	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 5 - Surf

## E311153-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		106 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		106 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		85.1 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	4700	40.0	2	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 6 - Surf

## E311153-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	59.3	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		85.4 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	1220	20.0	1	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 7 - Surf

## E311153-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		114 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		114 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	39.7	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	94.7	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		83.2 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	ND	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 8 - Surf

## E311153-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
Surrogate: n-Nonane		85.0 %	50-200	11/20/23	11/20/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	ND	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 9 - Surf

## E311153-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		115 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		115 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		89.7 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	68.3	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 10 - Surf

## E311153-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	63.4	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	122	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		85.4 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	76.2	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 11 - Surf

## E311153-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	32.7	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	90.3	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		79.2 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	244	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 12 - Surf

## E311153-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		119 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		119 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	64.7	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	167	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		81.0 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	41.0	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 13 - Surf

## E311153-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		110 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		110 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	56.5	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	153	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		93.7 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	108	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 14- Surf

## E311153-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	37.1	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	159	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		85.6 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	162	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 15- Surf

## E311153-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		116 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	31.8	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	95.4	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		80.5 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	117	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 16 - Surf

## E311153-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		105 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		105 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		109 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	59.9	50.0	2	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	102	100	2	11/20/23	11/21/23	
Surrogate: n-Nonane		87.9 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	461	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 17- Surf

## E311153-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		115 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		111 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		115 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		111 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	64.0	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	131	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		93.6 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	1160	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 18 - Surf

## E311153-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		117 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	27.6	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	86.0	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		82.2 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	168	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 19- Surf

## E311153-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.5 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.5 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		108 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	34.4	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	85.2	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		87.4 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	86.4	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 20- Surf

## E311153-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Benzene	ND	0.0250	1	11/20/23	11/21/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/21/23	
Toluene	ND	0.0250	1	11/20/23	11/21/23	
o-Xylene	ND	0.0250	1	11/20/23	11/21/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/21/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/21/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/21/23	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	11/20/23	11/21/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/21/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347010
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/21/23	
Surrogate: Bromofluorobenzene		118 %	70-130	11/20/23	11/21/23	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	11/20/23	11/21/23	
Surrogate: Toluene-d8		107 %	70-130	11/20/23	11/21/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347023
Diesel Range Organics (C10-C28)	43.6	25.0	1	11/20/23	11/22/23	
Oil Range Organics (C28-C36)	105	50.0	1	11/20/23	11/22/23	
Surrogate: n-Nonane		78.3 %	50-200	11/20/23	11/22/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347019
Chloride	ND	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 21- Surf

## E311153-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.0 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	109 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.0 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	109 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	91.9	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	231	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	118 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	2640	20.0	1	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 22- Surf

## E311153-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	99.7 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	109 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	99.7 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	109 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	118 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	22.6	20.0	1	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 23- Surf

## E311153-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.3 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	110 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.3 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	110 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	55.5	50.0	2	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	112	100	2	11/20/23	11/21/23	
Surrogate: n-Nonane	108 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	ND	20.0	1	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 24- Surf

## E311153-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	99.0 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	107 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	99.0 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	107 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	108 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	ND	20.0	1	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 25- Surf

## E311153-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.5 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	108 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.5 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	108 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	106 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	ND	20.0	1	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: Frack Line Spill 'F' West Mount  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 12:46:29PM

## SW 26- Surf

## E311153-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.9 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	111 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.9 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	111 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	95.9 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	4390	20.0	1	11/20/23	11/20/23	



## QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

## Volatile Organic Compounds by EPA 8260B

Analyst: RAS

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

## Blank (2347010-BLK1)

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.579		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

## LCS (2347010-BS1)

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.74	0.0250	2.50		109	70-130			
Ethylbenzene	2.66	0.0250	2.50		106	70-130			
Toluene	2.63	0.0250	2.50		105	70-130			
o-Xylene	2.65	0.0250	2.50		106	70-130			
p,m-Xylene	5.33	0.0500	5.00		107	70-130			
Total Xylenes	7.98	0.0250	7.50		106	70-130			
Surrogate: Bromofluorobenzene	0.600		0.500		120	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

## Matrix Spike (2347010-MS1)

Source: E311153-03

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.76	0.0250	2.50	ND	110	48-131			
Ethylbenzene	2.70	0.0250	2.50	ND	108	45-135			
Toluene	2.65	0.0250	2.50	ND	106	48-130			
o-Xylene	2.71	0.0250	2.50	ND	109	43-135			
p,m-Xylene	5.45	0.0500	5.00	ND	109	43-135			
Total Xylenes	8.16	0.0250	7.50	ND	109	43-135			
Surrogate: Bromofluorobenzene	0.613		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.540		0.500		108	70-130			

## Matrix Spike Dup (2347010-MSD1)

Source: E311153-03

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.77	0.0250	2.50	ND	111	48-131	0.452	23	
Ethylbenzene	2.72	0.0250	2.50	ND	109	45-135	0.959	27	
Toluene	2.70	0.0250	2.50	ND	108	48-130	1.53	24	
o-Xylene	2.74	0.0250	2.50	ND	110	43-135	0.880	27	
p,m-Xylene	5.47	0.0500	5.00	ND	109	43-135	0.531	27	
Total Xylenes	8.21	0.0250	7.50	ND	109	43-135	0.647	27	
Surrogate: Bromofluorobenzene	0.614		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			





## QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

## Volatile Organic Compounds by EPA 8260B

Analyst: RAS

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

## Blank (2347012-BLK1)

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

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.499		0.500		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.551		0.500		110	70-130			

## LCS (2347012-BS1)

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

Benzene	2.65	0.0250	2.50		106	70-130			
Ethylbenzene	2.68	0.0250	2.50		107	70-130			
Toluene	2.71	0.0250	2.50		108	70-130			
o-Xylene	2.60	0.0250	2.50		104	70-130			
p,m-Xylene	5.16	0.0500	5.00		103	70-130			
Total Xylenes	7.76	0.0250	7.50		103	70-130			
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			

## Matrix Spike (2347012-MS1)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.66	0.0250	2.50	ND	106	48-131			
Ethylbenzene	2.69	0.0250	2.50	ND	107	45-135			
Toluene	2.74	0.0250	2.50	ND	109	48-130			
o-Xylene	2.57	0.0250	2.50	ND	103	43-135			
p,m-Xylene	5.16	0.0500	5.00	ND	103	43-135			
Total Xylenes	7.74	0.0250	7.50	ND	103	43-135			
Surrogate: Bromofluorobenzene	0.487		0.500		97.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		96.9	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

## Matrix Spike Dup (2347012-MSD1)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.56	0.0250	2.50	ND	102	48-131	3.83	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	2.58	27	
Toluene	2.68	0.0250	2.50	ND	107	48-130	2.05	24	
o-Xylene	2.51	0.0250	2.50	ND	100	43-135	2.48	27	
p,m-Xylene	5.06	0.0500	5.00	ND	101	43-135	2.08	27	
Total Xylenes	7.57	0.0250	7.50	ND	101	43-135	2.22	27	
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			



## QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	<b>Reported:</b>
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2347010-BLK1)

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.579		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

## LCS (2347010-BS2)

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	54.1	20.0	50.0		108	70-130			
Surrogate: Bromofluorobenzene	0.608		0.500		122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		96.0	70-130			
Surrogate: Toluene-d8	0.559		0.500		112	70-130			

## Matrix Spike (2347010-MS2)

Source: E311153-03

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	54.9	20.0	50.0	ND	110	70-130			
Surrogate: Bromofluorobenzene	0.604		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			

## Matrix Spike Dup (2347010-MSD2)

Source: E311153-03

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	54.6	20.0	50.0	ND	109	70-130	0.522	20	
Surrogate: Bromofluorobenzene	0.599		0.500		120	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.561		0.500		112	70-130			



## QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2347012-BLK1)

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

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.499		0.500		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.551		0.500		110	70-130			

## LCS (2347012-BS2)

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

Gasoline Range Organics (C6-C10)	51.7	20.0	50.0		103	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.545		0.500		109	70-130			

## Matrix Spike (2347012-MS2)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	52.4	20.0	50.0	ND	105	70-130			
Surrogate: Bromofluorobenzene	0.496		0.500		99.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.2	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			

## Matrix Spike Dup (2347012-MSD2)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130	0.678	20	
Surrogate: Bromofluorobenzene	0.507		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.519		0.500		104	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			





QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2347018-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.9		50.0		114	50-200			

LCS (2347018-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	250	25.0	250		100	38-132			
Surrogate: n-Nonane	53.6		50.0		107	50-200			

Matrix Spike (2347018-MS1)					Source: E311152-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	55.5		50.0		111	50-200			

Matrix Spike Dup (2347018-MSD1)					Source: E311152-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Diesel Range Organics (C10-C28)	267	25.0	250	ND	107	38-132	1.09	20	
Surrogate: n-Nonane	57.1		50.0		114	50-200			



QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2347023-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.4		50.0		90.8	50-200			

LCS (2347023-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	261	25.0	250		105	38-132			
Surrogate: n-Nonane	50.8		50.0		102	50-200			

Matrix Spike (2347023-MS1)					Source: E311153-07		Prepared: 11/20/23 Analyzed: 11/21/23		
Diesel Range Organics (C10-C28)	271	25.0	250	39.7	92.6	38-132			
Surrogate: n-Nonane	44.2		50.0		88.3	50-200			

Matrix Spike Dup (2347023-MSD1)					Source: E311153-07		Prepared: 11/20/23 Analyzed: 11/21/23		
Diesel Range Organics (C10-C28)	266	25.0	250	39.7	90.5	38-132	1.93	20	
Surrogate: n-Nonane	43.1		50.0		86.3	50-200			



QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2347019-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	ND	20.0							
LCS (2347019-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	248	20.0	250		99.1	90-110			
Matrix Spike (2347019-MS1)					Source: E311153-05		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	4730	40.0	250	4700	12.0	80-120			M4
Matrix Spike Dup (2347019-MSD1)					Source: E311153-05		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	4750	40.0	250	4700	17.2	80-120	0.278	20	M4





QC Summary Data

Mack Energy	Project Name:	Frack Line Spill 'F' West Mount	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 12:46:29PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2347021-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	ND	20.0							
LCS (2347021-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2347021-MS1)					Source: E311153-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	267	20.0	250	22.6	97.9	80-120			
Matrix Spike Dup (2347021-MSD1)					Source: E311153-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	269	20.0	250	22.6	98.4	80-120	0.440	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:	Frack Line Spill 'F' West Mount	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/23 12:46

- 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.



## Project Information

## Chain of Custody

Page 1 of 3

Client: <u>MACIL Energy</u> Project: <u>Frack Line SP.11 "f" west Mary</u> Project Manager: <u>N. Giddens</u> Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Report due by: _____					Bill To Attention: <u>ENERGY STAFFING SERVICES</u> Address: <u>2724 NW COUNTY RD</u> City, State, Zip: <u>HOBBS, NM 88240</u> Phone: <u>575-393-9048</u> Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u> <u>BRITTNEY@ENERGYSTAFFINGLLC.COM</u>					Lab Use Only Lab WO# <u>E311153</u> Job Number <u>200400001</u> Analysis and Method					TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard <input type="checkbox"/>				EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
										State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BDOC NM	BDOC TX	Remarks						
	11/16/23	S	1	SW 1 - SU8F	1							X								
				SW 2 - SU8F	2															
				SW 3 - SU8F	3															
				SW 4 - SU8F	4															
				SW 5 - SU8F	5															
				SW 6 - SU8F	6															
				SW 7 - SU8F	7															
				SW 8 - SU8F	8															
				SW 9 - SU8F	9															
	11/16/23	S	1	SW 10 - SU8F	10							X								
Additional Instructions:																				
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.											Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.									
Relinquished by: (Signature) <u>Andy Toruga</u> Date <u>11/16/23</u> Time _____ Received by: (Signature) <u>Michelle Gayle</u> Date <u>11-17-23</u> Time <u>1215</u>																				
Relinquished by: (Signature) <u>Michelle Gayle</u> Date <u>11-17-23</u> Time <u>1700</u> Received by: (Signature) <u>Andrew Moss</u> Date <u>11-17-23</u> Time <u>1800</u>																				
Relinquished by: (Signature) <u>Andrew Moss</u> Date <u>11-17-23</u> Time <u>2400</u> Received by: (Signature) <u>Andrew Moss</u> Date <u>11-18-23</u> Time <u>730</u>																				
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																				
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				









## Chain of Custody



## Envirotech Analytical Laboratory

Printed: 11/20/2023 10:10:22AM

## 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:	11/18/23 07:30	Work Order ID:	E311153
Phone:	(575) 390-6397	Date Logged In:	11/17/23 15:13	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/21/23 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierSample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client InstructionComments/Resolution

Time sampled not provided on COC per client.

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

Date



envirotech Inc.



Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount #1 Frack Line Spill F

Work Order: E311154

Job Number: 20046-0001

Received: 11/18/2023

Revision: 3

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
11/22/23

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 11/22/23



Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210

Project Name: West Mount #1 Frack Line Spill F  
Workorder: E311154  
Date Received: 11/18/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/18/2023 7:30:00AM, under the Project Name: West Mount #1 Frack Line Spill F.

The analytical test results summarized in this report with the Project Name: West Mount #1 Frack Line Spill F apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
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**Alexa Michaels**  
Sample Custody Officer  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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## Sample Summary

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/23 15:53

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1- Surf	E311154-01A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP2- Surf	E311154-02A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP3- Surf	E311154-03A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP4- Surf	E311154-04A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP5- Surf	E311154-05A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP6- Surf	E311154-06A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP7- Surf	E311154-07A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP8- Surf	E311154-08A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP9- Surf	E311154-09A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP10- Surf	E311154-10A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP11- Surf	E311154-11A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP12- Surf	E311154-12A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP13- Surf	E311154-13A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP14- Surf	E311154-14A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP15- Surf	E311154-15A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP16- Surf	E311154-16A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP17- Surf	E311154-17A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP18- Surf	E311154-18A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP19- Surf	E311154-19A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP20- Surf	E311154-20A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP21- Surf	E311154-21A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP22- Surf	E311154-22A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP23- Surf	E311154-23A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.
SP24- Surf	E311154-24A	Soil	11/16/23	11/18/23	Glass Jar, 2 oz.



## Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1 Frack Line Spill F Project Number: 20046-0001 Project Manager: Natalie Gladden	<b>Reported:</b> 11/22/2023 3:53:02PM
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### SP1- Surf

**E311154-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
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<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2347011	
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
<i>Surrogate: Bromofluorobenzene</i>	105 %	70-130		11/20/23	11/20/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	97.2 %	70-130		11/20/23	11/20/23	
<i>Surrogate: Toluene-d8</i>	95.6 %	70-130		11/20/23	11/20/23	

<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2347011	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
<i>Surrogate: Bromofluorobenzene</i>	105 %	70-130		11/20/23	11/20/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	97.2 %	70-130		11/20/23	11/20/23	
<i>Surrogate: Toluene-d8</i>	95.6 %	70-130		11/20/23	11/20/23	

<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: JL		Batch: 2347022	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
<i>Surrogate: n-Nonane</i>	94.7 %	50-200		11/20/23	11/20/23	

<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2347020	
Chloride	998	20.0	1	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP2- Surf

## E311154-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		94.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		97.5 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		94.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		97.5 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
Surrogate: n-Nonane		84.5 %	50-200	11/20/23	11/20/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	10500	200	10	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP3- Surf

E311154-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		104 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.7 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		104 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.7 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	60.3	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		92.7 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	129	20.0	1	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP4- Surf

## E311154-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.1 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.1 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
Surrogate: n-Nonane		87.9 %	50-200	11/20/23	11/20/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	16100	400	20	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP5- Surf

E311154-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.5 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.5 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	56.0	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		81.5 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	151	20.0	1	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

**SP6- Surf**  
**E311154-06**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		97.3 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		97.3 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/20/23	
Surrogate: n-Nonane		89.0 %	50-200	11/20/23	11/20/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	23200	400	20	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP7- Surf

E311154-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		102 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.6 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		94.9 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		102 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.6 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		94.9 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		85.0 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	14500	400	20	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

**SP8- Surf**  
**E311154-08**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		94.9 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		97.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		94.9 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		88.5 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	3780	200	10	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

**SP9- Surf**  
**E311154-09**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		104 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.5 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		104 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.5 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		89.4 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	7730	200	10	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP10- Surf

## E311154-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.6 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.6 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		91.9 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	5740	20.0	1	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP11- Surf

## E311154-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.5 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.4 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.5 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.4 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	28.0	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	60.2	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		94.0 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	627	20.0	1	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP12- Surf

## E311154-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		97.4 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		97.4 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	43.4	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	108	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		91.0 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	4240	40.0	2	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP13- Surf

## E311154-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.5 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		94.3 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.5 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		94.3 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	29.8	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	88.8	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		96.3 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	535	20.0	1	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP14- Surf

## E311154-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		104 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.3 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		104 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.3 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	27.4	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	60.8	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		94.5 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	12800	200	10	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP15- Surf

## E311154-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.4 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.4 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	38.3	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	101	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		93.4 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	5450	200	10	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP16- Surf

## E311154-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.9 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.9 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		90.5 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	5670	200	10	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP17- Surf

## E311154-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.0 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		105 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		96.0 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	255	250	10	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	500	10	11/20/23	11/21/23	
Surrogate: n-Nonane		90.6 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	2110	40.0	2	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP18- Surf

## E311154-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.7 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.7 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	80.6	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	170	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		87.4 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	12100	200	10	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP19- Surf

## E311154-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.0 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene		103 %	70-130	11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4		96.1 %	70-130	11/20/23	11/20/23	
Surrogate: Toluene-d8		95.0 %	70-130	11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	72.5	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	176	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		89.3 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	2600	40.0	2	11/20/23	11/21/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP20- Surf

## E311154-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Benzene	ND	0.0250	1	11/20/23	11/21/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/21/23	
Toluene	ND	0.0250	1	11/20/23	11/21/23	
o-Xylene	ND	0.0250	1	11/20/23	11/21/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/21/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/21/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/21/23	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	11/20/23	11/21/23	
Surrogate: Toluene-d8		95.1 %	70-130	11/20/23	11/21/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347011
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/21/23	
Surrogate: Bromofluorobenzene		106 %	70-130	11/20/23	11/21/23	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	11/20/23	11/21/23	
Surrogate: Toluene-d8		95.1 %	70-130	11/20/23	11/21/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347022
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane		96.2 %	50-200	11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347020
Chloride	205	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP21- Surf

## E311154-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	98.5 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	110 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	98.5 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	110 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	97.4 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	6230	200	10	11/20/23	11/20/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP22- Surf

## E311154-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.2 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	109 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.2 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	109 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	ND	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	108 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	31.7	20.0	1	11/20/23	11/20/23	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP23- Surf

## E311154-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	96.5 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	107 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	96.5 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	107 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	27.0	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	109 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	36.0	20.0	1	11/20/23	11/21/23	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount #1 Frack Line Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
11/22/2023 3:53:02PM

## SP24- Surf

## E311154-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Benzene	ND	0.0250	1	11/20/23	11/20/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/20/23	
Toluene	ND	0.0250	1	11/20/23	11/20/23	
o-Xylene	ND	0.0250	1	11/20/23	11/20/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/20/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.8 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	107 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	108 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347012
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/20/23	
Surrogate: Bromofluorobenzene	97.8 %	70-130		11/20/23	11/20/23	
Surrogate: 1,2-Dichloroethane-d4	107 %	70-130		11/20/23	11/20/23	
Surrogate: Toluene-d8	108 %	70-130		11/20/23	11/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347018
Diesel Range Organics (C10-C28)	56.8	25.0	1	11/20/23	11/21/23	
Oil Range Organics (C28-C36)	114	50.0	1	11/20/23	11/21/23	
Surrogate: n-Nonane	106 %	50-200		11/20/23	11/21/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2347021
Chloride	54.4	20.0	1	11/20/23	11/21/23	



## QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

## Volatile Organic Compounds by EPA 8260B

Analyst: RKS

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

## Blank (2347011-BLK1)

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.3	70-130			
Surrogate: Toluene-d8	0.472		0.500		94.4	70-130			

## LCS (2347011-BS1)

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.71	0.0250	2.50		108	70-130			
Ethylbenzene	2.50	0.0250	2.50		100	70-130			
Toluene	2.42	0.0250	2.50		96.7	70-130			
o-Xylene	2.56	0.0250	2.50		102	70-130			
p,m-Xylene	5.03	0.0500	5.00		101	70-130			
Total Xylenes	7.59	0.0250	7.50		101	70-130			
Surrogate: Bromofluorobenzene	0.517		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.469		0.500		93.8	70-130			
Surrogate: Toluene-d8	0.473		0.500		94.6	70-130			

## Matrix Spike (2347011-MS1)

Source: E311154-10

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.83	0.0250	2.50	ND	113	48-131			
Ethylbenzene	2.66	0.0250	2.50	ND	106	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.70	0.0250	2.50	ND	108	43-135			
p,m-Xylene	5.26	0.0500	5.00	ND	105	43-135			
Total Xylenes	7.96	0.0250	7.50	ND	106	43-135			
Surrogate: Bromofluorobenzene	0.510		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		96.0	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.5	70-130			

## Matrix Spike Dup (2347011-MSD1)

Source: E311154-10

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.82	0.0250	2.50	ND	113	48-131	0.389	23	
Ethylbenzene	2.69	0.0250	2.50	ND	108	45-135	1.27	27	
Toluene	2.60	0.0250	2.50	ND	104	48-130	1.35	24	
o-Xylene	2.76	0.0250	2.50	ND	110	43-135	2.34	27	
p,m-Xylene	5.43	0.0500	5.00	ND	109	43-135	3.12	27	
Total Xylenes	8.19	0.0250	7.50	ND	109	43-135	2.86	27	
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.469		0.500		93.8	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			





## QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

## Volatile Organic Compounds by EPA 8260B

Analyst: RAS

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

## Blank (2347012-BLK1)

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

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.499		0.500		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.551		0.500		110	70-130			

## LCS (2347012-BS1)

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

Benzene	2.65	0.0250	2.50		106	70-130			
Ethylbenzene	2.68	0.0250	2.50		107	70-130			
Toluene	2.71	0.0250	2.50		108	70-130			
o-Xylene	2.60	0.0250	2.50		104	70-130			
p,m-Xylene	5.16	0.0500	5.00		103	70-130			
Total Xylenes	7.76	0.0250	7.50		103	70-130			
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			

## Matrix Spike (2347012-MS1)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.66	0.0250	2.50	ND	106	48-131			
Ethylbenzene	2.69	0.0250	2.50	ND	107	45-135			
Toluene	2.74	0.0250	2.50	ND	109	48-130			
o-Xylene	2.57	0.0250	2.50	ND	103	43-135			
p,m-Xylene	5.16	0.0500	5.00	ND	103	43-135			
Total Xylenes	7.74	0.0250	7.50	ND	103	43-135			
Surrogate: Bromofluorobenzene	0.487		0.500		97.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		96.9	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

## Matrix Spike Dup (2347012-MSD1)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Benzene	2.56	0.0250	2.50	ND	102	48-131	3.83	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	2.58	27	
Toluene	2.68	0.0250	2.50	ND	107	48-130	2.05	24	
o-Xylene	2.51	0.0250	2.50	ND	100	43-135	2.48	27	
p,m-Xylene	5.06	0.0500	5.00	ND	101	43-135	2.08	27	
Total Xylenes	7.57	0.0250	7.50	ND	101	43-135	2.22	27	
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			



## QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	<b>Reported:</b>
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2347011-BLK1)

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.3	70-130			
Surrogate: Toluene-d8	0.472		0.500		94.4	70-130			

## LCS (2347011-BS2)

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	46.9	20.0	50.0		93.8	70-130			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.469		0.500		93.8	70-130			
Surrogate: Toluene-d8	0.489		0.500		97.7	70-130			

## Matrix Spike (2347011-MS2)

Source: E311154-10

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	43.4	20.0	50.0	ND	86.7	70-130			
Surrogate: Bromofluorobenzene	0.524		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.5	70-130			
Surrogate: Toluene-d8	0.481		0.500		96.2	70-130			

## Matrix Spike Dup (2347011-MSD2)

Source: E311154-10

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	47.8	20.0	50.0	ND	95.6	70-130	9.68	20	
Surrogate: Bromofluorobenzene	0.529		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.469		0.500		93.8	70-130			
Surrogate: Toluene-d8	0.486		0.500		97.2	70-130			



## QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	<b>Reported:</b>
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2347012-BLK1)

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

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.499		0.500		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.551		0.500		110	70-130			

## LCS (2347012-BS2)

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

Gasoline Range Organics (C6-C10)	51.7	20.0	50.0		103	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.545		0.500		109	70-130			

## Matrix Spike (2347012-MS2)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	52.4	20.0	50.0	ND	105	70-130			
Surrogate: Bromofluorobenzene	0.496		0.500		99.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.2	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			

## Matrix Spike Dup (2347012-MSD2)

Source: E311148-01

Prepared: 11/20/23 Analyzed: 11/21/23

Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130	0.678	20	
Surrogate: Bromofluorobenzene	0.507		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.519		0.500		104	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			





QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2347018-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.9		50.0		114	50-200			

LCS (2347018-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	250	25.0	250		100	38-132			
Surrogate: n-Nonane	53.6		50.0		107	50-200			

Matrix Spike (2347018-MS1)					Source: E311152-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	55.5		50.0		111	50-200			

Matrix Spike Dup (2347018-MSD1)					Source: E311152-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Diesel Range Organics (C10-C28)	267	25.0	250	ND	107	38-132	1.09	20	
Surrogate: n-Nonane	57.1		50.0		114	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2347022-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.3		50.0		96.6	50-200			

LCS (2347022-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Diesel Range Organics (C10-C28)	216	25.0	250		86.2	38-132			
Surrogate: n-Nonane	44.7		50.0		89.3	50-200			

Matrix Spike (2347022-MS1)					Source: E311154-03		Prepared: 11/20/23 Analyzed: 11/20/23		
Diesel Range Organics (C10-C28)	242	50.0	250	ND	96.8	38-132			
Surrogate: n-Nonane	50.0		50.0		100	50-200			

Matrix Spike Dup (2347022-MSD1)					Source: E311154-03		Prepared: 11/20/23 Analyzed: 11/20/23		
Diesel Range Organics (C10-C28)	252	50.0	250	ND	101	38-132	4.15	20	
Surrogate: n-Nonane	45.5		50.0		91.0	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

Anions by EPA 300.0/9056A

Analyst: BA

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

Blank (2347020-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	ND	20.0							
LCS (2347020-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	245	20.0	250		98.1	90-110			
Matrix Spike (2347020-MS1)					Source: E311154-05		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	387	20.0	250	151	94.7	80-120			
Matrix Spike Dup (2347020-MSD1)					Source: E311154-05		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	407	20.0	250	151	102	80-120	4.85	20	





QC Summary Data

Mack Energy	Project Name:	West Mount #1 Frack Line Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/2023 3:53:02PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2347021-BLK1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	ND	20.0							
LCS (2347021-BS1)					Prepared: 11/20/23 Analyzed: 11/20/23				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2347021-MS1)					Source: E311153-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	267	20.0	250	22.6	97.9	80-120			
Matrix Spike Dup (2347021-MSD1)					Source: E311153-22		Prepared: 11/20/23 Analyzed: 11/20/23		
Chloride	269	20.0	250	22.6	98.4	80-120	0.440	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 #1 Frack Line Spill F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/22/23 15:53

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

Page 1 of 3

Client: <u>Moek Energy</u>				Bill To				Lab Use Only				TAT				EPA Program																							
Project: <u>West Mount #2 fract spill 6</u>				Attention: ENERGY STAFFING SERVICES				Lab WO# <u>E311154</u>				Job Number <u>200400001</u>				1D	2D	3D	Standard	CWA	SDWA																		
Project Manager: <u>N. Gladden</u>				Address: 2724 NW COUNTY RD				Analysis and Method								RCRA																							
Address:				City, State, Zip <u>HOBBS, NM 88240</u>																																			
City, State, Zip				Phone: 575-393-9048				DRO/DRO by 8015				GRO/DRO by 8015				BTEX by 8021				VOC by 8260				Metals 6010				Chloride 300.0				BGDOC NM				BGDOC TX			
Phone:				Email: NATALIE@ENERGYSTAFFINGLLC.COM																																			
Email:				BRITTNEY@ENERGYSTAFFINGLLC.COM				State				NM				CO				UT				AZ				TX											
Report due by:																																							
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Remarks																																	
	11/16/23	S	1	SP1 - Durb	1																																		
				SP2 - Durb	2																																		
				SP3 - Durb	3																																		
				SP4 - Durb	4																																		
				SP5 - Durb	5																																		
				SP6 - Durb	6																																		
				SP7 - Durb	7																																		
				SP8 - Durb	8																																		
				SP9 - Durb	9																																		
	11/16/23	S	1	SP10 - Durb	10																																		
Additional Instructions:																																							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.																													
Relinquished by: (Signature) <u>[Signature]</u>										Received by: (Signature) <u>[Signature]</u>																													
Date <u>11/16/23</u>										Date <u>11-17-23</u>																													
Time <u>1700</u>										Time <u>1800</u>																													
Relinquished by: (Signature) <u>[Signature]</u>										Received by: (Signature) <u>[Signature]</u>																													
Date <u>11-17-23</u>										Date <u>11-18-23</u>																													
Time <u>2400</u>										Time <u>730</u>																													
Relinquished by: (Signature) <u>[Signature]</u>										Received by: (Signature) <u>[Signature]</u>																													
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																													
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																																							



## Project Information

## Chain of Custody

Page 2 of 3

Client: <u>Mark Ensu</u> Project: <u>Westmont 4th Street Spill</u> Project Manager: <u>N.G. Ladden</u> Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Report due by: _____					Bill To Attention: ENERGY STAFFING SERVICES Address: 2724 NW COUNTY RD City, State, Zip: HOBBS, NM 88240 Phone: 575-393-9048 Email: NATALIE@ENERGYSTAFFINGLLC.COM BRITTNEY@ENERGYSTAFFINGLLC.COM					Lab Use Only Lab WO# <u>E311154</u> Job Number <u>200400001</u> Analysis and Method					TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard <input type="checkbox"/>				EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
										State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks						
	11/16/23	S	1	DP11 - surf	11															
				DP12 - surf	12															
				DP13 - surf	13															
				DP14 - surf	14															
				DP15 - surf	15															
				DP16 - surf	16															
				DP17 - surf	17															
				DP18 - surf	18															
				DP19 - surf	19															
	11/16/23	S	1	DP20 - surf	20															
Additional Instructions:																				
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.										
Relinquished by: (Signature) <u>Jose Rodriguez</u> Date <u>11/16/23</u> Time _____										Received by: (Signature) <u>Michelle Gayle</u> Date <u>11-17-23</u> Time <u>1215</u>										
Relinquished by: (Signature) <u>Michelle Gayle</u> Date <u>11-17-23</u> Time <u>1700</u>										Received by: (Signature) <u>Andrew Musso</u> Date <u>11-17-23</u> Time <u>1800</u>										
Relinquished by: (Signature) <u>Andrew Musso</u> Date <u>11-17-23</u> Time <u>2400</u>										Received by: (Signature) <u>Alfred</u> Date <u>11-18-23</u> Time <u>730</u>										
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA										
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				





## Envirotech Analytical Laboratory

Printed: 11/20/2023 10:30:01AM

## 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:	11/18/23 07:30	Work Order ID:	E311154
Phone:	(575) 390-6397	Date Logged In:	11/17/23 15:14	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/21/23 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Time sampled not provided on COC per client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

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? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount (F)

Work Order: E406194

Job Number: 20046-0001

Received: 6/21/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/25/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 6/25/24



Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210

Project Name: West Mount (F)  
Workorder: E406194  
Date Received: 6/21/2024 5:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/21/2024 5:30:00AM, under the Project Name: West Mount (F).

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

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

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

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

Respectfully,

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/25/24 09:47

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1-2'	E406194-01A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.
SW2-2'	E406194-02A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.
SW3-2'	E406194-03A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.
SW4-2'	E406194-04A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.

## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:47:52AM

**SW1-2'**

**E406194-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Benzene	ND	0.0500	2	06/21/24	06/22/24	
Ethylbenzene	ND	0.0500	2	06/21/24	06/22/24	
Toluene	ND	0.0500	2	06/21/24	06/22/24	
o-Xylene	ND	0.0500	2	06/21/24	06/22/24	
p,m-Xylene	ND	0.100	2	06/21/24	06/22/24	
Total Xylenes	ND	0.0500	2	06/21/24	06/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	90.9 %	70-130		06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/21/24	06/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	106 %	70-130		06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2425100	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/24/24	
<i>Surrogate: n-Nonane</i>	93.6 %	50-200		06/21/24	06/24/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2425103	
Chloride	43.8	20.0	1	06/21/24	06/22/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:47:52AM

SW2-2'

E406194-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2425097
Benzene	ND	0.0500	2	06/21/24	06/22/24	
Ethylbenzene	ND	0.0500	2	06/21/24	06/22/24	
Toluene	ND	0.0500	2	06/21/24	06/22/24	
o-Xylene	ND	0.0500	2	06/21/24	06/22/24	
p,m-Xylene	ND	0.100	2	06/21/24	06/22/24	
Total Xylenes	ND	0.0500	2	06/21/24	06/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		91.1 %	70-130	06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2425097
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/21/24	06/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		106 %	70-130	06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2425100
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/24/24	
<i>Surrogate: n-Nonane</i>						
		80.3 %	50-200	06/21/24	06/24/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2425103
Chloride	27.3	20.0	1	06/21/24	06/22/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:47:52AM

SW3-2'

E406194-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Benzene	ND	0.0500	2	06/21/24	06/22/24	
Ethylbenzene	ND	0.0500	2	06/21/24	06/22/24	
Toluene	ND	0.0500	2	06/21/24	06/22/24	
o-Xylene	ND	0.0500	2	06/21/24	06/22/24	
p,m-Xylene	ND	0.100	2	06/21/24	06/22/24	
Total Xylenes	ND	0.0500	2	06/21/24	06/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	90.5 %	70-130		06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/21/24	06/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	107 %	70-130		06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2425100	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/24/24	
<i>Surrogate: n-Nonane</i>	84.0 %	50-200		06/21/24	06/24/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2425103	
Chloride	22.9	20.0	1	06/21/24	06/22/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:47:52AM

SW4-2'

E406194-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2425097
Benzene	ND	0.0500	2	06/21/24	06/22/24	
Ethylbenzene	ND	0.0500	2	06/21/24	06/22/24	
Toluene	ND	0.0500	2	06/21/24	06/22/24	
o-Xylene	ND	0.0500	2	06/21/24	06/22/24	
p,m-Xylene	ND	0.100	2	06/21/24	06/22/24	
Total Xylenes	ND	0.0500	2	06/21/24	06/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		91.0 %	70-130	06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2425097
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/21/24	06/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		106 %	70-130	06/21/24	06/22/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2425100
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/24/24	
<i>Surrogate: n-Nonane</i>						
		98.7 %	50-200	06/21/24	06/24/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2425103
Chloride	ND	20.0	1	06/21/24	06/22/24	



## QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:47:52AM

## Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2425097-BLK1)

Prepared: 06/21/24 Analyzed: 06/22/24

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	7.24		8.00		90.5	70-130			

## LCS (2425097-BS1)

Prepared: 06/21/24 Analyzed: 06/22/24

Benzene	5.16	0.0250	5.00		103	70-130			
Ethylbenzene	4.81	0.0250	5.00		96.1	70-130			
Toluene	5.05	0.0250	5.00		101	70-130			
o-Xylene	4.91	0.0250	5.00		98.2	70-130			
p,m-Xylene	9.90	0.0500	10.0		99.0	70-130			
Total Xylenes	14.8	0.0250	15.0		98.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.32		8.00		91.4	70-130			

## Matrix Spike (2425097-MS1)

Source: E406191-02

Prepared: 06/21/24 Analyzed: 06/22/24

Benzene	5.18	0.0250	5.00	ND	104	54-133			
Ethylbenzene	4.84	0.0250	5.00	ND	96.9	61-133			
Toluene	5.10	0.0250	5.00	ND	102	61-130			
o-Xylene	4.95	0.0250	5.00	ND	99.0	63-131			
p,m-Xylene	9.98	0.0500	10.0	ND	99.8	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.35		8.00		91.9	70-130			

## Matrix Spike Dup (2425097-MSD1)

Source: E406191-02

Prepared: 06/21/24 Analyzed: 06/22/24

Benzene	5.24	0.0250	5.00	ND	105	54-133	1.10	20	
Ethylbenzene	4.89	0.0250	5.00	ND	97.7	61-133	0.863	20	
Toluene	5.14	0.0250	5.00	ND	103	61-130	0.801	20	
o-Xylene	4.99	0.0250	5.00	ND	99.9	63-131	0.839	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.754	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	0.782	20	
Surrogate: 4-Bromochlorobenzene-PID	7.35		8.00		91.9	70-130			





QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:47:52AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425097-BLK1) Prepared: 06/21/24 Analyzed: 06/22/24

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

LCS (2425097-BS2) Prepared: 06/21/24 Analyzed: 06/22/24

Gasoline Range Organics (C6-C10)	52.2	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.67		8.00		108	70-130			

Matrix Spike (2425097-MS2) Source: E406191-02 Prepared: 06/21/24 Analyzed: 06/22/24

Gasoline Range Organics (C6-C10)	52.0	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.56		8.00		107	70-130			

Matrix Spike Dup (2425097-MSD2) Source: E406191-02 Prepared: 06/21/24 Analyzed: 06/22/24

Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	3.15	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.59		8.00		107	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:47:52AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425100-BLK1) Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.5		50.0		105	50-200			

LCS (2425100-BS1) Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	276	25.0	250		110	38-132			
Surrogate: n-Nonane	49.6		50.0		99.2	50-200			

Matrix Spike (2425100-MS1) Source: E406194-01 Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	284	25.0	250	ND	114	38-132			
Surrogate: n-Nonane	48.6		50.0		97.3	50-200			

Matrix Spike Dup (2425100-MSD1) Source: E406194-01 Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	293	25.0	250	ND	117	38-132	3.05	20	
Surrogate: n-Nonane	49.9		50.0		99.7	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:47:52AM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425103-BLK1)					Prepared: 06/21/24 Analyzed: 06/21/24				
Chloride	ND	20.0							
LCS (2425103-BS1)					Prepared: 06/21/24 Analyzed: 06/22/24				
Chloride	249	20.0	250		99.6	90-110			
Matrix Spike (2425103-MS1)					Source: E406191-01		Prepared: 06/21/24 Analyzed: 06/22/24		
Chloride	306	20.0	250	55.8	100	80-120			
Matrix Spike Dup (2425103-MSD1)					Source: E406191-01		Prepared: 06/21/24 Analyzed: 06/22/24		
Chloride	305	20.0	250	55.8	99.8	80-120	0.436	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 (F)	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/25/24 09:47

- 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.







## Envirotech Analytical Laboratory

Printed: 6/24/2024 9:53:07AM

## 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:	06/21/24 05:30	Work Order ID:	E406194
Phone:	(575) 390-6397	Date Logged In:	06/20/24 16:38	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/24/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: Couier**Comments/Resolution**

Project manager and time sampled not listed by client.

**Sample Turn Around Time (TAT)**

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

**Sample Cooler**

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? Yes

**Sample Preservation**

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

**Multiphase Sample Matrix**

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

**Subcontract Laboratory**

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

**Client Instruction**

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

Date



envirotech Inc.

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E406196

Job Number: 20046-0001

Received: 6/21/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/25/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 6/25/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E406196  
Date Received: 6/21/2024 5:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/21/2024 5:30:00AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

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



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Sample Summary

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/25/24 09:50

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1-8	E406196-01A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.
SP2-6	E406196-02A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.
SP3-8	E406196-03A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.
SP4-8	E406196-04A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.
SP5-8	E406196-05A	Soil	06/19/24	06/21/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:50:47AM

### SP1-8

### E406196-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Benzene	ND	0.0500	2	06/21/24	06/23/24	
Ethylbenzene	ND	0.0500	2	06/21/24	06/23/24	
Toluene	ND	0.0500	2	06/21/24	06/23/24	
o-Xylene	ND	0.0500	2	06/21/24	06/23/24	
p,m-Xylene	ND	0.100	2	06/21/24	06/23/24	
Total Xylenes	ND	0.0500	2	06/21/24	06/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		90.7 %	70-130	06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/21/24	06/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		106 %	70-130	06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2425100	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/25/24	
<i>Surrogate: n-Nonane</i>		105 %	50-200	06/21/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2425103	
Chloride	ND	20.0	1	06/21/24	06/22/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:50:47AM

## SP2-6

## E406196-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Benzene	ND	0.0500	2	06/21/24	06/23/24	
Ethylbenzene	ND	0.0500	2	06/21/24	06/23/24	
Toluene	ND	0.0500	2	06/21/24	06/23/24	
o-Xylene	ND	0.0500	2	06/21/24	06/23/24	
p,m-Xylene	ND	0.100	2	06/21/24	06/23/24	
Total Xylenes	ND	0.0500	2	06/21/24	06/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	90.6 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/21/24	06/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	107 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2425100	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/25/24	
<i>Surrogate: n-Nonane</i>	105 %	50-200		06/21/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2425103	
Chloride	ND	20.0	1	06/21/24	06/22/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:50:47AM

## SP3-8

## E406196-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Benzene	ND	0.0250	1	06/21/24	06/23/24	
Ethylbenzene	ND	0.0250	1	06/21/24	06/23/24	
Toluene	ND	0.0250	1	06/21/24	06/23/24	
o-Xylene	ND	0.0250	1	06/21/24	06/23/24	
p,m-Xylene	ND	0.0500	1	06/21/24	06/23/24	
Total Xylenes	ND	0.0250	1	06/21/24	06/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/21/24	06/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	106 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2425100	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/25/24	
<i>Surrogate: n-Nonane</i>						
	119 %	50-200		06/21/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2425103	
Chloride	ND	20.0	1	06/21/24	06/22/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:50:47AM

## SP4-8

## E406196-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2425097
Benzene	ND	0.0250	1	06/21/24	06/23/24	
Ethylbenzene	ND	0.0250	1	06/21/24	06/23/24	
Toluene	ND	0.0250	1	06/21/24	06/23/24	
o-Xylene	ND	0.0250	1	06/21/24	06/23/24	
p,m-Xylene	ND	0.0500	1	06/21/24	06/23/24	
Total Xylenes	ND	0.0250	1	06/21/24	06/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.8 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2425097
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/21/24	06/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2425100
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/25/24	
<i>Surrogate: n-Nonane</i>						
	97.9 %	50-200		06/21/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2425103
Chloride	ND	20.0	1	06/21/24	06/22/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 9:50:47AM

## SP5-8

## E406196-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Benzene	ND	0.0250	1	06/21/24	06/23/24	
Ethylbenzene	ND	0.0250	1	06/21/24	06/23/24	
Toluene	ND	0.0250	1	06/21/24	06/23/24	
o-Xylene	ND	0.0250	1	06/21/24	06/23/24	
p,m-Xylene	ND	0.0500	1	06/21/24	06/23/24	
Total Xylenes	ND	0.0250	1	06/21/24	06/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2425097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/21/24	06/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	106 %	70-130		06/21/24	06/23/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2425100	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/21/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/21/24	06/25/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		06/21/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2425103	
Chloride	ND	20.0	1	06/21/24	06/22/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:50:47AM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425097-BLK1) Prepared: 06/21/24 Analyzed: 06/22/24

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	7.24		8.00		90.5	70-130			

LCS (2425097-BS1) Prepared: 06/21/24 Analyzed: 06/22/24

Benzene	5.16	0.0250	5.00		103	70-130			
Ethylbenzene	4.81	0.0250	5.00		96.1	70-130			
Toluene	5.05	0.0250	5.00		101	70-130			
o-Xylene	4.91	0.0250	5.00		98.2	70-130			
p,m-Xylene	9.90	0.0500	10.0		99.0	70-130			
Total Xylenes	14.8	0.0250	15.0		98.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.32		8.00		91.4	70-130			

Matrix Spike (2425097-MS1) Source: E406191-02 Prepared: 06/21/24 Analyzed: 06/22/24

Benzene	5.18	0.0250	5.00	ND	104	54-133			
Ethylbenzene	4.84	0.0250	5.00	ND	96.9	61-133			
Toluene	5.10	0.0250	5.00	ND	102	61-130			
o-Xylene	4.95	0.0250	5.00	ND	99.0	63-131			
p,m-Xylene	9.98	0.0500	10.0	ND	99.8	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.35		8.00		91.9	70-130			

Matrix Spike Dup (2425097-MSD1) Source: E406191-02 Prepared: 06/21/24 Analyzed: 06/22/24

Benzene	5.24	0.0250	5.00	ND	105	54-133	1.10	20	
Ethylbenzene	4.89	0.0250	5.00	ND	97.7	61-133	0.863	20	
Toluene	5.14	0.0250	5.00	ND	103	61-130	0.801	20	
o-Xylene	4.99	0.0250	5.00	ND	99.9	63-131	0.839	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.754	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	0.782	20	
Surrogate: 4-Bromochlorobenzene-PID	7.35		8.00		91.9	70-130			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:50:47AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425097-BLK1) Prepared: 06/21/24 Analyzed: 06/22/24

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

LCS (2425097-BS2) Prepared: 06/21/24 Analyzed: 06/22/24

Gasoline Range Organics (C6-C10)	52.2	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.67		8.00		108	70-130			

Matrix Spike (2425097-MS2) Source: E406191-02 Prepared: 06/21/24 Analyzed: 06/22/24

Gasoline Range Organics (C6-C10)	52.0	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.56		8.00		107	70-130			

Matrix Spike Dup (2425097-MSD2) Source: E406191-02 Prepared: 06/21/24 Analyzed: 06/22/24

Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	3.15	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.59		8.00		107	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:50:47AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425100-BLK1) Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.5		50.0		105	50-200			

LCS (2425100-BS1) Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	276	25.0	250		110	38-132			
Surrogate: n-Nonane	49.6		50.0		99.2	50-200			

Matrix Spike (2425100-MS1) Source: E406194-01 Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	284	25.0	250	ND	114	38-132			
Surrogate: n-Nonane	48.6		50.0		97.3	50-200			

Matrix Spike Dup (2425100-MSD1) Source: E406194-01 Prepared: 06/21/24 Analyzed: 06/24/24

Diesel Range Organics (C10-C28)	293	25.0	250	ND	117	38-132	3.05	20	
Surrogate: n-Nonane	49.9		50.0		99.7	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 9:50:47AM

Anions by EPA 300.0/9056A

Analyst: JM

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

Blank (2425103-BLK1)					Prepared: 06/21/24 Analyzed: 06/21/24				
Chloride	ND	20.0							
LCS (2425103-BS1)					Prepared: 06/21/24 Analyzed: 06/22/24				
Chloride	249	20.0	250		99.6	90-110			
Matrix Spike (2425103-MS1)					Source: E406191-01		Prepared: 06/21/24 Analyzed: 06/22/24		
Chloride	306	20.0	250	55.8	100	80-120			
Matrix Spike Dup (2425103-MSD1)					Source: E406191-01		Prepared: 06/21/24 Analyzed: 06/22/24		
Chloride	305	20.0	250	55.8	99.8	80-120	0.436	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/25/24 09:50

- 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

Page 1 of 1

Client: <u>Mac Energy</u> Project: <u>Westmount Spill</u> Project Manager: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Report due by: _____					<b>Bill To</b> Attention: <u>ENERGY STAFFING SERVICES</u> Address: <u>2724 NW COUNTY RD</u> City, State, Zip: <u>HOBBS, NM 88240</u> Phone: <u>575-393-9048</u> Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u> <u>BRITTNEY@ENERGYSTAFFINGLLC.COM</u>					<b>Lab Use Only</b> Lab WO# <u>E406196</u> Job Number <u>20046-0001</u> Analysis and Method DRO/ORO by 8015 _____ GRO/DRO by 8015 _____ BTEX by 8021 _____ VOC by 8260 _____ Metals 6010 _____ Chloride 300.0 _____ BGDOC NM _____ BGDOC TX _____					<b>TAT</b> 1D <input checked="" type="checkbox"/> 2D <input type="checkbox"/> 3D <input type="checkbox"/> Standard _____			<b>EPA Program</b> CWA _____ SDWA _____ RCRA _____ State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks			
	6/19/24	S	1	SP1-8	1														
	1	1	1	SP2-6	2														
	1	1	1	SP3-8	3														
	1	1	1	SP4-8	4														
	6/19/24	S	1	SP5-8	5														

## Additional Instructions:

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

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <u>Andy Tough</u>		Date <u>6-20-24</u> Time <u>1030</u>	Received by: (Signature) <u>[Signature]</u>		Date <u>6-20-24</u> Time <u>1030</u>	<b>Lab Use Only</b> Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>[Signature]</u>		Date <u>6-20-24</u> Time <u>1630</u>	Received by: (Signature) <u>[Signature]</u>		Date <u>6-20-24</u> Time <u>1030</u>	
Relinquished by: (Signature) <u>[Signature]</u>		Date <u>6-20-24</u> Time <u>2400</u>	Received by: (Signature) <u>Ruth R Hall</u>		Date <u>6-21-24</u> Time <u>0530</u>	
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA						

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

## Envirotech Analytical Laboratory

Printed: 6/24/2024 10:02:51AM

## 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:	06/21/24 05:30	Work Order ID:	E406196
Phone:	(575) 390-6397	Date Logged In:	06/20/24 16:48	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/24/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not listed by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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?	Yes
Collectors name?	No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E406212

Job Number: 20046-0001

Received: 6/24/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/25/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 6/25/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E406212  
Date Received: 6/24/2024 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/24/2024 7:30:00AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

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



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Sample Summary

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/25/24 13:52

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP9-6	E406212-01A	Soil	06/19/24	06/24/24	Glass Jar, 2 oz.
SP10-4	E406212-02A	Soil	06/19/24	06/24/24	Glass Jar, 2 oz.
SP11-4	E406212-03A	Soil	06/19/24	06/24/24	Glass Jar, 2 oz.
SP12-8	E406212-04A	Soil	06/19/24	06/24/24	Glass Jar, 2 oz.
SP13-6	E406212-05A	Soil	06/19/24	06/24/24	Glass Jar, 2 oz.
SP14-4	E406212-06A	Soil	06/19/24	06/24/24	Glass Jar, 2 oz.
SP15-8	E406212-07A	Soil	06/19/24	06/24/24	Glass Jar, 2 oz.

## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 1:52:35PM

### SP9-6

### E406212-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Benzene	ND	0.0250	1	06/24/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/24/24	06/25/24	
Toluene	ND	0.0250	1	06/24/24	06/25/24	
o-Xylene	ND	0.0250	1	06/24/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/24/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/24/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		92.0 %	70-130	06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/24/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		105 %	70-130	06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426001	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>		92.0 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2426007	
Chloride	34.3	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 1:52:35PM

## SP10-4

## E406212-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426003
Benzene	ND	0.0250	1	06/24/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/24/24	06/25/24	
Toluene	ND	0.0250	1	06/24/24	06/25/24	
o-Xylene	ND	0.0250	1	06/24/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/24/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/24/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.7 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426003
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/24/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	105 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426001
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>						
	90.6 %	50-200		06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426007
Chloride	24.7	20.0	1	06/24/24	06/24/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 1:52:35PM

## SP11-4

## E406212-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Benzene	ND	0.0250	1	06/24/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/24/24	06/25/24	
Toluene	ND	0.0250	1	06/24/24	06/25/24	
o-Xylene	ND	0.0250	1	06/24/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/24/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/24/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.3 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/24/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	104 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426001	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>						
	86.4 %	50-200		06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2426007	
Chloride	26.1	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 1:52:35PM

## SP12-8

## E406212-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426003
Benzene	ND	0.0250	1	06/24/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/24/24	06/25/24	
Toluene	ND	0.0250	1	06/24/24	06/25/24	
o-Xylene	ND	0.0250	1	06/24/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/24/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/24/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.1 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426003
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/24/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	106 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426001
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>						
	84.8 %	50-200		06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426007
Chloride	123	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 1:52:35PM

## SP13-6

## E406212-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Benzene	ND	0.0250	1	06/24/24	06/24/24	
Ethylbenzene	ND	0.0250	1	06/24/24	06/24/24	
Toluene	ND	0.0250	1	06/24/24	06/24/24	
o-Xylene	ND	0.0250	1	06/24/24	06/24/24	
p,m-Xylene	ND	0.0500	1	06/24/24	06/24/24	
Total Xylenes	ND	0.0250	1	06/24/24	06/24/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.6 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/24/24	06/24/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		105 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426001	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>		88.5 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2426007	
Chloride	ND	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 1:52:35PM

## SP14-4

## E406212-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Benzene	ND	0.0250	1	06/24/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/24/24	06/25/24	
Toluene	ND	0.0250	1	06/24/24	06/25/24	
o-Xylene	ND	0.0250	1	06/24/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/24/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/24/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.6 %	70-130	06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/24/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		105 %	70-130	06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426001	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>		95.2 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2426007	
Chloride	132	20.0	1	06/24/24	06/24/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 1:52:35PM

## SP15-8

## E406212-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426003
Benzene	ND	0.0250	1	06/24/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/24/24	06/25/24	
Toluene	ND	0.0250	1	06/24/24	06/25/24	
o-Xylene	ND	0.0250	1	06/24/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/24/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/24/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.6 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426003
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/24/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	106 %	70-130		06/24/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426001
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>						
	91.6 %	50-200		06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426007
Chloride	33.9	20.0	1	06/24/24	06/24/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 1:52:35PM

Volatile Organics by EPA 8021B

Analyst: BA

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

Blank (2426003-BLK1) Prepared: 06/24/24 Analyzed: 06/24/24

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	7.45		8.00		93.1	70-130			

LCS (2426003-BS1) Prepared: 06/24/24 Analyzed: 06/24/24

Benzene	5.30	0.0250	5.00		106	70-130			
Ethylbenzene	4.96	0.0250	5.00		99.2	70-130			
Toluene	5.20	0.0250	5.00		104	70-130			
o-Xylene	5.05	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	7.53		8.00		94.1	70-130			

Matrix Spike (2426003-MS1) Source: E406212-05 Prepared: 06/24/24 Analyzed: 06/24/24

Benzene	5.36	0.0250	5.00	ND	107	54-133			
Ethylbenzene	5.02	0.0250	5.00	ND	100	61-133			
Toluene	5.26	0.0250	5.00	ND	105	61-130			
o-Xylene	5.11	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	7.44		8.00		93.0	70-130			

Matrix Spike Dup (2426003-MSD1) Source: E406212-05 Prepared: 06/24/24 Analyzed: 06/25/24

Benzene	5.18	0.0250	5.00	ND	104	54-133	3.40	20	
Ethylbenzene	4.84	0.0250	5.00	ND	96.8	61-133	3.71	20	
Toluene	5.08	0.0250	5.00	ND	102	61-130	3.46	20	
o-Xylene	4.94	0.0250	5.00	ND	98.8	63-131	3.41	20	
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131	3.75	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.2	63-131	3.64	20	
Surrogate: 4-Bromochlorobenzene-PID	7.44		8.00		93.0	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 1:52:35PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426003-BLK1) Prepared: 06/24/24 Analyzed: 06/24/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.42		8.00		105	70-130			

LCS (2426003-BS2) Prepared: 06/24/24 Analyzed: 06/24/24

Gasoline Range Organics (C6-C10)	52.1	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.55		8.00		107	70-130			

Matrix Spike (2426003-MS2) Source: E406212-05 Prepared: 06/24/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	49.2	20.0	50.0	ND	98.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.55		8.00		107	70-130			

Matrix Spike Dup (2426003-MSD2) Source: E406212-05 Prepared: 06/24/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	51.7	20.0	50.0	ND	103	70-130	5.06	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.55		8.00		107	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 1:52:35PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426001-BLK1)					Prepared: 06/24/24 Analyzed: 06/25/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.6		50.0		105	50-200			

LCS (2426001-BS1)					Prepared: 06/24/24 Analyzed: 06/25/24				
Diesel Range Organics (C10-C28)	295	25.0	250		118	38-132			
Surrogate: n-Nonane	50.8		50.0		102	50-200			

Matrix Spike (2426001-MS1)					Source: E406207-07		Prepared: 06/24/24 Analyzed: 06/25/24		
Diesel Range Organics (C10-C28)	289	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	51.7		50.0		103	50-200			

Matrix Spike Dup (2426001-MSD1)					Source: E406207-07		Prepared: 06/24/24 Analyzed: 06/25/24		
Diesel Range Organics (C10-C28)	317	25.0	250	ND	127	38-132	8.99	20	
Surrogate: n-Nonane	51.3		50.0		103	50-200			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 1:52:35PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426007-BLK1)					Prepared: 06/24/24 Analyzed: 06/24/24				
Chloride	ND	20.0							
LCS (2426007-BS1)					Prepared: 06/24/24 Analyzed: 06/24/24				
Chloride	249	20.0	250		99.7	90-110			
Matrix Spike (2426007-MS1)					Source: E406207-07		Prepared: 06/24/24 Analyzed: 06/24/24		
Chloride	236	200	250	ND	94.5	80-120			
Matrix Spike Dup (2426007-MSD1)					Source: E406207-07		Prepared: 06/24/24 Analyzed: 06/24/24		
Chloride	263	200	250	ND	105	80-120	10.5	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/25/24 13:52

- 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

Page 1 of 1

Client: <u>Nack Energy</u>					Bill To					Lab Use Only				TAT				EPA Program	
Project: <u>Westmont Spill F</u>					Attention: ENERGY STAFFING SERVICES					Lab WO# <u>E 406212</u>		Job Number <u>20040-001</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager:					Address: 2724 NW COUNTY RD					Analysis and Method									
Address:					City, State, Zip HOBBS, NM 88240														RCRA
City, State, Zip					Phone: 575-393-9048														
Phone:					Email: NATALIE@ENERGYSTAFFINGLLC.COM														
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM														
Report due by:																			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0								
	4/14/24	S	1	SP9-6	1														
				SP10-4	2														
				SP11-4	3														
				SP12-8	4														
				SP13-06	5														
				SP14-4	6														
	4/19/24	S	1	SP15-8	7														

## Additional Instructions:

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

Sampled by:

Andy Toruga

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
Andy Toruga	6/19/24		Michelle Gonzales	6-21-24	1305	Received on ice: Y / N
Michelle Gonzales	6-21-24	1620		6/21/24	1730	T1: T2: T3:
	6/21/24	1730	Raina Delmar	6/24/24	7:30	AVG Temp °C 4
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other						Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.


**enviro+tech**

## Envirotech Analytical Laboratory

Printed: 6/24/2024 10:49:33AM

## 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:	06/24/24 07:30	Work Order ID:	E406212
Phone:	(575) 390-6397	Date Logged In:	06/24/24 08:06	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/25/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not listed on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount (F)

Work Order: E406214

Job Number: 20046-0001

Received: 6/24/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/25/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 6/25/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount (F)  
Workorder: E406214  
Date Received: 6/24/2024 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/24/2024 7:30:00AM, under the Project Name: West Mount (F).

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

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

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

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

Respectfully,

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

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount (F)	Reported:  06/25/24 14:50
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW5-2'	E406214-01A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.
SW8-2'	E406214-02A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.
SW9-2'	E406214-03A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.
SW10-2'	E406214-04A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.
SW11-2'	E406214-05A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.
SW12-2'	E406214-06A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.
SW13-2'	E406214-07A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.
SW14-2'	E406214-08A	Soil	06/20/24	06/24/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 2:50:09PM

**SW5-2'**

**E406214-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2426004
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
<i>Surrogate: Bromofluorobenzene</i>		98.1 %	70-130	06/24/24	06/24/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.8 %	70-130	06/24/24	06/24/24	
<i>Surrogate: Toluene-d8</i>		96.7 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2426004
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
<i>Surrogate: Bromofluorobenzene</i>		98.1 %	70-130	06/24/24	06/24/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.8 %	70-130	06/24/24	06/24/24	
<i>Surrogate: Toluene-d8</i>		96.7 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426005
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2426006
Chloride	28.4	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 2:50:09PM

SW8-2'

E406214-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		103 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		97.3 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		103 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		97.3 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426005	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
Surrogate: n-Nonane		109 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: WF		Batch: 2426006	
Chloride	ND	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 2:50:09PM

SW9-2'

E406214-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene	99.0 %	70-130		06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4	97.0 %	70-130		06/24/24	06/24/24	
Surrogate: Toluene-d8	96.3 %	70-130		06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene	99.0 %	70-130		06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4	97.0 %	70-130		06/24/24	06/24/24	
Surrogate: Toluene-d8	96.3 %	70-130		06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426005	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
Surrogate: n-Nonane	110 %	50-200		06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: WF		Batch: 2426006	
Chloride	ND	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 2:50:09PM

SW10-2'

E406214-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.4 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		97.4 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.4 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		97.4 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426005	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
Surrogate: n-Nonane		111 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: WF		Batch: 2426006	
Chloride	ND	20.0	1	06/24/24	06/24/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 2:50:09PM

SW11-2'

E406214-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		100 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		97.1 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		100 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		97.1 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426005	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
Surrogate: n-Nonane		114 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: WF		Batch: 2426006	
Chloride	ND	20.0	1	06/24/24	06/24/24	



Sample Data

Mack Energy	Project Name:	West Mount (F)	Reported: 6/25/2024 2:50:09PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW12-2'

E406214-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene	99.4 %	70-130		06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		06/24/24	06/24/24	
Surrogate: Toluene-d8	96.6 %	70-130		06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene	99.4 %	70-130		06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		06/24/24	06/24/24	
Surrogate: Toluene-d8	96.6 %	70-130		06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426005	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
Surrogate: n-Nonane	113 %	50-200		06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: WF		Batch: 2426006	
Chloride	ND	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 2:50:09PM

SW13-2'

E406214-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		96.7 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2426004	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		96.7 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426005	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
Surrogate: n-Nonane		112 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: WF		Batch: 2426006	
Chloride	54.7	20.0	1	06/24/24	06/24/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/25/2024 2:50:09PM

SW14-2'

E406214-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2426004
Benzene	ND	0.0500	2	06/24/24	06/24/24	
Ethylbenzene	ND	0.0500	2	06/24/24	06/24/24	
Toluene	ND	0.0500	2	06/24/24	06/24/24	
o-Xylene	ND	0.0500	2	06/24/24	06/24/24	
p,m-Xylene	ND	0.100	2	06/24/24	06/24/24	
Total Xylenes	ND	0.0500	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		100 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		99.8 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2426004
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/24/24	06/24/24	
Surrogate: Bromofluorobenzene		100 %	70-130	06/24/24	06/24/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	06/24/24	06/24/24	
Surrogate: Toluene-d8		99.8 %	70-130	06/24/24	06/24/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426005
Diesel Range Organics (C10-C28)	ND	25.0	1	06/24/24	06/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/24/24	06/25/24	
Surrogate: n-Nonane		115 %	50-200	06/24/24	06/25/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2426006
Chloride	28.2	20.0	1	06/24/24	06/24/24	





QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 2:50:09PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

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

Blank (2426004-BLK1) Prepared: 06/24/24 Analyzed: 06/24/24

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: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.489		0.500		97.7	70-130			

LCS (2426004-BS1) Prepared: 06/24/24 Analyzed: 06/24/24

Benzene	2.41	0.0250	2.50		96.4	70-130			
Ethylbenzene	2.49	0.0250	2.50		99.7	70-130			
Toluene	2.35	0.0250	2.50		93.9	70-130			
o-Xylene	2.43	0.0250	2.50		97.3	70-130			
p,m-Xylene	4.88	0.0500	5.00		97.7	70-130			
Total Xylenes	7.31	0.0250	7.50		97.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.7	70-130			

Matrix Spike (2426004-MS1) Source: E406210-03 Prepared: 06/24/24 Analyzed: 06/24/24

Benzene	2.26	0.0250	2.50	ND	90.5	48-131			
Ethylbenzene	2.32	0.0250	2.50	ND	92.9	45-135			
Toluene	2.19	0.0250	2.50	ND	87.5	48-130			
o-Xylene	2.29	0.0250	2.50	ND	91.8	43-135			
p,m-Xylene	4.60	0.0500	5.00	ND	92.0	43-135			
Total Xylenes	6.89	0.0250	7.50	ND	91.9	43-135			
Surrogate: Bromofluorobenzene	0.500		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.470		0.500		94.0	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			

Matrix Spike Dup (2426004-MSD1) Source: E406210-03 Prepared: 06/24/24 Analyzed: 06/24/24

Benzene	2.47	0.0250	2.50	ND	98.6	48-131	8.63	23	
Ethylbenzene	2.50	0.0250	2.50	ND	100	45-135	7.32	27	
Toluene	2.36	0.0250	2.50	ND	94.4	48-130	7.63	24	
o-Xylene	2.55	0.0250	2.50	ND	102	43-135	10.5	27	
p,m-Xylene	5.11	0.0500	5.00	ND	102	43-135	10.5	27	
Total Xylenes	7.66	0.0250	7.50	ND	102	43-135	10.5	27	
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.474		0.500		94.8	70-130			
Surrogate: Toluene-d8	0.492		0.500		98.4	70-130			

QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 2:50:09PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

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

Blank (2426004-BLK1) Prepared: 06/24/24 Analyzed: 06/24/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.489		0.500		97.7	70-130			

LCS (2426004-BS2) Prepared: 06/24/24 Analyzed: 06/24/24

Gasoline Range Organics (C6-C10)	52.1	20.0	50.0		104	70-130			
Surrogate: Bromofluorobenzene	0.509		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.2	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

Matrix Spike (2426004-MS2) Source: E406210-03 Prepared: 06/24/24 Analyzed: 06/24/24

Gasoline Range Organics (C6-C10)	53.3	20.0	50.0	ND	107	70-130			
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		95.0	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			

Matrix Spike Dup (2426004-MSD2) Source: E406210-03 Prepared: 06/24/24 Analyzed: 06/24/24

Gasoline Range Organics (C6-C10)	51.9	20.0	50.0	ND	104	70-130	2.72	20	
Surrogate: Bromofluorobenzene	0.511		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.482		0.500		96.4	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 2:50:09PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426005-BLK1)					Prepared: 06/24/24 Analyzed: 06/24/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.4		50.0		113	50-200			

LCS (2426005-BS1)					Prepared: 06/24/24 Analyzed: 06/25/24				
Diesel Range Organics (C10-C28)	327	25.0	250		131	38-132			
Surrogate: n-Nonane	52.8		50.0		106	50-200			

Matrix Spike (2426005-MS1)					Source: E406213-07		Prepared: 06/24/24 Analyzed: 06/25/24		
Diesel Range Organics (C10-C28)	341	25.0	250	ND	137	38-132			M1
Surrogate: n-Nonane	54.1		50.0		108	50-200			M1

Matrix Spike Dup (2426005-MSD1)					Source: E406213-07		Prepared: 06/24/24 Analyzed: 06/25/24		
Diesel Range Organics (C10-C28)	343	25.0	250	ND	137	38-132	0.332	20	M1
Surrogate: n-Nonane	56.0		50.0		112	50-200			M1



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/25/2024 2:50:09PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426006-BLK1)					Prepared: 06/24/24 Analyzed: 06/24/24				
Chloride	ND	20.0							
LCS (2426006-BS1)					Prepared: 06/24/24 Analyzed: 06/24/24				
Chloride	247	20.0	250		99.0	90-110			
Matrix Spike (2426006-MS1)					Source: E406213-03		Prepared: 06/24/24 Analyzed: 06/24/24		
Chloride	414	20.0	250	166	99.4	80-120			
Matrix Spike Dup (2426006-MSD1)					Source: E406213-03		Prepared: 06/24/24 Analyzed: 06/24/24		
Chloride	405	20.0	250	166	95.7	80-120	2.23	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 (F)	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/25/24 14:50

- 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

## Chain of Custody

Page 1 of 1

Client: <u>Mack Energy</u>					Bill To					Lab Use Only					TAT				EPA Program			
Project: <u>West Mount (F)</u>					Attention: ENERGY STAFFING SERVICES					Lab WO#		Job Number			1D	2D	3D	Standard	CWA	SDWA		
Project Manager:					Address: 2724 NW COUNTY RD					<u>E406214</u>		<u>200410-0001</u>				<input checked="" type="checkbox"/>						
Address:					City, State, Zip: HOBBS, NM 88240					Analysis and Method												RCRA
City, State, Zip:					Phone: 575-393-9048					DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0							
Phone:					Email: NATALIE@ENERGYSTAFFINGLLC.COM													BGDOC NM	BGDOC TX			
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM																	
Report due by:																						
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number																	
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 5-2'</u>	<u>1</u>												<input checked="" type="checkbox"/>					
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 8-2'</u>	<u>2</u>												<input checked="" type="checkbox"/>					
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 9-2'</u>	<u>3</u>												<input checked="" type="checkbox"/>					
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 10-2'</u>	<u>4</u>												<input checked="" type="checkbox"/>					
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 11-2'</u>	<u>5</u>												<input checked="" type="checkbox"/>					
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 12-2'</u>	<u>6</u>												<input checked="" type="checkbox"/>					
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 13-2'</u>	<u>7</u>												<input checked="" type="checkbox"/>					
	<u>06/20</u>	<u>S</u>	<u>1</u>	<u>SW 14-2'</u>	<u>8</u>												<input checked="" type="checkbox"/>					

## Additional Instructions:

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

Sampled by: Sandra Perez

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <u>(Y)</u> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>S. Perez</u>	<u>06/20</u>		<u>Michelle Gonzales</u>	<u>6-21-24</u>	<u>1305</u>	
<u>Michelle Gonzales</u>	<u>6-21-24</u>	<u>1620</u>	<u>[Signature]</u>	<u>6/21/24</u>	<u>1730</u>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<u>[Signature]</u>	<u>6/21/24</u>	<u>1730</u>	<u>Raina Schwann</u>	<u>6/21/24</u>	<u>7:30</u>	

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

## Envirotech Analytical Laboratory

Printed: 6/24/2024 10:45:11AM

## 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:	06/24/24 07:30	Work Order ID:	E406214
Phone:	(575) 390-6397	Date Logged In:	06/24/24 08:46	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/25/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: Courier**Comments/Resolution**

Project manager and time sampled not listed on COC by client.

**Sample Turn Around Time (TAT)**

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

**Sample Cooler**

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? No

**Sample Preservation**

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

**Multiphase Sample Matrix**

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

**Subcontract Laboratory**

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

**Client Instruction**

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

Date



envirotech Inc.



Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount (F)

Work Order: E406216

Job Number: 20046-0001

Received: 6/25/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/26/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 6/26/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount (F)  
Workorder: E406216  
Date Received: 6/25/2024 5:15:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/25/2024 5:15:00AM, under the Project Name: West Mount (F).

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

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

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

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

Respectfully,

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

**Raina Schwanz**  
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Field Offices:

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

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**Sample Summary**

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount (F) Project Number: 20046-0001 Project Manager: Natalie Gladden	<b>Reported:</b> 06/26/24 14:46
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 6-2'	E406216-01A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 7-2'	E406216-02A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 15-2'	E406216-03A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 16-5'	E406216-04A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 17-3'	E406216-05A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 18-2'	E406216-06A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 19-2'	E406216-07A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 20-2'	E406216-08A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 21-2'	E406216-09A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
SW 22-2'	E406216-10A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount (F) Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 6/26/2024 2:46:49PM
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SW 6-2'  
E406216-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
Surrogate: 4-Bromochlorobenzene-PID	90.3 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.8 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426017	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
Surrogate: n-Nonane	110 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2426021	
Chloride	ND	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 7-2'

E406216-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.5 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.5 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	ND	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 15-2'

E406216-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.9 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	341	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 16-5'

E406216-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.4 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	244	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 17-3'

E406216-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.7 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.7 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	114 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	128	20.0	1	06/25/24	06/25/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 18-2'

E406216-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.6 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	245	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 19-2'

E406216-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.7 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	130	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 20-2'

E406216-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.6 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	ND	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 21-2'

E406216-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.0 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426017	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2426021	
Chloride	ND	20.0	1	06/25/24	06/25/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:46:49PM

SW 22-2'

E406216-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.5 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426017	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	119 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2426021	
Chloride	ND	20.0	1	06/25/24	06/25/24	



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:46:49PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426014-BLK1)

Prepared: 06/25/24 Analyzed: 06/25/24

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	6.95		8.00		86.8	70-130			

LCS (2426014-BS1)

Prepared: 06/25/24 Analyzed: 06/25/24

Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.0	70-130			
Toluene	4.95	0.0250	5.00		99.1	70-130			
o-Xylene	4.81	0.0250	5.00		96.2	70-130			
p,m-Xylene	9.85	0.0500	10.0		98.5	70-130			
Total Xylenes	14.7	0.0250	15.0		97.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.15		8.00		89.3	70-130			

Matrix Spike (2426014-MS1)

Source: E406216-05

Prepared: 06/25/24 Analyzed: 06/25/24

Benzene	4.89	0.0250	5.00	ND	97.9	54-133			
Ethylbenzene	4.68	0.0250	5.00	ND	93.7	61-133			
Toluene	4.79	0.0250	5.00	ND	95.9	61-130			
o-Xylene	4.65	0.0250	5.00	ND	93.0	63-131			
p,m-Xylene	9.52	0.0500	10.0	ND	95.2	63-131			
Total Xylenes	14.2	0.0250	15.0	ND	94.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.16		8.00		89.5	70-130			

Matrix Spike Dup (2426014-MSD1)

Source: E406216-05

Prepared: 06/25/24 Analyzed: 06/25/24

Benzene	4.98	0.0250	5.00	ND	99.6	54-133	1.71	20	
Ethylbenzene	4.77	0.0250	5.00	ND	95.4	61-133	1.83	20	
Toluene	4.87	0.0250	5.00	ND	97.4	61-130	1.57	20	
o-Xylene	4.73	0.0250	5.00	ND	94.5	63-131	1.60	20	
p,m-Xylene	9.68	0.0500	10.0	ND	96.8	63-131	1.69	20	
Total Xylenes	14.4	0.0250	15.0	ND	96.1	63-131	1.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.22		8.00		90.2	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:46:49PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426014-BLK1) Prepared: 06/25/24 Analyzed: 06/25/24

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

LCS (2426014-BS2) Prepared: 06/25/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	50.6	20.0	50.0		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.72		8.00		96.5	70-130			

Matrix Spike (2426014-MS2) Source: E406216-05 Prepared: 06/25/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	46.9	20.0	50.0	ND	93.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.8	70-130			

Matrix Spike Dup (2426014-MSD2) Source: E406216-05 Prepared: 06/25/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	50.8	20.0	50.0	ND	102	70-130	8.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.67		8.00		95.8	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:46:49PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426017-BLK1) Prepared: 06/25/24 Analyzed: 06/25/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.9		50.0		112	50-200			

LCS (2426017-BS1) Prepared: 06/25/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	318	25.0	250		127	38-132			
Surrogate: n-Nonane	58.0		50.0		116	50-200			

Matrix Spike (2426017-MS1) Source: E406216-06 Prepared: 06/25/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	331	25.0	250	ND	132	38-132			
Surrogate: n-Nonane	58.0		50.0		116	50-200			

Matrix Spike Dup (2426017-MSD1) Source: E406216-06 Prepared: 06/25/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	330	25.0	250	ND	132	38-132	0.189	20	
Surrogate: n-Nonane	57.8		50.0		116	50-200			





QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:46:49PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426021-BLK1)					Prepared: 06/25/24 Analyzed: 06/25/24				
Chloride	ND	20.0							
LCS (2426021-BS1)					Prepared: 06/25/24 Analyzed: 06/25/24				
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2426021-MS1)					Source: E406216-06		Prepared: 06/25/24 Analyzed: 06/25/24		
Chloride	500	20.0	250	245	102	80-120			
Matrix Spike Dup (2426021-MSD1)					Source: E406216-06		Prepared: 06/25/24 Analyzed: 06/25/24		
Chloride	496	20.0	250	245	101	80-120	0.792	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 (F)	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/26/24 14:46

- 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

Page 1 of 1

Client: <u>Mack Energy</u> Project: <u>West Mount(F)</u> Project Manager: Address: City, State, Zip: Phone: Email: Report due by:					<b>Bill To</b> Attention: ENERGY STAFFING SERVICES Address: 2724 NW COUNTY RD City, State, Zip HOBBS, NM 88240 Phone: 575-393-9048 Email: NATALIE@ENERGYSTAFFINGLLC.COM BRITTNEY@ENERGYSTAFFINGLLC.COM					<b>Lab Use Only</b> Lab WO# <u>E 406216</u> Job Number <u>20046-0001</u> Analysis and Method					<b>TAT</b> 1D 2D 3D Standard			<b>EPA Program</b> CWA SDWA RCRA		
										State NM CO UT AZ TX										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks						
	06/21	S	1	SW 6-2'	1							✓								
				SW 7-2'	2							✓								
				SW 15-2'	3							✓								
				SW 16-5'	4							✓								
				SW 17-3'	5							✓								
				SW 18-2'	6							✓								
				SW 19-2'	7							✓								
				SW 20-2'	8							✓								
				SW 21-2'	9							✓								
	06/21	S	1	SW 22-2'	10							✓								
<b>Additional Instructions:</b> I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: <u>Sandra Perez</u> Relinquished by: (Signature) <u>S. Perez</u> Date <u>06/21/24</u> Time <u>1215</u> Received by: (Signature) <u>Michelle Eyle</u> Date <u>6-24-24</u> Time <u>1215</u> Relinquished by: (Signature) <u>Michelle Eyle</u> Date <u>6-24-24</u> Time <u>2300</u> Received by: (Signature) <u>Kyle R Hall</u> Date <u>6-25-24</u> Time <u>0515</u> Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date _____ Time _____ Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				

## Envirotech Analytical Laboratory

Printed: 6/26/2024 8:27:36AM

## 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:	06/25/24 05:15	Work Order ID:	E406216
Phone:	(575) 390-6397	Date Logged In:	06/24/24 16:07	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	06/26/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: Courier**Comments/Resolution**

Project manager and time sampled are not listed on the COC by client.

**Sample Turn Around Time (TAT)**

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

**Sample Cooler**

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? No

**Sample Preservation**

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

**Multiphase Sample Matrix**

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

**Subcontract Laboratory**

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

**Client Instruction**

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

Date



envirotech Inc.



Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E406217

Job Number: 20046-0001

Received: 6/25/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/26/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 6/26/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E406217  
Date Received: 6/25/2024 5:15:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/25/2024 5:15:00AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/26/24 14:49

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sp 6-4	E406217-01A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
Sp 7-4	E406217-02A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
Sp 8-8	E406217-03A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
Sp 16-4	E406217-04A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
Sp 17-4	E406217-05A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
Sp 18-4	E406217-06A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:49:14PM

### Sp 6-4

**E406217-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.0 %	70-130	06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.7 %	70-130	06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426017	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2426021	
Chloride	80.9	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:49:14PM

## Sp 7-4

E406217-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.8 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	96.4 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426017	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>	115 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2426021	
Chloride	93.5	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:49:14PM

## Sp 8-8

E406217-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.3 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	96.6 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2426017	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>	111 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2426021	
Chloride	87.4	20.0	1	06/25/24	06/25/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:49:14PM

## Sp 16-4

E406217-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.3 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.0 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	37.8	20.0	1	06/25/24	06/25/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/26/2024 2:49:14PM

## Sp 17-4

E406217-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.6 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2426014
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2426017
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	99.6 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2426021
Chloride	36.2	20.0	1	06/25/24	06/25/24	



Sample Data

Mack Energy	Project Name:	West Mount Spill F	Reported: 6/26/2024 2:49:14PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sp 18-4

E406217-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Benzene	ND	0.0250	1	06/25/24	06/25/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/25/24	
Toluene	ND	0.0250	1	06/25/24	06/25/24	
o-Xylene	ND	0.0250	1	06/25/24	06/25/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/25/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/25/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.9 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2426014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/25/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.4 %	70-130		06/25/24	06/25/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2426017	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		06/25/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2426021	
Chloride	ND	20.0	1	06/25/24	06/25/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:49:14PM

Volatile Organics by EPA 8021B

Analyst: BA

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

Blank (2426014-BLK1) Prepared: 06/25/24 Analyzed: 06/25/24

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	6.95		8.00		86.8	70-130			

LCS (2426014-BS1) Prepared: 06/25/24 Analyzed: 06/25/24

Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.0	70-130			
Toluene	4.95	0.0250	5.00		99.1	70-130			
o-Xylene	4.81	0.0250	5.00		96.2	70-130			
p,m-Xylene	9.85	0.0500	10.0		98.5	70-130			
Total Xylenes	14.7	0.0250	15.0		97.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.15		8.00		89.3	70-130			

Matrix Spike (2426014-MS1) Source: E406216-05 Prepared: 06/25/24 Analyzed: 06/25/24

Benzene	4.89	0.0250	5.00	ND	97.9	54-133			
Ethylbenzene	4.68	0.0250	5.00	ND	93.7	61-133			
Toluene	4.79	0.0250	5.00	ND	95.9	61-130			
o-Xylene	4.65	0.0250	5.00	ND	93.0	63-131			
p,m-Xylene	9.52	0.0500	10.0	ND	95.2	63-131			
Total Xylenes	14.2	0.0250	15.0	ND	94.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.16		8.00		89.5	70-130			

Matrix Spike Dup (2426014-MSD1) Source: E406216-05 Prepared: 06/25/24 Analyzed: 06/25/24

Benzene	4.98	0.0250	5.00	ND	99.6	54-133	1.71	20	
Ethylbenzene	4.77	0.0250	5.00	ND	95.4	61-133	1.83	20	
Toluene	4.87	0.0250	5.00	ND	97.4	61-130	1.57	20	
o-Xylene	4.73	0.0250	5.00	ND	94.5	63-131	1.60	20	
p,m-Xylene	9.68	0.0500	10.0	ND	96.8	63-131	1.69	20	
Total Xylenes	14.4	0.0250	15.0	ND	96.1	63-131	1.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.22		8.00		90.2	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:49:14PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426014-BLK1) Prepared: 06/25/24 Analyzed: 06/25/24

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

LCS (2426014-BS2) Prepared: 06/25/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	50.6	20.0	50.0		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.72		8.00		96.5	70-130			

Matrix Spike (2426014-MS2) Source: E406216-05 Prepared: 06/25/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	46.9	20.0	50.0	ND	93.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.8	70-130			

Matrix Spike Dup (2426014-MSD2) Source: E406216-05 Prepared: 06/25/24 Analyzed: 06/25/24

Gasoline Range Organics (C6-C10)	50.8	20.0	50.0	ND	102	70-130	8.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.67		8.00		95.8	70-130			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:49:14PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426017-BLK1) Prepared: 06/25/24 Analyzed: 06/25/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.9		50.0		112	50-200			

LCS (2426017-BS1) Prepared: 06/25/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	318	25.0	250		127	38-132			
Surrogate: n-Nonane	58.0		50.0		116	50-200			

Matrix Spike (2426017-MS1) Source: E406216-06 Prepared: 06/25/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	331	25.0	250	ND	132	38-132			
Surrogate: n-Nonane	58.0		50.0		116	50-200			

Matrix Spike Dup (2426017-MSD1) Source: E406216-06 Prepared: 06/25/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	330	25.0	250	ND	132	38-132	0.189	20	
Surrogate: n-Nonane	57.8		50.0		116	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/26/2024 2:49:14PM

Anions by EPA 300.0/9056A

Analyst: JM

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

Blank (2426021-BLK1)					Prepared: 06/25/24 Analyzed: 06/25/24				
Chloride	ND	20.0							
LCS (2426021-BS1)					Prepared: 06/25/24 Analyzed: 06/25/24				
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2426021-MS1)					Source: E406216-06		Prepared: 06/25/24 Analyzed: 06/25/24		
Chloride	500	20.0	250	245	102	80-120			
Matrix Spike Dup (2426021-MSD1)					Source: E406216-06		Prepared: 06/25/24 Analyzed: 06/25/24		
Chloride	496	20.0	250	245	101	80-120	0.792	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/26/24 14:49

- 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

Page 1 of 1

Client: <u>Mule Energy</u>					Bill To					Lab Use Only					TAT				EPA Program					
Project: <u>WEA MOUNT SPILL</u>					Attention: ENERGY STAFFING SERVICES					Lab WO# <u>E406217</u>					Job Number <u>200416-0001</u>				1D	2D	3D	Standard	CWA	SDWA
Project Manager:					Address: 2724 NW COUNTY RD					Analysis and Method									RCRA					
Address:					City, State, Zip HOBBS, NM 88240																			
City, State, Zip					Phone: 575-393-9048																			
Phone:					Email: NATALIE@ENERGYSTAFFINGLLC.COM																			
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM																			
Report due by:																								

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	X1 BGDOC	Remarks
	6/21/24	S	1	Sp6-4	1							X		
				Sp7-4	2									
				Sp8-8	3									
				Sp16-4	4									
				Sp17-4	5									
	6/21/24	S	1	Sp18-4	6							X		

## Additional Instructions:

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

Sampled by: Andy Cervga

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <u>Y/N</u> T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>Andy Cervga</u>	6/21/24		<u>Michelle Eyle</u>	6/24/24	1215	
<u>Michelle Eyle</u>	6/24/24	2300	<u>Kyleigh R. Hees</u>	6-25-24	0515	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.


**enviro+tech**

## Envirotech Analytical Laboratory

Printed: 6/26/2024 8:28:10AM

## 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:	06/25/24 05:15	Work Order ID:	E406217
Phone:	(575) 390-6397	Date Logged In:	06/24/24 16:14	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	06/26/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled are not listed on the CO Cby client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount F

Work Order: E406230

Job Number: 20046-0001

Received: 6/26/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/27/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 6/27/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount F  
Workorder: E406230  
Date Received: 6/26/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/26/2024 6:00:00AM, under the Project Name: West Mount F.

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

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

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

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

Respectfully,

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/27/24 15:55

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW23-2	E406230-01A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SW24-2	E406230-02A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SW25-2	E406230-03A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SW26-3	E406230-04A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount F Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 6/27/2024 3:55:27PM
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SW23-2  
E406230-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2426035	
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
Surrogate: 4-Bromochlorobenzene-PID	91.8 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2426035	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.0 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2426032	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
Surrogate: n-Nonane	94.6 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2426031	
Chloride	ND	20.0	1	06/26/24	06/26/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:55:27PM

SW24-2

E406230-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.3 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	86.3 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	27.3	20.0	1	06/26/24	06/26/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:55:27PM

SW25-2

E406230-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.5 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	ND	20.0	1	06/26/24	06/26/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:55:27PM

SW26-3

E406230-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.2 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	ND	20.0	1	06/26/24	06/26/24	



## QC Summary Data

Mack Energy	Project Name:	West Mount F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:55:27PM

## Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2426035-BLK1)

Prepared: 06/26/24 Analyzed: 06/26/24

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	7.27		8.00		90.9	70-130			

## LCS (2426035-BS1)

Prepared: 06/26/24 Analyzed: 06/26/24

Benzene	5.09	0.0250	5.00		102	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.1	70-130			
Toluene	5.01	0.0250	5.00		100	70-130			
o-Xylene	4.89	0.0250	5.00		97.8	70-130			
p,m-Xylene	9.96	0.0500	10.0		99.6	70-130			
Total Xylenes	14.8	0.0250	15.0		99.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.25		8.00		90.6	70-130			

## Matrix Spike (2426035-MS1)

Source: E406231-05

Prepared: 06/26/24 Analyzed: 06/26/24

Benzene	10.1	0.0500	10.0	ND	101	54-133			
Ethylbenzene	9.74	0.0500	10.0	ND	97.4	61-133			
Toluene	9.95	0.0500	10.0	ND	99.5	61-130			
o-Xylene	9.69	0.0500	10.0	ND	96.9	63-131			
p,m-Xylene	19.7	0.100	20.0	ND	98.7	63-131			
Total Xylenes	29.4	0.0500	30.0	ND	98.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	14.7		16.0		92.2	70-130			

## Matrix Spike Dup (2426035-MSD1)

Source: E406231-05

Prepared: 06/26/24 Analyzed: 06/26/24

Benzene	10.1	0.0500	10.0	ND	101	54-133	0.390	20	
Ethylbenzene	9.69	0.0500	10.0	ND	96.9	61-133	0.509	20	
Toluene	9.90	0.0500	10.0	ND	99.0	61-130	0.568	20	
o-Xylene	9.66	0.0500	10.0	ND	96.6	63-131	0.253	20	
p,m-Xylene	19.6	0.100	20.0	ND	98.1	63-131	0.628	20	
Total Xylenes	29.3	0.0500	30.0	ND	97.6	63-131	0.504	20	
Surrogate: 4-Bromochlorobenzene-PID	14.8		16.0		92.6	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:55:27PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426035-BLK1) Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.54		8.00		94.3	70-130			

LCS (2426035-BS2) Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		8.00		96.0	70-130			

Matrix Spike (2426035-MS2) Source: E406231-05 Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	98.6	40.0	100	ND	98.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.5		16.0		96.7	70-130			

Matrix Spike Dup (2426035-MSD2) Source: E406231-05 Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	95.4	40.0	100	ND	95.4	70-130	3.27	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.5		16.0		97.1	70-130			





QC Summary Data

Mack Energy	Project Name:	West Mount F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:55:27PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426032-BLK1) Prepared: 06/26/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.3		50.0		107	50-200			

LCS (2426032-BS1) Prepared: 06/26/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	325	25.0	250		130	38-132			
Surrogate: n-Nonane	54.1		50.0		108	50-200			

Matrix Spike (2426032-MS1) Source: E406241-02 Prepared: 06/26/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	324	25.0	250	ND	129	38-132			
Surrogate: n-Nonane	53.2		50.0		106	50-200			

Matrix Spike Dup (2426032-MSD1) Source: E406241-02 Prepared: 06/26/24 Analyzed: 06/26/24

Diesel Range Organics (C10-C28)	325	25.0	250	ND	130	38-132	0.381	20	
Surrogate: n-Nonane	53.9		50.0		108	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:55:27PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426031-BLK1)					Prepared: 06/26/24 Analyzed: 06/26/24				
Chloride	ND	20.0							
LCS (2426031-BS1)					Prepared: 06/26/24 Analyzed: 06/26/24				
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2426031-MS1)					Source: E406241-01		Prepared: 06/26/24 Analyzed: 06/26/24		
Chloride	324	100	250	ND	130	80-120			M6
Matrix Spike Dup (2426031-MSD1)					Source: E406241-01		Prepared: 06/26/24 Analyzed: 06/26/24		
Chloride	320	100	250	ND	128	80-120	1.10	20	M6

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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/27/24 15:55

- M6 Matrix spike recovery has a high bias. The native sample results were below the RL, but appears to have contributed to high MS recoveries.
- 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

[illegible]

## Envirotech Analytical Laboratory

Printed: 6/27/2024 7:37:51AM

## 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:	06/26/24 06:00	Work Order ID:	E406230
Phone:	(575) 390-6397	Date Logged In:	06/25/24 15:52	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/27/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CouierComments/Resolution

Project manager and time sampled not on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Report to:

Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount (F)

Work Order: E406231

Job Number: 20046-0001

Received: 6/26/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/27/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 6/27/24



Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210

Project Name: West Mount (F)  
Workorder: E406231  
Date Received: 6/26/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/26/2024 6:00:00AM, under the Project Name: West Mount (F).

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

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

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

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

Respectfully,

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/27/24 15:57

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP19-4	E406231-01A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SP20-6	E406231-02A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SP21-10	E406231-03A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SP22-4	E406231-04A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SP23-8	E406231-05A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.
SP24-6	E406231-06A	Soil	06/24/24	06/26/24	Glass Jar, 2 oz.

## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:57:34PM

## SP19-4

## E406231-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2426035	
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.2 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2426035	
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.3 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2426032	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>	110 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2426031	
Chloride	43.7	20.0	1	06/26/24	06/26/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:57:34PM

## SP20-6

## E406231-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.8 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.2 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	27.8	20.0	1	06/26/24	06/26/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:57:34PM

## SP21-10

## E406231-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.8 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	116	20.0	1	06/26/24	06/26/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:57:34PM

## SP22-4

## E406231-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0500	2	06/26/24	06/26/24	
Ethylbenzene	ND	0.0500	2	06/26/24	06/26/24	
Toluene	ND	0.0500	2	06/26/24	06/26/24	
o-Xylene	ND	0.0500	2	06/26/24	06/26/24	
p,m-Xylene	ND	0.100	2	06/26/24	06/26/24	
Total Xylenes	ND	0.0500	2	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.4 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	40.0	2	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.8 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	336	20.0	1	06/26/24	06/26/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:57:34PM

## SP23-8

## E406231-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0250	1	06/26/24	06/26/24	
Ethylbenzene	ND	0.0250	1	06/26/24	06/26/24	
Toluene	ND	0.0250	1	06/26/24	06/26/24	
o-Xylene	ND	0.0250	1	06/26/24	06/26/24	
p,m-Xylene	ND	0.0500	1	06/26/24	06/26/24	
Total Xylenes	ND	0.0250	1	06/26/24	06/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.5 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/26/24	06/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.4 %	70-130		06/26/24	06/26/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	301	20.0	1	06/26/24	06/26/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount (F)  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
6/27/2024 3:57:34PM

## SP24-6

## E406231-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Benzene	ND	0.0250	1	06/26/24	06/27/24	
Ethylbenzene	ND	0.0250	1	06/26/24	06/27/24	
Toluene	ND	0.0250	1	06/26/24	06/27/24	
o-Xylene	ND	0.0250	1	06/26/24	06/27/24	
p,m-Xylene	ND	0.0500	1	06/26/24	06/27/24	
Total Xylenes	ND	0.0250	1	06/26/24	06/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.2 %	70-130		06/26/24	06/27/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2426035
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/26/24	06/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.8 %	70-130		06/26/24	06/27/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2426032
Diesel Range Organics (C10-C28)	ND	25.0	1	06/26/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/26/24	06/26/24	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		06/26/24	06/26/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2426031
Chloride	235	20.0	1	06/26/24	06/26/24	





QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:57:34PM

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426035-BLK1) Prepared: 06/26/24 Analyzed: 06/26/24

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	7.27		8.00		90.9	70-130			

LCS (2426035-BS1) Prepared: 06/26/24 Analyzed: 06/26/24

Benzene	5.09	0.0250	5.00		102	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.1	70-130			
Toluene	5.01	0.0250	5.00		100	70-130			
o-Xylene	4.89	0.0250	5.00		97.8	70-130			
p,m-Xylene	9.96	0.0500	10.0		99.6	70-130			
Total Xylenes	14.8	0.0250	15.0		99.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.25		8.00		90.6	70-130			

Matrix Spike (2426035-MS1) Source: E406231-05 Prepared: 06/26/24 Analyzed: 06/26/24

Benzene	10.1	0.0500	10.0	ND	101	54-133			
Ethylbenzene	9.74	0.0500	10.0	ND	97.4	61-133			
Toluene	9.95	0.0500	10.0	ND	99.5	61-130			
o-Xylene	9.69	0.0500	10.0	ND	96.9	63-131			
p,m-Xylene	19.7	0.100	20.0	ND	98.7	63-131			
Total Xylenes	29.4	0.0500	30.0	ND	98.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	14.7		16.0		92.2	70-130			

Matrix Spike Dup (2426035-MSD1) Source: E406231-05 Prepared: 06/26/24 Analyzed: 06/26/24

Benzene	10.1	0.0500	10.0	ND	101	54-133	0.390	20	
Ethylbenzene	9.69	0.0500	10.0	ND	96.9	61-133	0.509	20	
Toluene	9.90	0.0500	10.0	ND	99.0	61-130	0.568	20	
o-Xylene	9.66	0.0500	10.0	ND	96.6	63-131	0.253	20	
p,m-Xylene	19.6	0.100	20.0	ND	98.1	63-131	0.628	20	
Total Xylenes	29.3	0.0500	30.0	ND	97.6	63-131	0.504	20	
Surrogate: 4-Bromochlorobenzene-PID	14.8		16.0		92.6	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:57:34PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426035-BLK1) Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.54		8.00		94.3	70-130			

LCS (2426035-BS2) Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		8.00		96.0	70-130			

Matrix Spike (2426035-MS2) Source: E406231-05 Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	98.6	40.0	100	ND	98.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.5		16.0		96.7	70-130			

Matrix Spike Dup (2426035-MSD2) Source: E406231-05 Prepared: 06/26/24 Analyzed: 06/26/24

Gasoline Range Organics (C6-C10)	95.4	40.0	100	ND	95.4	70-130	3.27	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.5		16.0		97.1	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:57:34PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426032-BLK1)					Prepared: 06/26/24 Analyzed: 06/26/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.3		50.0		107	50-200			

LCS (2426032-BS1)					Prepared: 06/26/24 Analyzed: 06/26/24				
Diesel Range Organics (C10-C28)	325	25.0	250		130	38-132			
Surrogate: n-Nonane	54.1		50.0		108	50-200			

Matrix Spike (2426032-MS1)					Source: E406241-02		Prepared: 06/26/24 Analyzed: 06/26/24		
Diesel Range Organics (C10-C28)	324	25.0	250	ND	129	38-132			
Surrogate: n-Nonane	53.2		50.0		106	50-200			

Matrix Spike Dup (2426032-MSD1)					Source: E406241-02		Prepared: 06/26/24 Analyzed: 06/26/24		
Diesel Range Organics (C10-C28)	325	25.0	250	ND	130	38-132	0.381	20	
Surrogate: n-Nonane	53.9		50.0		108	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount (F)	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	6/27/2024 3:57:34PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2426031-BLK1)					Prepared: 06/26/24 Analyzed: 06/26/24				
Chloride	ND	20.0							
LCS (2426031-BS1)					Prepared: 06/26/24 Analyzed: 06/26/24				
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2426031-MS1)					Source: E406241-01		Prepared: 06/26/24 Analyzed: 06/26/24		
Chloride	324	100	250	ND	130	80-120			M6
Matrix Spike Dup (2426031-MSD1)					Source: E406241-01		Prepared: 06/26/24 Analyzed: 06/26/24		
Chloride	320	100	250	ND	128	80-120	1.10	20	M6

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 (F)	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	06/27/24 15:57

- M6 Matrix spike recovery has a high bias. The native sample results were below the RL, but appears to have contributed to high MS recoveries.
- 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

Client: <u>Marc Energy</u> Project: <u>Westmont (F)</u> Project Manager: Address: City, State, Zip Phone: Email: Report due by:				Bill To Attention: <u>ENERGY STAFFING SERVICES</u> Address: <u>2724 NW COUNTY RD</u> City, State, Zip: <u>HOBBS, NM 88240</u> Phone: <u>575-393-9048</u> Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u> <u>BRITTNEY@ENERGYSTAFFINGLLC.COM</u>				Lab Use Only Lab WO# <u>E406231</u> Job Number <u>20046-0001</u> Analysis and Method				TAT 1D <input checked="" type="checkbox"/> 2D <input type="checkbox"/> 3D <input type="checkbox"/> Standard <input type="checkbox"/> EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/> State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/> Remarks			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 8010	DOCE ep/leach	SGDOC NM	SGDOC TX		
	4/24	S	1	Sp19-4	1							X			
				Sp20-6	2										
				Sp21-10	3										
				Sp22-4	4										
				Sp23-8	5										
	6/4/24	S	1	Sp24-6	6							X			
Additional Instructions:															
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.															
Relinquished by: (Signature) <u>Andy Torng</u> Date <u>6/24/24</u> Time <u>1230</u> Received by: (Signature) <u>Andy Torng</u> Date <u>6-25-24</u> Time <u>1230</u> Relinquished by: (Signature) <u>C. J. M.</u> Date <u>6-25-24</u> Time <u>1530</u> Received by: (Signature) <u>C. J. M.</u> Date <u>6-25-24</u> Time <u>1700</u> Relinquished by: (Signature) <u>C. J. M.</u> Date <u>6-25-24</u> Time <u>2315</u> Received by: (Signature) <u>Kyff &amp; Haa</u> Date <u>6-26-24</u> Time <u>0600</u>															
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.															
Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u> Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA															

## Envirotech Analytical Laboratory

Printed: 6/27/2024 7:38:25AM

## 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:	06/26/24 06:00	Work Order ID:	E406231
Phone:	(575) 390-6397	Date Logged In:	06/25/24 15:58	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/27/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CouierComments/Resolution

Project manager and time sampled not on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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?	Yes
Collectors name?	No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



**MACK ENERGY: WEST MOUNT SPILL F  
DELINEATION SITE PHOTOS**















Jun 19, 2024 11:28:08 AM  
32.99352175N 104.06963886W  
Eddy County  
Mack Energy  
West Mount) (F)  
SP





Jun 19, 2024 10:44:48 AM  
32.99363857N 104.06973279W  
Mack Energy  
West Mount) (F  
Delineation

















Jun 20, 2024 1:23:03 PM  
32.99285543N 104.06999403W  
Mack Energy  
West mount (f)  
sample point  
side walls









Jun 20, 2024 1:24:32 PM  
32.99244726N 104.06971265W  
Mack Energy  
West mount (f)  
sample point  
side walls

























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

**Sent:** Monday, August 19, 2024 2:31 PM

**To:** Natalie Gladden <natalie@energystaffingllc.com>

**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 375229

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#) nAPP2329733486.

The sampling event is expected to take place:

**When:** 08/21/2024 @ 07:00

**Where:** C-30-15S-29E 0 FNL 0 FEL (32.993548,-104.06973)

**Additional Information:** CONTACT NATALIE GLADDEN 575-390-6397

**Additional Instructions:** PLEASE CONTACT NATALIE 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.



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 ENERGY****Location: WEST MOUNT SPILL F****Release Date:**

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Soil	Notes
COMP1	6	160	L	ND	ND	ND	ND	ND	36.5		
COMP2	6	240	L	ND	ND	ND	ND	ND	67.2		
COMP3	6	160	L	ND	ND	ND	ND	ND	34.6		
COMP4	6	160	L	ND	ND	ND	ND	ND	33.2		
COMP5	6	240	L	ND	ND	ND	ND	ND	57.7		
COMP6	10	160	L	ND	ND	ND	ND	ND	ND		
COMP7	10	160	L	ND	ND	ND	ND	ND	ND		
COMP8	8	240	L	ND	ND	ND	ND	ND	56.1		
COMP9	8	240	L	ND	ND	ND	ND	ND	34.2		
COMP10	10	160	L	ND	ND	ND	ND	ND	ND		
COMP11	8	240	L	ND	ND	ND	ND	ND	43.8		
COMP12	10	160	L	ND	ND	ND	ND	ND	127		
COMP13	10	160	L	ND	ND	ND	ND	ND	ND		
COMP14	10	160	L	ND	ND	ND	ND	ND	133		
COMP15	8	160	L	ND	ND	ND	ND	ND	131		
COMP16	6	160	L	ND	ND	ND	ND	ND	32.8		

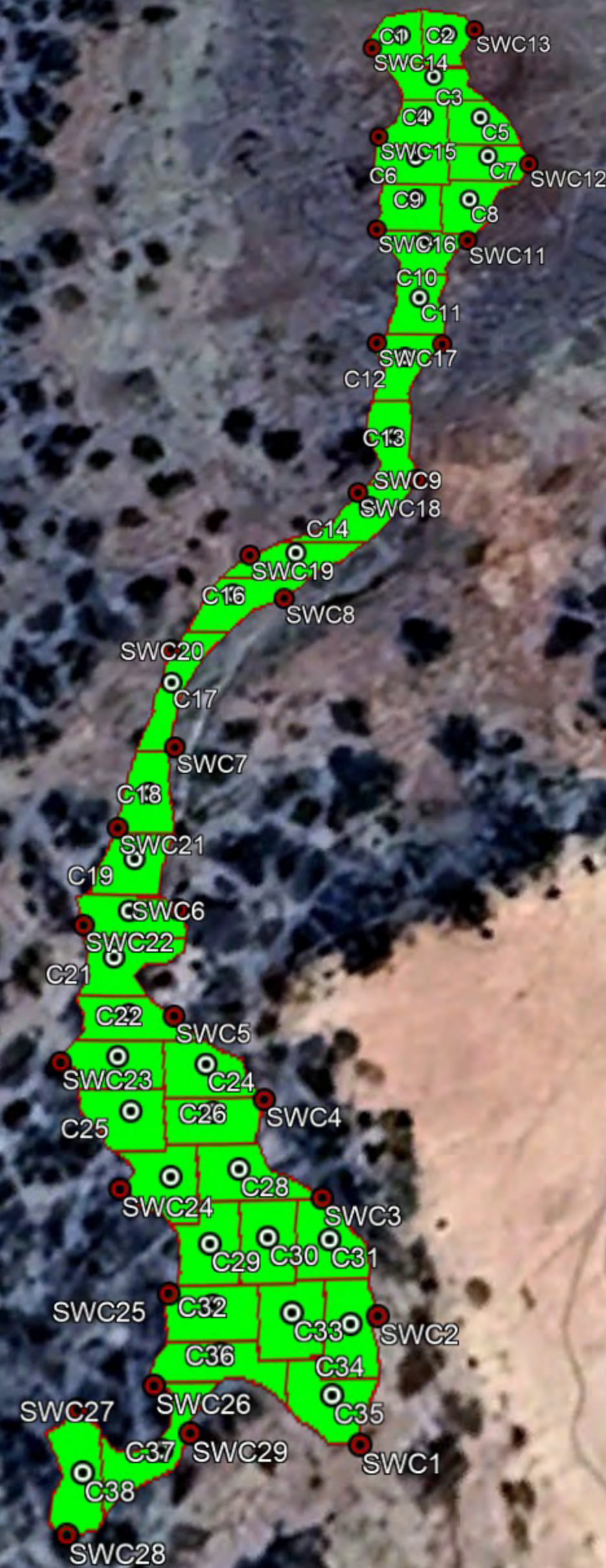
COMP17	4	160	L	ND	ND	ND	ND	ND	34.3		
COMP18	4	160	L	ND	ND	ND	ND	ND	38.3		
COMP19	4	160	L	ND	ND	ND	ND	ND	38.3		
COMP20	4	160	L	ND	ND	ND	ND	ND	40.5		
COMP21	4	160	L	ND	ND	ND	ND	ND	40.8		
COMP22	4	160	L	ND	ND	ND	ND	ND	35.2		
COMP23	4	160	L	ND	ND	ND	ND	ND	35.3		
COMP24	2	160	L	ND	ND	ND	ND	ND	41.4		
COMP25	2	160	L	ND	ND	ND	ND	ND	36.6		
COMP26	4	160	L	ND	ND	ND	ND	ND	37.9		
COMP27	6	160	L	ND	ND	ND	ND	ND	42.4		
COMP28	6	160	L	ND	ND	ND	ND	ND	42.3		
COMP29	4	160	L	ND	ND	ND	ND	ND	37.1		
COMP30	2	160	L	ND	ND	ND	ND	ND	40.5		
COMP31	8	240	L	ND	ND	ND	ND	ND	ND		
COMP32	8	240	L	ND	ND	ND	ND	ND	ND		
COMP33	8	240	L	ND	ND	ND	ND	ND	25.7		

COMP34	8	240	L	ND	ND	ND	ND	ND	23.6		
COMP35	8	240	L	ND	ND	ND	ND	ND	22.9		
COMP36	2	240	L	ND	ND	ND	ND	ND	20.4		
COMP37	2	240	L	ND	ND	ND	ND	ND	20.6		
COMP38	2	240	L	ND	ND	ND	ND	ND	ND		
SWCOMP1	6	160	L	ND	ND	ND	ND	ND	20.6		
SWCOMP2	6	160	L	ND	ND	ND	ND	ND	23.5		
SWCOMP3	6	160	L	ND	ND	ND	ND	ND	24		
SWCOMP4	8	160	L	ND	ND	ND	ND	ND	22.5		
SWCOMP5	8	160	L	ND	ND	ND	ND	ND	45.9		
SWCOMP6	8	160	L	ND	ND	ND	ND	ND	44.6		
SWCOMP7	4	160	L	ND	ND	ND	ND	ND	44.8		
SWCOMP8	4	160	L	ND	ND	ND	ND	ND	25.6		
SWCOMP9	4	160	L	ND	ND	ND	ND	ND	26.2		
SWCOMP10	4	160	L	ND	ND	ND	ND	ND	26.7		
SWCOMP11	6	160	L	ND	ND	ND	ND	ND	37.3		
SWCOMP12	4	160	L	ND	ND	ND	ND	ND	40.6		

SWCOMP13	8	160	L	ND	ND	ND	ND	ND	37.4		
SWCOMP14	8	160	L	ND	ND	ND	ND	ND	38.3		
SWCOMP15	8	160	L	ND	ND	ND	ND	ND	34		
SWCOMP16	8	160	L	ND	ND	ND	ND	ND	35.3		
SWCOMP17	2	160	L	ND	ND	ND	ND	ND	37.3		
SWCOMP18	6	160	L	ND	ND	ND	ND	ND	36.2		
SWCOMP19	4	160	L	ND	ND	ND	ND	ND	38.1		
SWCOMP20	4	160	L	ND	ND	ND	ND	ND	37.8		
SWCOMP21	4	160	L	ND	ND	ND	ND	ND	38.3		
SWCOMP22	4	160	L	ND	ND	ND	ND	ND	37.1		
SWCOMP23	10	160	L	ND	ND	ND	ND	ND	25.6		
SWCOMP24	10	160	L	ND	ND	ND	ND	ND	26.6		
SWCOMP25	10	160	L	ND	ND	ND	ND	ND	31.3		
SWCOMP26	10	160	L	ND	ND	ND	ND	ND	26.5		
SWCOMP27	10	160	L	ND	ND	ND	ND	ND	26.7		
SWCOMP28	10	160	L	ND	ND	ND	ND	ND	27.6		
SWCOMP29	10	160	L	ND	ND	ND	ND	ND	26.3		



- Composites
- Side Wall Composites





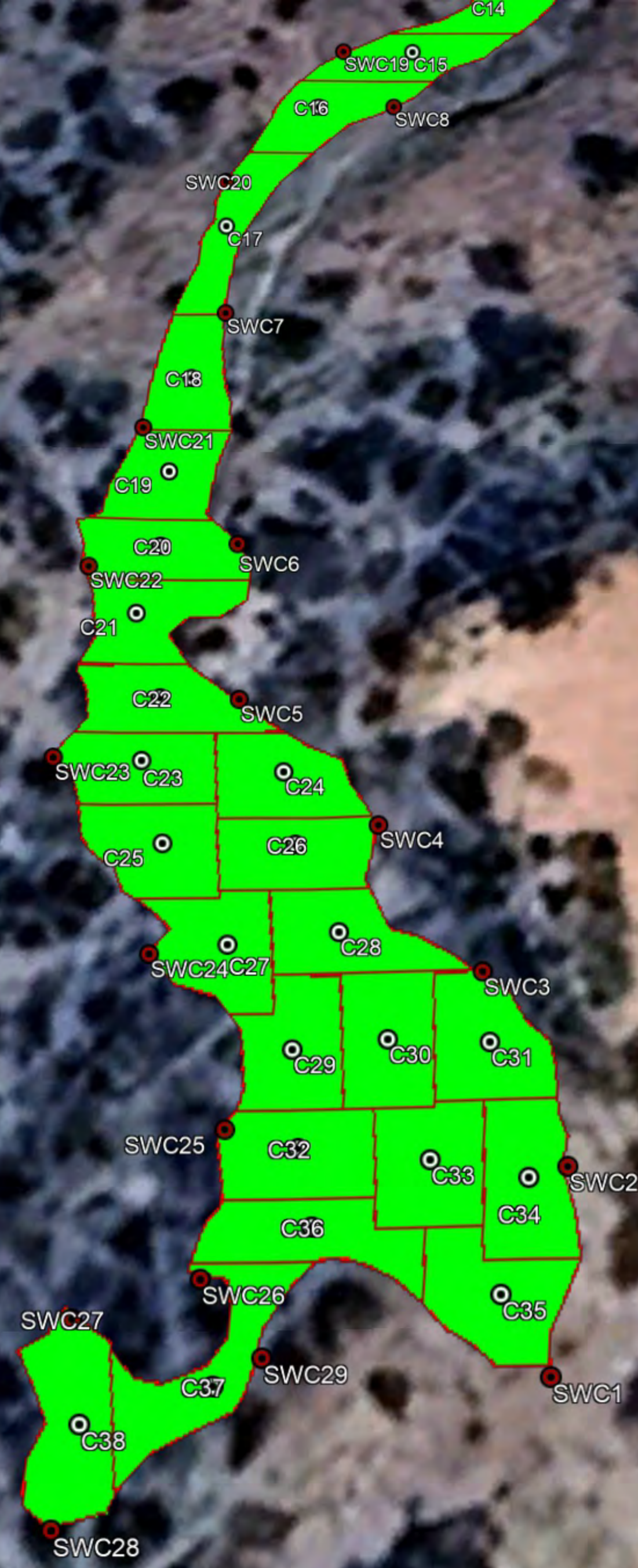
- Composites
- Side Wall Composites





**Legend**

- Composites
- Side Wall Composites





**CLIENTS:** MACK ENERGY**LOCATION:** WEST MOUNT SPILL F

SAMPLE ID	LAT	LONG
C1	32.993588°	-104.069830°
C2	32.993589°	-104.069793°
C3	32.993551°	-104.069801°
C4	32.993517°	-104.069806°
C5	32.993516°	-104.069762°
C6	32.993482°	-104.069810°
C7	32.993484°	-104.069754°
C8	32.993448°	-104.069766°
C9	32.993448°	-104.069807°
C10	32.993412°	-104.069797°
C11	32.993367°	-104.069798°
C12	32.993320°	-104.069805°
C13	32.993259°	-104.069809°
C14	32.993207°	-104.069822°
C15	32.993173°	-104.069872°
C16	32.993143°	-104.069914°
C17	32.993080°	-104.069950°
C18	32.993004°	-104.069956°
C19	32.992960°	-104.069960°
C20	32.992926°	-104.069959°
C21	32.992896°	-104.069965°
C22	32.992860°	-104.069950°
C23	32.992834°	-104.069954°
C24	32.992829°	-104.069895°
C25	32.992801°	-104.069941°
C26	32.992800°	-104.069887°
C27	32.992762°	-104.069910°
C28	32.992766°	-104.069866°
C29	32.992723°	-104.069880°
C30	32.992726°	-104.069843°
C31	32.992724°	-104.069803°
C32	32.992688°	-104.069874°
C33	32.992683°	-104.069823°
C34	32.992676°	-104.069785°
C35	32.992637°	-104.069793°
C36	32.992661°	-104.069866°
C37	32.992609°	-104.069897°
C38	32.992597°	-104.069944°
SWC1	32.992610°	-104.069773°
SWC2	32.992680°	-104.069768°



SWC3	32.992748°	-104.069810°
SWC4	32.992807°	-104.069854°
SWC5	32.992859°	-104.069920°
SWC6	32.992927°	-104.069926°
SWC7	32.993035°	-104.069942°
SWC8	32.993140°	-104.069877°
SWC9	32.993227°	-104.069789°
SWC10	32.993331°	-104.069780°
SWC11	32.993414°	-104.069767°
SWC12	32.993478°	-104.069722°
SWC13	32.993593°	-104.069772°
SWC14	32.993576°	-104.069852°
SWC15	32.993499°	-104.069840°
SWC16	32.993422°	-104.069835°
SWC17	32.993331°	-104.069827°
SWC18	32.993217°	-104.069831°
SWC19	32.993171°	-104.069905°
SWC20	32.993103°	-104.069953°
SWC21	32.992980°	-104.069974°
SWC22	32.992916°	-104.069988°
SWC23	32.992830°	-104.069991°
SWC24	32.992755°	-104.069942°
SWC25	32.992695°	-104.069903°
SWC26	32.992644°	-104.069906°
SWC27	32.992631°	-104.069952°
SWC28	32.992564°	-104.069949°
SWC29	32.992618°	-104.069880°

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E408238

Job Number: 20046-0001

Received: 8/28/2024

Revision: 2

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/29/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/29/24



Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210

Project Name: West Mount Spill F  
Workorder: E408238  
Date Received: 8/28/2024 7:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/28/2024 7:00:00AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

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## Sample Summary

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	08/29/24 16:15

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 1 - 6'	E408238-01A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 2 - 6'	E408238-02A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 3 - 6'	E408238-03A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 4 - 6'	E408238-04A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 5 - 6'	E408238-05A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 6 - 10'	E408238-06A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 7 - 10'	E408238-07A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 8 - 8'	E408238-08A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 9 - 8'	E408238-09A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 10 - 10'	E408238-10A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 11 - 8'	E408238-11A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 12 - 10'	E408238-12A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 13 - 10'	E408238-13A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 14 - 10'	E408238-14A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.
SP Comp 15 - 8'	E408238-15A	Soil	08/26/24	08/28/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

### SP Comp 1 - 6'

**E408238-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		103 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.4 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/28/24	
<i>Surrogate: n-Nonane</i>		85.3 %	50-200	08/28/24	08/28/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	36.5	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 2 - 6'

E408238-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		103 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.0 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/28/24	
<i>Surrogate: n-Nonane</i>		85.2 %	50-200	08/28/24	08/28/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	67.2	20.0	1	08/28/24	08/28/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 3 - 6'

E408238-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		92.4 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/28/24	
<i>Surrogate: n-Nonane</i>						
		86.0 %	50-200	08/28/24	08/28/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	34.6	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 4 - 6'

E408238-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.2 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/28/24	
<i>Surrogate: n-Nonane</i>		87.1 %	50-200	08/28/24	08/28/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	33.2	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 5 - 6'

E408238-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.4 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/28/24	
<i>Surrogate: n-Nonane</i>		82.7 %	50-200	08/28/24	08/28/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	57.7	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 6 - 10'

E408238-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0250	1	08/28/24	08/28/24	
Ethylbenzene	ND	0.0250	1	08/28/24	08/28/24	
Toluene	ND	0.0250	1	08/28/24	08/28/24	
o-Xylene	ND	0.0250	1	08/28/24	08/28/24	
p,m-Xylene	ND	0.0500	1	08/28/24	08/28/24	
Total Xylenes	ND	0.0250	1	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.1 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/28/24	
<i>Surrogate: n-Nonane</i>		79.5 %	50-200	08/28/24	08/28/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	ND	20.0	1	08/28/24	08/28/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 7 - 10'

E408238-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0250	1	08/28/24	08/28/24	
Ethylbenzene	ND	0.0250	1	08/28/24	08/28/24	
Toluene	ND	0.0250	1	08/28/24	08/28/24	
o-Xylene	ND	0.0250	1	08/28/24	08/28/24	
p,m-Xylene	ND	0.0500	1	08/28/24	08/28/24	
Total Xylenes	ND	0.0250	1	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.4 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/28/24	
<i>Surrogate: n-Nonane</i>		85.4 %	50-200	08/28/24	08/28/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	ND	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 8 - 8'

E408238-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.8 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>		87.5 %	50-200	08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	56.1	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 9 - 8'

E408238-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.5 %	70-130		08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.5 %	70-130		08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>	89.8 %	50-200		08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	34.2	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 10 - 10'

E408238-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0250	1	08/28/24	08/28/24	
Ethylbenzene	ND	0.0250	1	08/28/24	08/28/24	
Toluene	ND	0.0250	1	08/28/24	08/28/24	
o-Xylene	ND	0.0250	1	08/28/24	08/28/24	
p,m-Xylene	ND	0.0500	1	08/28/24	08/28/24	
Total Xylenes	ND	0.0250	1	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.4 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>						
		89.4 %	50-200	08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	ND	20.0	1	08/28/24	08/28/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 11 - 8'

E408238-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0500	2	08/28/24	08/28/24	
Ethylbenzene	ND	0.0500	2	08/28/24	08/28/24	
Toluene	ND	0.0500	2	08/28/24	08/28/24	
o-Xylene	ND	0.0500	2	08/28/24	08/28/24	
p,m-Xylene	ND	0.100	2	08/28/24	08/28/24	
Total Xylenes	ND	0.0500	2	08/28/24	08/28/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/28/24	08/28/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.1 %	70-130	08/28/24	08/28/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>		96.2 %	50-200	08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	43.8	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 12 - 10'

## E408238-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0250	1	08/28/24	08/29/24	
Ethylbenzene	ND	0.0250	1	08/28/24	08/29/24	
Toluene	ND	0.0250	1	08/28/24	08/29/24	
o-Xylene	ND	0.0250	1	08/28/24	08/29/24	
p,m-Xylene	ND	0.0500	1	08/28/24	08/29/24	
Total Xylenes	ND	0.0250	1	08/28/24	08/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/28/24	08/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.8 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>						
		90.6 %	50-200	08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	127	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 13 - 10'

## E408238-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0250	1	08/28/24	08/29/24	
Ethylbenzene	ND	0.0250	1	08/28/24	08/29/24	
Toluene	ND	0.0250	1	08/28/24	08/29/24	
o-Xylene	ND	0.0250	1	08/28/24	08/29/24	
p,m-Xylene	ND	0.0500	1	08/28/24	08/29/24	
Total Xylenes	ND	0.0250	1	08/28/24	08/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/28/24	08/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.7 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>						
		87.4 %	50-200	08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	ND	20.0	1	08/28/24	08/28/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 14 - 10'

E408238-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0250	1	08/28/24	08/29/24	
Ethylbenzene	ND	0.0250	1	08/28/24	08/29/24	
Toluene	ND	0.0250	1	08/28/24	08/29/24	
o-Xylene	ND	0.0250	1	08/28/24	08/29/24	
p,m-Xylene	ND	0.0500	1	08/28/24	08/29/24	
Total Xylenes	ND	0.0250	1	08/28/24	08/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/28/24	08/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.3 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>						
		90.4 %	50-200	08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	133	20.0	1	08/28/24	08/28/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/29/2024 4:15:45PM

## SP Comp 15 - 8'

E408238-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Benzene	ND	0.0250	1	08/28/24	08/29/24	
Ethylbenzene	ND	0.0250	1	08/28/24	08/29/24	
Toluene	ND	0.0250	1	08/28/24	08/29/24	
o-Xylene	ND	0.0250	1	08/28/24	08/29/24	
p,m-Xylene	ND	0.0500	1	08/28/24	08/29/24	
Total Xylenes	ND	0.0250	1	08/28/24	08/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2435074	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/28/24	08/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.4 %	70-130	08/28/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435070	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/28/24	08/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/28/24	08/29/24	
<i>Surrogate: n-Nonane</i>						
		94.8 %	50-200	08/28/24	08/29/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435077	
Chloride	131	20.0	1	08/28/24	08/28/24	



## QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/29/2024 4:15:45PM

## Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2435074-BLK1)

Prepared: 08/28/24 Analyzed: 08/28/24

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	8.04		8.00		101	70-130			

## LCS (2435074-BS1)

Prepared: 08/28/24 Analyzed: 08/28/24

Benzene	4.45	0.0250	5.00		88.9	70-130			
Ethylbenzene	4.92	0.0250	5.00		98.5	70-130			
Toluene	4.80	0.0250	5.00		96.1	70-130			
o-Xylene	4.97	0.0250	5.00		99.5	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.0	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.05		8.00		101	70-130			

## Matrix Spike (2435074-MS1)

Source: E408238-03

Prepared: 08/28/24 Analyzed: 08/28/24

Benzene	8.94	0.0500	10.0	ND	89.4	54-133			
Ethylbenzene	9.89	0.0500	10.0	ND	98.9	61-133			
Toluene	9.68	0.0500	10.0	ND	96.8	61-130			
o-Xylene	10.0	0.0500	10.0	ND	100	63-131			
p,m-Xylene	20.2	0.100	20.0	ND	101	63-131			
Total Xylenes	30.2	0.0500	30.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	16.5		16.0		103	70-130			

## Matrix Spike Dup (2435074-MSD1)

Source: E408238-03

Prepared: 08/28/24 Analyzed: 08/28/24

Benzene	8.80	0.0500	10.0	ND	88.0	54-133	1.59	20	
Ethylbenzene	9.82	0.0500	10.0	ND	98.2	61-133	0.741	20	
Toluene	9.56	0.0500	10.0	ND	95.6	61-130	1.21	20	
o-Xylene	9.93	0.0500	10.0	ND	99.3	63-131	0.907	20	
p,m-Xylene	20.0	0.100	20.0	ND	100	63-131	0.870	20	
Total Xylenes	30.0	0.0500	30.0	ND	99.9	63-131	0.882	20	
Surrogate: 4-Bromochlorobenzene-PID	16.6		16.0		104	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/29/2024 4:15:45PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435074-BLK1) Prepared: 08/28/24 Analyzed: 08/28/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.69		8.00		96.1	70-130			

LCS (2435074-BS2) Prepared: 08/28/24 Analyzed: 08/28/24

Gasoline Range Organics (C6-C10)	44.5	20.0	50.0		89.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.50		8.00		93.8	70-130			

Matrix Spike (2435074-MS2) Source: E408238-03 Prepared: 08/28/24 Analyzed: 08/28/24

Gasoline Range Organics (C6-C10)	91.0	40.0	100	ND	91.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.4		16.0		96.0	70-130			

Matrix Spike Dup (2435074-MSD2) Source: E408238-03 Prepared: 08/28/24 Analyzed: 08/28/24

Gasoline Range Organics (C6-C10)	89.7	40.0	100	ND	89.7	70-130	1.45	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.3		16.0		95.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/29/2024 4:15:45PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

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

Blank (2435070-BLK1)					Prepared: 08/28/24 Analyzed: 08/28/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	41.9		50.0		83.9	50-200			

LCS (2435070-BS1)					Prepared: 08/28/24 Analyzed: 08/28/24				
Diesel Range Organics (C10-C28)	208	25.0	250		83.2	38-132			
Surrogate: n-Nonane	39.0		50.0		78.0	50-200			

Matrix Spike (2435070-MS1)					Source: E408238-05		Prepared: 08/28/24 Analyzed: 08/28/24		
Diesel Range Organics (C10-C28)	234	25.0	250	ND	93.6	38-132			
Surrogate: n-Nonane	43.0		50.0		85.9	50-200			

Matrix Spike Dup (2435070-MSD1)					Source: E408238-05		Prepared: 08/28/24 Analyzed: 08/28/24		
Diesel Range Organics (C10-C28)	223	25.0	250	ND	89.2	38-132	4.82	20	
Surrogate: n-Nonane	44.5		50.0		89.0	50-200			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/29/2024 4:15:45PM

Anions by EPA 300.0/9056A

Analyst: DT

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

Blank (2435077-BLK1)					Prepared: 08/28/24 Analyzed: 08/28/24				
Chloride	ND	20.0							
LCS (2435077-BS1)					Prepared: 08/28/24 Analyzed: 08/28/24				
Chloride	254	20.0	250		101	90-110			
Matrix Spike (2435077-MS1)					Source: E408238-02		Prepared: 08/28/24 Analyzed: 08/28/24		
Chloride	323	20.0	250	67.2	102	80-120			
Matrix Spike Dup (2435077-MSD1)					Source: E408238-02		Prepared: 08/28/24 Analyzed: 08/28/24		
Chloride	330	20.0	250	67.2	105	80-120	2.15	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	08/29/24 16:15

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Page 1 of 2

## Project Information

## Chain of Custody

Client: <u>Mack Energy</u> Project: <u>West Mont SP: H F</u> Project Manager: Address: City, State, Zip: Phone: Email:					Bill To Attention: <u>ENERGY STAFFING SERVICES</u> Address: <u>2724 NW COUNTY RD</u> City, State, Zip: <u>HOBBS NM 88240</u> Phone: <u>575-393-9048</u> Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u> <u>BRITNEY@ENERGYSTAFFINGLLC.COM</u>					Lab Use Only Lab WO# <u>E408238</u> Job Number <u>20046-0001</u>		TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/>		EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
Report due by					Analysis and Method		State		Remarks						
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/O/C by 8015	GRD/O/C by 8015	BTX by 8015	VOC by 8015	Metals 8010	NOX by 8010	PM 1000	PM 2.5	Remarks	
	08/26	S	1	SP Comp 1 - 6'	1										
				SP Comp 2 - 6'	2										
				SP Comp 3 - 6'	3										
				SP Comp 4 - 6'	4										
				SP Comp 5 - 6'	5										
				SP Comp 6 - 10'	6										
				SP Comp 7 - 10'	7										
				SP Comp 8 - 8'	8										
				SP Comp 9 - 8'	9										
	08/26	S	1	SP Comp 10 - 10'	10										
Additional Instructions:															
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Sampled by: <u>Juan Solis</u>										Lab Use Only					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Received on ice: <u>0/ N</u>			
<u>Juan Solis</u>		08/26/24				<u>Michelle Gonzales</u>		8-27-24		1300					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 _____ T2 _____ T3 _____			
<u>Michelle Gonzales</u>		8-27-24		1545		<u>Juan Solis</u>		8-27-24		1545					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>			
<u>Juan Solis</u>		8-27-24		2100		<u>Sto</u>		8-28-24		0700					
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA															
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.															

Chain of Custody

Project Information

Client: <b>Mac's Energy</b>		Project Manager: <b>Westmont SR-11 F</b>	
Address: <b>2724 NW COUNTY RD</b>		City, State, Zip: <b>HOBBBS, NM 88240</b>	
Phone: <b>575-393-9048</b>		Email: <b>NATALLIE@ENERGYSTAFFINGLLC.COM</b>	
Report due by:		Email: <b>BRITTNEY@ENERGYSTAFFINGLLC.COM</b>	

Lab WO# <b>E408238</b>	Job Number <b>20046-0001</b>	Analysis and Method		Remarks	
<input type="checkbox"/> Lab Use Only	<input type="checkbox"/> TAT	<input type="checkbox"/> EPA Program	<input type="checkbox"/> CWA	<input type="checkbox"/> SDWA	<input type="checkbox"/> RCRA
<input type="checkbox"/> 1D	<input type="checkbox"/> 2D	<input type="checkbox"/> 3D	<input type="checkbox"/> Standard	<input type="checkbox"/> NM	<input type="checkbox"/> CO
<input type="checkbox"/> UT	<input type="checkbox"/> AZ	<input type="checkbox"/> TX			

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	GRG/DIC by 8015	GRG/DIC by 8015	STEX by 8021	VOC by 8280	Metals by 8010	Chloride by 8010	SGCUC NM	SGCUC IA	Remarks
08/26	5	SF	1	SF Comp 11 - 8'	11							X		
08/26	5	SF	1	SF Comp 12 - 10'	12									
		SF		SF Comp 13 - 10'	13									
		SF		SF Comp 14 - 10'	14									
		SF		SF Comp 15 - 8'	15							X		

Additional Instructions:

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

Sampled by: **Juan Solis**

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an average temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <b>Juan Solis</b>	Date <b>08/26/24</b>	Time
Relinquished by: (Signature) <b>Michelle Gonzales</b>	Date <b>8-27-24</b>	Time <b>1545</b>
Relinquished by: (Signature) <b>Andrew Solis</b>	Date <b>8-27-24</b>	Time <b>1545</b>
Relinquished by: (Signature) <b>Andrew Solis</b>	Date <b>8-28-24</b>	Time <b>0700</b>
Container Type: <b>g - glass, p - poly/plastic, ag - amber glass, v - VOA</b>	AVG Temp °C <b>4</b>	Received on ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



## Envirotech Analytical Laboratory

Printed: 8/28/2024 9:18:29AM

## 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:	08/28/24 06:00	Work Order ID:	E408238
Phone:	(575) 390-6397	Date Logged In:	08/27/24 15:27	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	08/29/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled are missing on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E408246

Job Number: 20046-0001

Received: 8/29/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/30/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 8/30/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E408246  
Date Received: 8/29/2024 8:00:24AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/29/2024 8:00:24AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

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

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

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## Sample Summary

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	08/30/24 14:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 16 - 6'	E408246-01A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 17 - 4'	E408246-02A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 18 - 4'	E408246-03A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 19 - 4'	E408246-04A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 20 - 4'	E408246-05A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 21 - 4'	E408246-06A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 22 - 4'	E408246-07A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 23 - 4'	E408246-08A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 24 - 2'	E408246-09A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 25 - 2'	E408246-10A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 26 - 4'	E408246-11A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 27 - 6'	E408246-12A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 28 - 6'	E408246-13A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 29 - 4'	E408246-14A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.
SP Comp 30 - 2'	E408246-15A	Soil	08/27/24	08/29/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

### SP Comp 16 - 6'

**E408246-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/29/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/29/24	
Toluene	ND	0.0250	1	08/29/24	08/29/24	
o-Xylene	ND	0.0250	1	08/29/24	08/29/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/29/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/29/24	
<i>Surrogate: Bromofluorobenzene</i>		102 %	70-130	08/29/24	08/29/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.5 %	70-130	08/29/24	08/29/24	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	08/29/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/29/24	
<i>Surrogate: Bromofluorobenzene</i>		102 %	70-130	08/29/24	08/29/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.5 %	70-130	08/29/24	08/29/24	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	08/29/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
<i>Surrogate: n-Nonane</i>		83.5 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	32.8	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 17 - 4'

E408246-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/29/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/29/24	
Toluene	ND	0.0250	1	08/29/24	08/29/24	
o-Xylene	ND	0.0250	1	08/29/24	08/29/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/29/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/29/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/29/24	08/29/24	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130	08/29/24	08/29/24	
Surrogate: Toluene-d8		108 %	70-130	08/29/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/29/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/29/24	08/29/24	
Surrogate: 1,2-Dichloroethane-d4		97.6 %	70-130	08/29/24	08/29/24	
Surrogate: Toluene-d8		108 %	70-130	08/29/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		86.1 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	34.3	20.0	1	08/29/24	08/29/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 18 - 4'

E408246-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		98.4 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		107 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		98.4 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		107 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		82.2 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	38.3	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 19 - 4'

E408246-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0500	2	08/29/24	08/30/24	
Ethylbenzene	ND	0.0500	2	08/29/24	08/30/24	
Toluene	ND	0.0500	2	08/29/24	08/30/24	
o-Xylene	ND	0.0500	2	08/29/24	08/30/24	
p,m-Xylene	ND	0.100	2	08/29/24	08/30/24	
Total Xylenes	ND	0.0500	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		76.0 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	38.3	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 20 - 4'

E408246-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0500	2	08/29/24	08/30/24	
Ethylbenzene	ND	0.0500	2	08/29/24	08/30/24	
Toluene	ND	0.0500	2	08/29/24	08/30/24	
o-Xylene	ND	0.0500	2	08/29/24	08/30/24	
p,m-Xylene	ND	0.100	2	08/29/24	08/30/24	
Total Xylenes	ND	0.0500	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		99.8 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		99.8 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		83.3 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	40.5	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 21 - 4'

E408246-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		108 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		108 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		99.9 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	40.8	20.0	1	08/29/24	08/29/24	





Sample Data

Mack Energy	Project Name:	West Mount Spill F	Reported: 8/30/2024 2:10:42PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 22 - 4'  
E408246-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2435098	
Benzene	ND	0.0500	2	08/29/24	08/30/24	
Ethylbenzene	ND	0.0500	2	08/29/24	08/30/24	
Toluene	ND	0.0500	2	08/29/24	08/30/24	
o-Xylene	ND	0.0500	2	08/29/24	08/30/24	
p,m-Xylene	ND	0.100	2	08/29/24	08/30/24	
Total Xylenes	ND	0.0500	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene	99.8 %	70-130		08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130		08/29/24	08/30/24	
Surrogate: Toluene-d8	105 %	70-130		08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2435098	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene	99.8 %	70-130		08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130		08/29/24	08/30/24	
Surrogate: Toluene-d8	105 %	70-130		08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435089	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane	96.2 %	50-200		08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: WF		Batch: 2435095	
Chloride	35.2	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 23 - 4'

E408246-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene	98.2 %	70-130		08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4	96.8 %	70-130		08/29/24	08/30/24	
Surrogate: Toluene-d8	105 %	70-130		08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene	98.2 %	70-130		08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4	96.8 %	70-130		08/29/24	08/30/24	
Surrogate: Toluene-d8	105 %	70-130		08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane	91.5 %	50-200		08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	35.3	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 24 - 2'

E408246-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		108 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		108 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		86.7 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	41.4	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 25 - 2'

E408246-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		104 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		107 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		104 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		107 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		94.4 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	36.6	20.0	1	08/29/24	08/29/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 26 - 4'

E408246-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/29/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/29/24	
Toluene	ND	0.0250	1	08/29/24	08/29/24	
o-Xylene	ND	0.0250	1	08/29/24	08/29/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/29/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/29/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/29/24	08/29/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	08/29/24	08/29/24	
Surrogate: Toluene-d8		107 %	70-130	08/29/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/29/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/29/24	08/29/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	08/29/24	08/29/24	
Surrogate: Toluene-d8		107 %	70-130	08/29/24	08/29/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		98.1 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	37.9	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 27 - 6'

E408246-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		94.2 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	42.4	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 28 - 6'

E408246-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0500	2	08/29/24	08/30/24	
Ethylbenzene	ND	0.0500	2	08/29/24	08/30/24	
Toluene	ND	0.0500	2	08/29/24	08/30/24	
o-Xylene	ND	0.0500	2	08/29/24	08/30/24	
p,m-Xylene	ND	0.100	2	08/29/24	08/30/24	
Total Xylenes	ND	0.0500	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		88.7 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		104 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		88.7 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		104 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		93.7 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	42.3	20.0	1	08/29/24	08/29/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 29 - 4'

E408246-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		104 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.3 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		104 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.3 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		106 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		91.5 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	37.1	20.0	1	08/29/24	08/29/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
8/30/2024 2:10:42PM

## SP Comp 30 - 2'

E408246-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Benzene	ND	0.0250	1	08/29/24	08/30/24	
Ethylbenzene	ND	0.0250	1	08/29/24	08/30/24	
Toluene	ND	0.0250	1	08/29/24	08/30/24	
o-Xylene	ND	0.0250	1	08/29/24	08/30/24	
p,m-Xylene	ND	0.0500	1	08/29/24	08/30/24	
Total Xylenes	ND	0.0250	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		105 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2435098
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/24	08/30/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/29/24	08/30/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	08/29/24	08/30/24	
Surrogate: Toluene-d8		105 %	70-130	08/29/24	08/30/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2435089
Diesel Range Organics (C10-C28)	ND	25.0	1	08/29/24	08/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/29/24	08/30/24	
Surrogate: n-Nonane		95.1 %	50-200	08/29/24	08/30/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: WF		Batch: 2435095
Chloride	40.5	20.0	1	08/29/24	08/29/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/30/2024 2:10:42PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

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

Blank (2435098-BLK1) Prepared: 08/29/24 Analyzed: 08/29/24

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: Bromofluorobenzene	0.510		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2435098-BS1) Prepared: 08/29/24 Analyzed: 08/29/24

Benzene	2.51	0.0250	2.50		101	70-130			
Ethylbenzene	2.51	0.0250	2.50		100	70-130			
Toluene	2.50	0.0250	2.50		99.9	70-130			
o-Xylene	2.36	0.0250	2.50		94.3	70-130			
p,m-Xylene	4.76	0.0500	5.00		95.1	70-130			
Total Xylenes	7.11	0.0250	7.50		94.9	70-130			
Surrogate: Bromofluorobenzene	0.499		0.500		99.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.524		0.500		105	70-130			

Matrix Spike (2435098-MS1) Source: E408246-11 Prepared: 08/29/24 Analyzed: 08/29/24

Benzene	2.52	0.0250	2.50	ND	101	48-131			
Ethylbenzene	2.50	0.0250	2.50	ND	100	45-135			
Toluene	2.51	0.0250	2.50	ND	100	48-130			
o-Xylene	2.40	0.0250	2.50	ND	96.1	43-135			
p,m-Xylene	4.85	0.0500	5.00	ND	96.9	43-135			
Total Xylenes	7.25	0.0250	7.50	ND	96.7	43-135			
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.2	70-130			
Surrogate: Toluene-d8	0.526		0.500		105	70-130			

Matrix Spike Dup (2435098-MSD1) Source: E408246-11 Prepared: 08/29/24 Analyzed: 08/29/24

Benzene	2.48	0.0250	2.50	ND	99.2	48-131	1.58	23	
Ethylbenzene	2.45	0.0250	2.50	ND	98.1	45-135	1.92	27	
Toluene	2.43	0.0250	2.50	ND	97.1	48-130	3.20	24	
o-Xylene	2.38	0.0250	2.50	ND	95.0	43-135	1.11	27	
p,m-Xylene	4.81	0.0500	5.00	ND	96.2	43-135	0.714	27	
Total Xylenes	7.19	0.0250	7.50	ND	95.8	43-135	0.845	27	
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			



## QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/30/2024 2:10:42PM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2435098-BLK1)

Prepared: 08/29/24 Analyzed: 08/29/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.510		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

## LCS (2435098-BS2)

Prepared: 08/29/24 Analyzed: 08/29/24

Gasoline Range Organics (C6-C10)	53.4	20.0	50.0		107	70-130			
Surrogate: Bromofluorobenzene	0.517		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.486		0.500		97.1	70-130			
Surrogate: Toluene-d8	0.540		0.500		108	70-130			

## Matrix Spike (2435098-MS2)

Source: E408246-11

Prepared: 08/29/24 Analyzed: 08/29/24

Gasoline Range Organics (C6-C10)	53.1	20.0	50.0	ND	106	70-130			
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.538		0.500		108	70-130			

## Matrix Spike Dup (2435098-MSD2)

Source: E408246-11

Prepared: 08/29/24 Analyzed: 08/29/24

Gasoline Range Organics (C6-C10)	52.2	20.0	50.0	ND	104	70-130	1.55	20	
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.470		0.500		94.0	70-130			
Surrogate: Toluene-d8	0.546		0.500		109	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/30/2024 2:10:42PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435089-BLK1) Prepared: 08/29/24 Analyzed: 08/30/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	40.2		50.0		80.3	50-200			

LCS (2435089-BS1) Prepared: 08/29/24 Analyzed: 08/30/24

Diesel Range Organics (C10-C28)	191	25.0	250		76.4	38-132			
Surrogate: n-Nonane	42.3		50.0		84.6	50-200			

Matrix Spike (2435089-MS1) Source: E408246-08 Prepared: 08/29/24 Analyzed: 08/30/24

Diesel Range Organics (C10-C28)	203	25.0	250	ND	81.3	38-132			
Surrogate: n-Nonane	46.7		50.0		93.4	50-200			

Matrix Spike Dup (2435089-MSD1) Source: E408246-08 Prepared: 08/29/24 Analyzed: 08/30/24

Diesel Range Organics (C10-C28)	199	25.0	250	ND	79.8	38-132	1.88	20	
Surrogate: n-Nonane	45.4		50.0		90.9	50-200			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	8/30/2024 2:10:42PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435095-BLK1)					Prepared: 08/29/24 Analyzed: 08/29/24				
Chloride	ND	20.0							
LCS (2435095-BS1)					Prepared: 08/29/24 Analyzed: 08/29/24				
Chloride	249	20.0	250		99.8	90-110			
Matrix Spike (2435095-MS1)					Source: E408246-03		Prepared: 08/29/24 Analyzed: 08/29/24		
Chloride	297	20.0	250	38.3	103	80-120			
Matrix Spike Dup (2435095-MSD1)					Source: E408246-03		Prepared: 08/29/24 Analyzed: 08/29/24		
Chloride	294	20.0	250	38.3	102	80-120	0.942	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	08/30/24 14:10

- 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

## Chain of Custody

Client: <u>Macn Energy</u>				Bill To				Lab Use Only				TAT				EPA Program	
Project: <u>West Mont Spill F</u>				Attention: <u>ENERGY STAFFING SERVICES</u>				Lab WO# <u>E 408246</u>		Job Number <u>20046-0001</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager				Address: <u>2724 NW COUNTY RD</u>				Analysis and Method								RCRA	
Address:				City, State, Zip <u>HOBBS, NM 88240</u>												CWA	
City, State, Zip				Phone: <u>575-393-9048</u>				NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/> Remarks									
Phone:				Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>													
Email:				Email: <u>BRITTNEY@ENERGYSTAFFINGLLC.COM</u>													
Report due by																	

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	GTG Ag On/Off	
	08/27	S	1	SP Comp 16 - 6'	1														
				SP Comp 17 - 4'	2														
				SP Comp 18 - 4'	3														
				SP Comp 19 - 4'	4														
				SP Comp 20 - 4'	5														
				SP Comp 21 - 4'	6														
				SP Comp 22 - 4'	7														
				SP Comp 23 - 4'	8														
				SP Comp 24 - 2'	9														
	08/27	S	1	SP Comp 25 - 2'	10														

Additional Instructions:

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

Sampled by: Juan Solis

Relinquished by: (Signature) Juan Solis Date 08/27/24 Time 1400

Received by: (Signature) Michelle Gonzales Date 8-28-24 Time 1710

Relinquished by: (Signature) Michelle Gonzales Date 8-28-24 Time 1710

Received by: (Signature) Candice Briggs Date 8/28/24 Time 1710

Relinquished by: (Signature) Candice Briggs Date 8/29/24 Time 0135

Received by: (Signature) Rainaldum Date 8/29/24 Time 8:00

Lab Use Only

Received on ice: ☒ Y / ☐ N

T1 \_\_\_\_\_ T2 \_\_\_\_\_ T3 \_\_\_\_\_

AVG Temp °C 4

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Page 2 of 2

## Project Information

## Chain of Custody

Client: <b>Mach Energy</b> Project: <b>West mount Spill</b> Project Manager: Address: City, State, Zip: Phone: Email: Report due by:				Bill To Attention: <b>ENERGY STAFFING SERVICES</b> Address: <b>2724 NW COUNTY RD</b> City, State, Zip: <b>TILOS NM 88240</b> Phone: <b>575-393-9048</b> Email: <b>NATALIE@ENERGYSTAFFINGLLC.COM</b> <b>BRITTNEY@ENERGYSTAFFINGLLC.COM</b>				Lab Use Only Lab WO# <b>408246</b> Job Number <b>20546.0001</b>				TAT 1D 2D 3D Standard <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				EPA Program CWA SDWA RCRA	
								Analysis and Method				State NM CO UT AZ TX <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				Remarks	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	NAF by 8010	Metals 8010	Mercury 8010	PCDDs 8010	PCDFs 8010	PCBs 8010	PAHs 8010	Other	
	08/27	S	1	SP Comp 26 - 4'	11												
	{	{	{	SP Comp 27 - 6'	12												
SP Comp 28 - 6'				13													
SP Comp 29 - 4'				14													
	08/27	S	1	SP Comp 30 - 2'	15												
Additional Instructions:																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																	
Sampled by: <b>Juan Solis</b>																	
Relinquished by: (Signature) <b>Juan Solis</b>				Date <b>08/27/24</b>		Time <b>1400</b>		Received by: (Signature) <b>Michelle Gonzales</b>				Date <b>8-28-24</b>		Time <b>1710</b>		Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Relinquished by: (Signature) <b>Michelle Gonzales</b>				Date <b>8-28-24</b>		Time <b>1710</b>		Received by: (Signature) <b>Camden Briggs</b>				Date <b>8-28-24</b>		Time <b>1710</b>		T1 T2 T3	
Relinquished by: (Signature) <b>Camden Briggs</b>				Date <b>8-29-24</b>		Time <b>0135</b>		Received by: (Signature) <b>Roliva Luning</b>				Date <b>8/29/24</b>		Time <b>6:00</b>		AVG Temp °C <b>4</b>	
Sample Matrix: S - Soil, Sl - Solid, Sg - Sludge, A - Aqueous, O - Other																	
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																	
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																	



## Envirotech Analytical Laboratory

Printed: 8/29/2024 8:43:59AM

## 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:	08/29/24 08:00	Work Order ID:	E408246
Phone:	(575) 390-6397	Date Logged In:	08/28/24 16:10	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	08/30/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: Courier**Comments/Resolution**

Project manager and time sampled are missing on COC by client.

**Sample Turn Around Time (TAT)**

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

**Sample Cooler**

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? Yes
  - Collectors name? No

**Sample Preservation**

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

**Multiphase Sample Matrix**

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

**Subcontract Laboratory**

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

**Client Instruction**

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

Date



envirotech Inc.

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E408255

Job Number: 20046-0001

Received: 8/30/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
9/3/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 9/3/24



Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210

Project Name: West Mount Spill F  
Workorder: E408255  
Date Received: 8/30/2024 5:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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## Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill F Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 09/03/24 15:13
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW Comp 1 - 6'	E408255-01A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 2 - 6'	E408255-02A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 3 - 6'	E408255-03A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 4 - 8'	E408255-04A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 5 - 8'	E408255-05A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 6 - 8'	E408255-06A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 7 - 4'	E408255-07A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 8 - 4'	E408255-08A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 9 - 4'	E408255-09A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SW Comp 10 - 4'	E408255-10A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

### SW Comp 1 - 6'

**E408255-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.1 %	70-130	08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.7 %	70-130	08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>		84.3 %	50-200	08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	20.6	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 2 - 6'

E408255-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0500	2	08/30/24	08/31/24	
Ethylbenzene	ND	0.0500	2	08/30/24	08/31/24	
Toluene	ND	0.0500	2	08/30/24	08/31/24	
o-Xylene	ND	0.0500	2	08/30/24	08/31/24	
p,m-Xylene	ND	0.100	2	08/30/24	08/31/24	
Total Xylenes	ND	0.0500	2	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.0 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.1 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	85.5 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	23.5	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 3 - 6'

E408255-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0500	2	08/30/24	08/31/24	
Ethylbenzene	ND	0.0500	2	08/30/24	08/31/24	
Toluene	ND	0.0500	2	08/30/24	08/31/24	
o-Xylene	ND	0.0500	2	08/30/24	08/31/24	
p,m-Xylene	ND	0.100	2	08/30/24	08/31/24	
Total Xylenes	ND	0.0500	2	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.2 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.0 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	81.3 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	24.0	20.0	1	08/30/24	08/31/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 4 - 8'

E408255-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0500	2	08/30/24	08/31/24	
Ethylbenzene	ND	0.0500	2	08/30/24	08/31/24	
Toluene	ND	0.0500	2	08/30/24	08/31/24	
o-Xylene	ND	0.0500	2	08/30/24	08/31/24	
p,m-Xylene	ND	0.100	2	08/30/24	08/31/24	
Total Xylenes	ND	0.0500	2	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.7 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	85.7 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	22.5	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 5 - 8'

E408255-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0500	2	08/30/24	08/31/24	
Ethylbenzene	ND	0.0500	2	08/30/24	08/31/24	
Toluene	ND	0.0500	2	08/30/24	08/31/24	
o-Xylene	ND	0.0500	2	08/30/24	08/31/24	
p,m-Xylene	ND	0.100	2	08/30/24	08/31/24	
Total Xylenes	ND	0.0500	2	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.6 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.8 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	82.0 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	45.9	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 6 - 8'

E408255-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0500	2	08/30/24	08/31/24	
Ethylbenzene	ND	0.0500	2	08/30/24	08/31/24	
Toluene	ND	0.0500	2	08/30/24	08/31/24	
o-Xylene	ND	0.0500	2	08/30/24	08/31/24	
p,m-Xylene	ND	0.100	2	08/30/24	08/31/24	
Total Xylenes	ND	0.0500	2	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.8 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.1 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	83.7 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	44.6	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 7 - 4'

E408255-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0500	2	08/30/24	08/31/24	
Ethylbenzene	ND	0.0500	2	08/30/24	08/31/24	
Toluene	ND	0.0500	2	08/30/24	08/31/24	
o-Xylene	ND	0.0500	2	08/30/24	08/31/24	
p,m-Xylene	ND	0.100	2	08/30/24	08/31/24	
Total Xylenes	ND	0.0500	2	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.1 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.4 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	87.4 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	44.8	20.0	1	08/30/24	08/31/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 8 - 4'

E408255-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.2 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.3 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	85.1 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	25.6	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 9 - 4'

E408255-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.3 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.4 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	88.5 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	26.2	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:13:42PM

## SW Comp 10 - 4'

E408255-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0500	2	08/30/24	08/31/24	
Ethylbenzene	ND	0.0500	2	08/30/24	08/31/24	
Toluene	ND	0.0500	2	08/30/24	08/31/24	
o-Xylene	ND	0.0500	2	08/30/24	08/31/24	
p,m-Xylene	ND	0.100	2	08/30/24	08/31/24	
Total Xylenes	ND	0.0500	2	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	87.0 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	26.7	20.0	1	08/30/24	08/31/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:13:42PM

Volatile Organics by EPA 8021B

Analyst: CG

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

Blank (2435114-BLK1) Prepared: 08/30/24 Analyzed: 08/30/24

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	7.30		8.00		91.3	70-130			

LCS (2435114-BS1) Prepared: 08/30/24 Analyzed: 08/30/24

Benzene	5.30	0.0250	5.00		106	70-130			
Ethylbenzene	5.10	0.0250	5.00		102	70-130			
Toluene	5.21	0.0250	5.00		104	70-130			
o-Xylene	5.08	0.0250	5.00		102	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.4	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.29		8.00		91.1	70-130			

Matrix Spike (2435114-MS1) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Benzene	10.3	0.0500	10.0	ND	103	54-133			
Ethylbenzene	9.85	0.0500	10.0	ND	98.5	61-133			
Toluene	10.1	0.0500	10.0	ND	101	61-130			
o-Xylene	9.84	0.0500	10.0	ND	98.4	63-131			
p,m-Xylene	20.0	0.100	20.0	ND	100	63-131			
Total Xylenes	29.9	0.0500	30.0	ND	99.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	14.7		16.0		91.8	70-130			

Matrix Spike Dup (2435114-MSD1) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Benzene	10.7	0.0500	10.0	ND	107	54-133	3.71	20	
Ethylbenzene	10.2	0.0500	10.0	ND	102	61-133	3.55	20	
Toluene	10.4	0.0500	10.0	ND	104	61-130	3.47	20	
o-Xylene	10.2	0.0500	10.0	ND	102	63-131	3.54	20	
p,m-Xylene	20.7	0.100	20.0	ND	103	63-131	3.27	20	
Total Xylenes	30.9	0.0500	30.0	ND	103	63-131	3.36	20	
Surrogate: 4-Bromochlorobenzene-PID	14.6		16.0		91.2	70-130			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:13:42PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435114-BLK1) Prepared: 08/30/24 Analyzed: 08/30/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.46		8.00		93.3	70-130			

LCS (2435114-BS2) Prepared: 08/30/24 Analyzed: 08/31/24

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0		87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.4	70-130			

Matrix Spike (2435114-MS2) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Gasoline Range Organics (C6-C10)	86.8	40.0	100	ND	86.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.0		16.0		93.7	70-130			

Matrix Spike Dup (2435114-MSD2) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Gasoline Range Organics (C6-C10)	87.1	40.0	100	ND	87.1	70-130	0.329	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	14.9		16.0		93.2	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:13:42PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435109-BLK1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	42.8		50.0		85.6	50-200			

LCS (2435109-BS1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Diesel Range Organics (C10-C28)	200	25.0	250		80.2	38-132			
Surrogate: n-Nonane	42.5		50.0		85.0	50-200			

Matrix Spike (2435109-MS1)					Source: E408255-05		Prepared: 08/30/24 Analyzed: 08/31/24		
Diesel Range Organics (C10-C28)	208	25.0	250	ND	83.2	38-132			
Surrogate: n-Nonane	43.1		50.0		86.3	50-200			

Matrix Spike Dup (2435109-MSD1)					Source: E408255-05		Prepared: 08/30/24 Analyzed: 08/31/24		
Diesel Range Organics (C10-C28)	215	25.0	250	ND	85.8	38-132	3.14	20	
Surrogate: n-Nonane	45.2		50.0		90.5	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:13:42PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435108-BLK1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Chloride	ND	20.0							
LCS (2435108-BS1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2435108-MS1)					Source: E408255-04		Prepared: 08/30/24 Analyzed: 08/31/24		
Chloride	280	20.0	250	22.5	103	80-120			
Matrix Spike Dup (2435108-MSD1)					Source: E408255-04		Prepared: 08/30/24 Analyzed: 08/31/24		
Chloride	280	20.0	250	22.5	103	80-120	0.00107	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/03/24 15:13

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



## Project Information

## Chain of Custody

Client: <b>Acik Energy</b>					Bill To					Lab Use Only		TAT				EPA Program					
Project: <b>West Mont Spill F</b>					Attention: <b>ENERGY STAFFING SERVICES</b>					Lab WO# <b>408255</b>		Job Number <b>20046-0001</b>		ID	2D	3D	Standard	CWA	SDWA		
Project Manager					Address: <b>2724 NW COUNTY RD</b>																
Address:					City, State, Zip <b>HOBBS, NM 88240</b>																
City, State, Zip					Phone: <b>575-393-9048</b>																
Phone:					Email: <b>NATALIE@ENERGYSTAFFINGLLC.COM</b>																
Email:					Email: <b>BRIE@ENERGYSTAFFINGLLC.COM</b>																
Report due by:																					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRG/DRC by 8015	GRG/DRC by 8015	BTX by 8017	VOC by 8160	Metals 8010	PCDD/F 8011	PCB 8012	SGDUC NW	SGDUC IS	State				Remarks		
	08/28	S	1	Sw Corp 1 - 6'	1								X			NM	CO	UT	AZ	TX	
	}	}	}	Sw Corp 2 - 6'	2																
				Sw Corp 3 - 6'	3																
				Sw Corp 4 - 8'	4																
				Sw Corp 5 - 8'	5																
				Sw Corp 6 - 8'	6																
				Sw Corp 7 - 4'	7																
				Sw Corp 8 - 4'	8																
				Sw Corp 9 - 4'	9																
	08/24	S	1	Sw Corp 10 - 4'	10								X								

## Additional Instructions:

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

Sampled by: **Jun Solis**

Relinquished by (Signature): **Jun Solis** Date: **08/28/24** Time:

Received by (Signature): **Michelle Gonzales** Date: **8-29-24** Time: **1130**

Relinquished by (Signature): **Michelle Gonzales** Date: **8-29-24** Time: **1640**

Received by (Signature): **A.H.** Date: **8-29-24** Time: **1640**

Relinquished by (Signature): **A.H.** Date: **8-29-24** Time: **2300**

Received by (Signature): **Highly R Hall** Date: **8-30-24** Time: **0500**

Received on ice: **Y** / **N**

T1:  T2:  T3:

AVG Temp °C: **4**

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

## Envirotech Analytical Laboratory

Printed: 8/30/2024 9:23:39AM

## 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:	08/30/24 07:00	Work Order ID:	E408255
Phone:	(575) 390-6397	Date Logged In:	08/29/24 15:31	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	09/03/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

Carrier: Courier

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

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client InstructionComments/Resolution

Project manager and time sampled are missing on COC by client.

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

Date



envirotech Inc.

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E408256

Job Number: 20046-0001

Received: 8/30/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
9/3/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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



Date Reported: 9/3/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E408256  
Date Received: 8/30/2024 5:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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



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## Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill F Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 09/03/24 15:10
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 31 - 8'	E408256-01A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SP Comp 32 - 8'	E408256-02A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SP Comp 33 - 8'	E408256-03A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SP Comp 34 - 8'	E408256-04A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SP Comp 35 - 8'	E408256-05A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SP Comp 36 - 2'	E408256-06A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SP Comp 37 - 2'	E408256-07A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.
SP Comp 38 - 2'	E408256-08A	Soil	08/28/24	08/30/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

### SP Comp 31 - 8'

**E408256-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.3 %	70-130	08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.7 %	70-130	08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>		82.6 %	50-200	08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	ND	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

## SP Comp 32 - 8'

E408256-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.0 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.6 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	80.4 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	ND	20.0	1	08/30/24	08/31/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

## SP Comp 33 - 8'

E408256-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.5 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.6 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	84.1 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	25.7	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

## SP Comp 34 - 8'

E408256-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.6 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	87.1 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	23.6	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

## SP Comp 35 - 8'

E408256-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.0 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.4 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	86.9 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	22.9	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

## SP Comp 36 - 2'

E408256-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.6 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.3 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	86.9 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	20.4	20.0	1	08/30/24	08/31/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

## SP Comp 37 - 2'

E408256-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.2 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.0 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	87.5 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	20.6	20.0	1	08/30/24	08/31/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/3/2024 3:10:18PM

## SP Comp 38 - 2'

E408256-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Benzene	ND	0.0250	1	08/30/24	08/31/24	
Ethylbenzene	ND	0.0250	1	08/30/24	08/31/24	
Toluene	ND	0.0250	1	08/30/24	08/31/24	
o-Xylene	ND	0.0250	1	08/30/24	08/31/24	
p,m-Xylene	ND	0.0500	1	08/30/24	08/31/24	
Total Xylenes	ND	0.0250	1	08/30/24	08/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: CG		Batch: 2435114	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/30/24	08/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		08/30/24	08/31/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2435109	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/24	08/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/24	08/31/24	
<i>Surrogate: n-Nonane</i>						
	86.4 %	50-200		08/30/24	08/31/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2435108	
Chloride	ND	20.0	1	08/30/24	08/31/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:10:18PM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435114-BLK1) Prepared: 08/30/24 Analyzed: 08/30/24

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	7.30		8.00		91.3	70-130			

LCS (2435114-BS1) Prepared: 08/30/24 Analyzed: 08/30/24

Benzene	5.30	0.0250	5.00		106	70-130			
Ethylbenzene	5.10	0.0250	5.00		102	70-130			
Toluene	5.21	0.0250	5.00		104	70-130			
o-Xylene	5.08	0.0250	5.00		102	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.4	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.29		8.00		91.1	70-130			

Matrix Spike (2435114-MS1) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Benzene	10.3	0.0500	10.0	ND	103	54-133			
Ethylbenzene	9.85	0.0500	10.0	ND	98.5	61-133			
Toluene	10.1	0.0500	10.0	ND	101	61-130			
o-Xylene	9.84	0.0500	10.0	ND	98.4	63-131			
p,m-Xylene	20.0	0.100	20.0	ND	100	63-131			
Total Xylenes	29.9	0.0500	30.0	ND	99.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	14.7		16.0		91.8	70-130			

Matrix Spike Dup (2435114-MSD1) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Benzene	10.7	0.0500	10.0	ND	107	54-133	3.71	20	
Ethylbenzene	10.2	0.0500	10.0	ND	102	61-133	3.55	20	
Toluene	10.4	0.0500	10.0	ND	104	61-130	3.47	20	
o-Xylene	10.2	0.0500	10.0	ND	102	63-131	3.54	20	
p,m-Xylene	20.7	0.100	20.0	ND	103	63-131	3.27	20	
Total Xylenes	30.9	0.0500	30.0	ND	103	63-131	3.36	20	
Surrogate: 4-Bromochlorobenzene-PID	14.6		16.0		91.2	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:10:18PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435114-BLK1) Prepared: 08/30/24 Analyzed: 08/30/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.46		8.00		93.3	70-130			

LCS (2435114-BS2) Prepared: 08/30/24 Analyzed: 08/31/24

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0		87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.4	70-130			

Matrix Spike (2435114-MS2) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Gasoline Range Organics (C6-C10)	86.8	40.0	100	ND	86.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.0		16.0		93.7	70-130			

Matrix Spike Dup (2435114-MSD2) Source: E408255-10 Prepared: 08/30/24 Analyzed: 08/31/24

Gasoline Range Organics (C6-C10)	87.1	40.0	100	ND	87.1	70-130	0.329	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	14.9		16.0		93.2	70-130			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:10:18PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2435109-BLK1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	42.8		50.0		85.6	50-200			

LCS (2435109-BS1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Diesel Range Organics (C10-C28)	200	25.0	250		80.2	38-132			
Surrogate: n-Nonane	42.5		50.0		85.0	50-200			

Matrix Spike (2435109-MS1)					Source: E408255-05		Prepared: 08/30/24 Analyzed: 08/31/24		
Diesel Range Organics (C10-C28)	208	25.0	250	ND	83.2	38-132			
Surrogate: n-Nonane	43.1		50.0		86.3	50-200			

Matrix Spike Dup (2435109-MSD1)					Source: E408255-05		Prepared: 08/30/24 Analyzed: 08/31/24		
Diesel Range Organics (C10-C28)	215	25.0	250	ND	85.8	38-132	3.14	20	
Surrogate: n-Nonane	45.2		50.0		90.5	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/3/2024 3:10:18PM

Anions by EPA 300.0/9056A

Analyst: DT

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

Blank (2435108-BLK1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Chloride	ND	20.0							
LCS (2435108-BS1)					Prepared: 08/30/24 Analyzed: 08/31/24				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2435108-MS1)					Source: E408255-04		Prepared: 08/30/24 Analyzed: 08/31/24		
Chloride	280	20.0	250	22.5	103	80-120			
Matrix Spike Dup (2435108-MSD1)					Source: E408255-04		Prepared: 08/30/24 Analyzed: 08/31/24		
Chloride	280	20.0	250	22.5	103	80-120	0.00107	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/03/24 15:10

- 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.



## Chain of Custody

## Project Information

Client: <b>Mack Energy</b>				Bill To: <b>ENERGY STAFFING SERVICES</b>				Lab Use Only				TAT				EPA Program			
Project: <b>West Mont SPIN F</b>				Attention: <b>ENERGY STAFFING SERVICES</b>				Lab WO# <b>E408256</b>		Job Number <b>20346-0001</b>		1D	2D	3D	Standard	CWA	SDWA		
Project Manager				Address: <b>2724 NW COUNTY RD</b>				Analysis and Method										RCRA	
Address:				City, State, Zip: <b>HOBBS, NM 88240</b>															
City, State, Zip				Phone: <b>575-393-9048</b>															
Phone:				Email: <b>NATALIE@ENERGYSTAFFINGLLC.COM</b>														State	
Email:				Email: <b>BRITTNEY@ENERGYSTAFFINGLLC.COM</b>														NM CO UT AZ TX	
Report due by																		Remarks	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRD/DO/DO/DO/DO	STOR AG/DO/DO/DO	STEX by 8021	DOF by 8021	Metals 6010	DOF Acidity	NM	DO/DO	DO/DO					
	08/28	S	1	SP Comp 31 - 8'	1							X							
				SP Comp 32 - 8'	2														
				SP Comp 33 - 8'	3														
				SP Comp 34 - 8'	4														
				SP Comp 35 - 8'	5														
				SP Comp 36 - 2'	6														
				SP Comp 37 - 2'	7														
	08/28	S	1	SP Comp 38 - 2'	8							X							
Additional Instructions:																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																			
Sampled by: <b>Jim Solis</b>																			
Relinquished by (Signature): <b>Jim Solis</b>				Date: <b>08/28/24</b>		Time: <b>1130</b>		Received by (Signature): <b>Michelle Gonzales</b>				Date: <b>8-29-24</b>		Time: <b>1130</b>		Lab Use Only			
Relinquished by (Signature): <b>Michelle Gonzales</b>				Date: <b>8-29-24</b>		Time: <b>1640</b>		Received by (Signature): <b>L.H.</b>				Date: <b>8-29-24</b>		Time: <b>1640</b>		Received on ice: <b>Y/N</b>			
Relinquished by (Signature): <b>L.H.</b>				Date: <b>8-29-24</b>		Time: <b>2300</b>		Received by (Signature): <b>Kyleigh R. Hall</b>				Date: <b>8-30-24</b>		Time: <b>0500</b>		AVG Temp °C: <b>4</b>			
Sample Matrix: S - Soil, SD - Solid, Sp - Sludge, A - Aqueous, O - Other																			
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																			



## Envirotech Analytical Laboratory

Printed: 8/30/2024 9:35:15AM

## 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:	08/30/24 05:00	Work Order ID:	E408256
Phone:	(575) 390-6397	Date Logged In:	08/29/24 15:48	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	09/03/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled are missing on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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?	Yes
Collectors name?	No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E408281

Job Number: 20046-0001

Received: 9/3/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
9/4/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 9/4/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E408281  
Date Received: 9/3/2024 5:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/3/2024 5:00:00AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

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

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**Sample Summary**

Mack Energy	Project Name:	West Mount Spill F	<b>Reported:</b>
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/04/24 14:04

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW Comp 11-6'	E408281-01A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 12-4'	E408281-02A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 13-8'	E408281-03A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 14-8'	E408281-04A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 15-8'	E408281-05A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 16-8'	E408281-06A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 17-2'	E408281-07A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 18-6'	E408281-08A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 19-4'	E408281-09A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 20-4'	E408281-10A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 21-4'	E408281-11A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.
SW Comp 22-4'	E408281-12A	Soil	08/29/24	09/03/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

### SW Comp 11-6'

**E408281-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/03/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/03/24	
Toluene	ND	0.0250	1	09/03/24	09/03/24	
o-Xylene	ND	0.0250	1	09/03/24	09/03/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/03/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.1 %	70-130	09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/03/24	
<i>Surrogate: n-Nonane</i>						
		85.0 %	50-200	09/03/24	09/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	37.3	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 12-4'

## E408281-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/03/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/03/24	
Toluene	ND	0.0250	1	09/03/24	09/03/24	
o-Xylene	ND	0.0250	1	09/03/24	09/03/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/03/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.7 %	70-130	09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/03/24	
<i>Surrogate: n-Nonane</i>						
		85.2 %	50-200	09/03/24	09/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	40.6	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 13-8'

E408281-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/03/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/03/24	
Toluene	ND	0.0250	1	09/03/24	09/03/24	
o-Xylene	ND	0.0250	1	09/03/24	09/03/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/03/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.9 %	70-130	09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
		86.0 %	50-200	09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	37.4	20.0	1	09/03/24	09/04/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 14-8'

E408281-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436010
Benzene	ND	0.0250	1	09/03/24	09/03/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/03/24	
Toluene	ND	0.0250	1	09/03/24	09/03/24	
o-Xylene	ND	0.0250	1	09/03/24	09/03/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/03/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.5 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436010
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2436005
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	84.0 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2436011
Chloride	38.3	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 15-8'

E408281-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436010
Benzene	ND	0.0250	1	09/03/24	09/03/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/03/24	
Toluene	ND	0.0250	1	09/03/24	09/03/24	
o-Xylene	ND	0.0250	1	09/03/24	09/03/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/03/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.6 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436010
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2436005
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	83.0 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2436011
Chloride	34.0	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 16-8'

E408281-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/03/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/03/24	
Toluene	ND	0.0250	1	09/03/24	09/03/24	
o-Xylene	ND	0.0250	1	09/03/24	09/03/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/03/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.8 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.9 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	88.8 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	35.3	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 17-2'

E408281-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/03/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/03/24	
Toluene	ND	0.0250	1	09/03/24	09/03/24	
o-Xylene	ND	0.0250	1	09/03/24	09/03/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/03/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/03/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.9 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/03/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		09/03/24	09/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	87.9 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	37.3	20.0	1	09/03/24	09/04/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 18-6'

E408281-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/04/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/04/24	
Toluene	ND	0.0250	1	09/03/24	09/04/24	
o-Xylene	ND	0.0250	1	09/03/24	09/04/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/04/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/04/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.6 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/04/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	87.8 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	36.2	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 19-4'

## E408281-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/04/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/04/24	
Toluene	ND	0.0250	1	09/03/24	09/04/24	
o-Xylene	ND	0.0250	1	09/03/24	09/04/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/04/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/04/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/04/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.6 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	87.3 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	38.1	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 20-4'

## E408281-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/04/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/04/24	
Toluene	ND	0.0250	1	09/03/24	09/04/24	
o-Xylene	ND	0.0250	1	09/03/24	09/04/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/04/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/04/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/04/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.6 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	84.5 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	37.8	20.0	1	09/03/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 21-4'

## E408281-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>		mg/kg	mg/kg	Analyst: BA		Batch: 2436010
Benzene	ND	0.0250	1	09/03/24	09/04/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/04/24	
Toluene	ND	0.0250	1	09/03/24	09/04/24	
o-Xylene	ND	0.0250	1	09/03/24	09/04/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/04/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/04/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		97.8 %	70-130	09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>		mg/kg	mg/kg	Analyst: BA		Batch: 2436010
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/04/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.2 %	70-130	09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>		mg/kg	mg/kg	Analyst: NV		Batch: 2436005
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>		87.6 %	50-200	09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>		mg/kg	mg/kg	Analyst: DT		Batch: 2436011
Chloride	38.3	20.0	1	09/03/24	09/04/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/4/2024 2:04:13PM

## SW Comp 22-4'

## E408281-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Benzene	ND	0.0250	1	09/03/24	09/04/24	
Ethylbenzene	ND	0.0250	1	09/03/24	09/04/24	
Toluene	ND	0.0250	1	09/03/24	09/04/24	
o-Xylene	ND	0.0250	1	09/03/24	09/04/24	
p,m-Xylene	ND	0.0500	1	09/03/24	09/04/24	
Total Xylenes	ND	0.0250	1	09/03/24	09/04/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/03/24	09/04/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		09/03/24	09/04/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436005	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/03/24	09/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/03/24	09/04/24	
<i>Surrogate: n-Nonane</i>						
	87.7 %	50-200		09/03/24	09/04/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2436011	
Chloride	37.1	20.0	1	09/03/24	09/04/24	



## QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/4/2024 2:04:13PM

## Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2436010-BLK1)

Prepared: 09/03/24 Analyzed: 09/03/24

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	7.88		8.00		98.4	70-130			

## LCS (2436010-BS1)

Prepared: 09/03/24 Analyzed: 09/03/24

Benzene	5.48	0.0250	5.00		110	70-130			
Ethylbenzene	5.30	0.0250	5.00		106	70-130			
Toluene	5.41	0.0250	5.00		108	70-130			
o-Xylene	5.28	0.0250	5.00		106	70-130			
p,m-Xylene	10.8	0.0500	10.0		108	70-130			
Total Xylenes	16.1	0.0250	15.0		107	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.85		8.00		98.1	70-130			

## Matrix Spike (2436010-MS1)

Source: E408280-07

Prepared: 09/03/24 Analyzed: 09/03/24

Benzene	5.48	0.0250	5.00	ND	110	54-133			
Ethylbenzene	5.29	0.0250	5.00	ND	106	61-133			
Toluene	5.39	0.0250	5.00	ND	108	61-130			
o-Xylene	5.27	0.0250	5.00	ND	105	63-131			
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131			
Total Xylenes	16.0	0.0250	15.0	ND	107	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.99		8.00		99.9	70-130			

## Matrix Spike Dup (2436010-MSD1)

Source: E408280-07

Prepared: 09/03/24 Analyzed: 09/03/24

Benzene	5.40	0.0250	5.00	ND	108	54-133	1.50	20	
Ethylbenzene	5.23	0.0250	5.00	ND	105	61-133	0.967	20	
Toluene	5.33	0.0250	5.00	ND	107	61-130	1.11	20	
o-Xylene	5.21	0.0250	5.00	ND	104	63-131	1.01	20	
p,m-Xylene	10.7	0.0500	10.0	ND	107	63-131	0.949	20	
Total Xylenes	15.9	0.0250	15.0	ND	106	63-131	0.967	20	
Surrogate: 4-Bromochlorobenzene-PID	8.02		8.00		100	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/4/2024 2:04:13PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436010-BLK1) Prepared: 09/03/24 Analyzed: 09/03/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		8.00		94.8	70-130			

LCS (2436010-BS2) Prepared: 09/03/24 Analyzed: 09/03/24

Gasoline Range Organics (C6-C10)	46.2	20.0	50.0		92.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.70		8.00		96.3	70-130			

Matrix Spike (2436010-MS2) Source: E408280-07 Prepared: 09/03/24 Analyzed: 09/03/24

Gasoline Range Organics (C6-C10)	44.5	20.0	50.0	ND	89.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.64		8.00		95.5	70-130			

Matrix Spike Dup (2436010-MSD2) Source: E408280-07 Prepared: 09/03/24 Analyzed: 09/03/24

Gasoline Range Organics (C6-C10)	46.4	20.0	50.0	ND	92.9	70-130	4.17	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.65		8.00		95.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/4/2024 2:04:13PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436005-BLK1)					Prepared: 09/03/24 Analyzed: 09/03/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.1		50.0		92.2	50-200			

LCS (2436005-BS1)					Prepared: 09/03/24 Analyzed: 09/03/24				
Diesel Range Organics (C10-C28)	205	25.0	250		82.0	38-132			
Surrogate: n-Nonane	48.3		50.0		96.7	50-200			

Matrix Spike (2436005-MS1)					Source: E408280-04		Prepared: 09/03/24 Analyzed: 09/03/24		
Diesel Range Organics (C10-C28)	208	25.0	250	ND	83.1	38-132			
Surrogate: n-Nonane	50.2		50.0		100	50-200			

Matrix Spike Dup (2436005-MSD1)					Source: E408280-04		Prepared: 09/03/24 Analyzed: 09/03/24		
Diesel Range Organics (C10-C28)	202	25.0	250	ND	80.7	38-132	2.96	20	
Surrogate: n-Nonane	48.0		50.0		96.0	50-200			





QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/4/2024 2:04:13PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436011-BLK1)					Prepared: 09/03/24 Analyzed: 09/03/24				
Chloride	ND	20.0							
LCS (2436011-BS1)					Prepared: 09/03/24 Analyzed: 09/03/24				
Chloride	251	20.0	250		101	90-110			
Matrix Spike (2436011-MS1)					Source: E408280-03		Prepared: 09/03/24 Analyzed: 09/03/24		
Chloride	392	20.0	250	139	101	80-120			
Matrix Spike Dup (2436011-MSD1)					Source: E408280-03		Prepared: 09/03/24 Analyzed: 09/03/24		
Chloride	397	20.0	250	139	104	80-120	1.40	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/04/24 14:04

- 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

Client: <b>MOORE ENERGY</b>				Bill To		Lab Use Only		TAT			EPA Program							
Project: <b>WEST MOUNT SPILL #</b>				Attention: <b>ENERGY STAFFING SERVICES</b>		Lab WO#		1D	2D	3D	Standard	CWA	SDWA					
Project Manager:				Address: <b>2724 NW COUNTY RD</b>		<b>E408281</b>			<b>X</b>									
Address:				City, State, Zip <b>HOBBS, NM 88240</b>		<b>20046-0001</b>		Analysis and Method					RCRA					
City, State, Zip				Phone: <b>575-393-9048</b>									State					
Phone:				Email: <b>NATALIE@ENERGYSTAFFINGLLC.COM</b>									NM	CO	UT	AZ	TX	
Email:				Email: <b>BRITTNEY@ENERGYSTAFFINGLLC.COM</b>									Remarks					
Report due by:																		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRQ/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 8010	Chloride 30010	RGDOC NM	RGDOC IX					
	08/29	S	1	Sw Comp 11 - 6'	1							X						
				Sw Comp 12 - 4'	2													
				Sw Comp 13 - 8'	3													
				Sw Comp 14 - 8'	4													
				Sw Comp 15 - 8'	5													
				Sw Comp 16 - 8'	6													
				Sw Comp 17 - 2'	7													
				Sw Comp 18 - 6'	8													
				Sw Comp 19 - 4'	9													
	08/29	S	1	Sw Comp 20 - 4'	10							X						

**Additional Instructions:**

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

sampled by: Juan Solis

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days

Relinquished by: (Signature) <i>Jan Spils</i>		Date 08/29/24	Time 1300	Received by: (Signature) <i>Jan</i>		Date 8.30.24	Time 1300	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / N	
Relinquished by: (Signature) <i>[Signature]</i>		Date 8.30.24	Time 1500	Received by: (Signature) <i>A.H.</i>		Date 8.30.24	Time 1800	T1 _____ T2 _____ T3 _____	
Relinquished by: (Signature) <i>A.H.</i>		Date 8.30.24	Time 2400	Received by: (Signature) <i>Thuyha R Heller</i>		Date 9.3.24	Time 0500	AVG Temp °C <b>4</b>	
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA				_____ for the analysis of the above					

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

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other  
 Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples with a release date of 12/31/2012 or earlier are not accepted. The liability of the laboratory is limited to the amount paid for on the report. This warranty is applicable only to those samples received by the laboratory with this COC.



### Project Information

[illegible]

## Envirotech Analytical Laboratory

Printed: 9/3/2024 7:14:11AM

## 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:	09/03/24 05:00	Work Order ID:	E408281
Phone:	(575) 390-6397	Date Logged In:	08/30/24 15:50	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	09/04/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CouierComments/Resolution

Project manager and time sampled missing on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

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? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Report to:  
Natalie Gladden



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Mack Energy

Project Name: West Mount Spill F

Work Order: E409004

Job Number: 20046-0001

Received: 9/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
9/5/24

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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

Date Reported: 9/5/24

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E409004  
Date Received: 9/4/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/4/2024 6:00:00AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/05/24 13:58

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW Comp 23 - 10'	E409004-01A	Soil	08/30/24	09/04/24	Glass Jar, 2 oz.
SW Comp 24 - 10'	E409004-02A	Soil	08/30/24	09/04/24	Glass Jar, 2 oz.
SW Comp 25 - 10'	E409004-03A	Soil	08/30/24	09/04/24	Glass Jar, 2 oz.
SW Comp 26 - 10'	E409004-04A	Soil	08/30/24	09/04/24	Glass Jar, 2 oz.
SW Comp 27 - 10'	E409004-05A	Soil	08/30/24	09/04/24	Glass Jar, 2 oz.
SW Comp 28 - 10'	E409004-06A	Soil	08/30/24	09/04/24	Glass Jar, 2 oz.
SW Comp 29 - 10'	E409004-07A	Soil	08/30/24	09/04/24	Glass Jar, 2 oz.



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/5/2024 1:58:19PM

### SW Comp 23 - 10'

**E409004-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Benzene	ND	0.0250	1	09/04/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/04/24	09/05/24	
Toluene	ND	0.0250	1	09/04/24	09/05/24	
o-Xylene	ND	0.0250	1	09/04/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/04/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/04/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.3 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/04/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.3 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2436023	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/04/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/04/24	09/05/24	
<i>Surrogate: n-Nonane</i>	78.8 %	50-200		09/04/24	09/05/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436029	
Chloride	25.6	20.0	1	09/04/24	09/04/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/5/2024 1:58:19PM

## SW Comp 24 - 10'

E409004-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436027
Benzene	ND	0.0250	1	09/04/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/04/24	09/05/24	
Toluene	ND	0.0250	1	09/04/24	09/05/24	
o-Xylene	ND	0.0250	1	09/04/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/04/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/04/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.4 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436027
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/04/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2436023
Diesel Range Organics (C10-C28)	ND	25.0	1	09/04/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/04/24	09/05/24	
<i>Surrogate: n-Nonane</i>						
	82.7 %	50-200		09/04/24	09/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2436029
Chloride	26.6	20.0	1	09/04/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/5/2024 1:58:19PM

## SW Comp 25 - 10'

E409004-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Benzene	ND	0.0250	1	09/04/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/04/24	09/05/24	
Toluene	ND	0.0250	1	09/04/24	09/05/24	
o-Xylene	ND	0.0250	1	09/04/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/04/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/04/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.7 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/04/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436023	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/04/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/04/24	09/05/24	
<i>Surrogate: n-Nonane</i>						
	80.6 %	50-200		09/04/24	09/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2436029	
Chloride	31.3	20.0	1	09/04/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/5/2024 1:58:19PM

## SW Comp 26 - 10'

E409004-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Benzene	ND	0.0250	1	09/04/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/04/24	09/05/24	
Toluene	ND	0.0250	1	09/04/24	09/05/24	
o-Xylene	ND	0.0250	1	09/04/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/04/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/04/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.8 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/04/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.4 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2436023	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/04/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/04/24	09/05/24	
<i>Surrogate: n-Nonane</i>	79.1 %	50-200		09/04/24	09/05/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436029	
Chloride	26.5	20.0	1	09/04/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/5/2024 1:58:19PM

## SW Comp 27 - 10'

E409004-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Benzene	ND	0.0250	1	09/04/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/04/24	09/05/24	
Toluene	ND	0.0250	1	09/04/24	09/05/24	
o-Xylene	ND	0.0250	1	09/04/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/04/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/04/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/04/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.8 %	70-130	09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2436023	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/04/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/04/24	09/05/24	
<i>Surrogate: n-Nonane</i>						
		82.5 %	50-200	09/04/24	09/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2436029	
Chloride	26.7	20.0	1	09/04/24	09/04/24	



## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/5/2024 1:58:19PM

## SW Comp 28 - 10'

E409004-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436027
Benzene	ND	0.0250	1	09/04/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/04/24	09/05/24	
Toluene	ND	0.0250	1	09/04/24	09/05/24	
o-Xylene	ND	0.0250	1	09/04/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/04/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/04/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.6 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2436027
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/04/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2436023
Diesel Range Organics (C10-C28)	ND	25.0	1	09/04/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/04/24	09/05/24	
<i>Surrogate: n-Nonane</i>						
	82.1 %	50-200		09/04/24	09/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2436029
Chloride	27.6	20.0	1	09/04/24	09/04/24	





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
9/5/2024 1:58:19PM

## SW Comp 29 - 10'

E409004-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Benzene	ND	0.0250	1	09/04/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/04/24	09/05/24	
Toluene	ND	0.0250	1	09/04/24	09/05/24	
o-Xylene	ND	0.0250	1	09/04/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/04/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/04/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.1 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436027	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/04/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		09/04/24	09/05/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2436023	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/04/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/04/24	09/05/24	
<i>Surrogate: n-Nonane</i>						
	82.3 %	50-200		09/04/24	09/05/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436029	
Chloride	26.3	20.0	1	09/04/24	09/04/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/5/2024 1:58:19PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436027-BLK1)

Prepared: 09/04/24 Analyzed: 09/04/24

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	7.92		8.00		99.0	70-130			

LCS (2436027-BS1)

Prepared: 09/04/24 Analyzed: 09/04/24

Benzene	5.07	0.0250	5.00		101	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.1	70-130			
Toluene	5.00	0.0250	5.00		100	70-130			
o-Xylene	4.88	0.0250	5.00		97.5	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.96		8.00		99.5	70-130			

Matrix Spike (2436027-MS1)

Source: E409003-07 Prepared: 09/04/24 Analyzed: 09/04/24

Benzene	5.18	0.0250	5.00	ND	103	54-133			
Ethylbenzene	4.99	0.0250	5.00	ND	99.8	61-133			
Toluene	5.10	0.0250	5.00	ND	102	61-130			
o-Xylene	4.96	0.0250	5.00	ND	99.3	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	7.81		8.00		97.7	70-130			

Matrix Spike Dup (2436027-MSD1)

Source: E409003-07 Prepared: 09/04/24 Analyzed: 09/04/24

Benzene	5.18	0.0250	5.00	ND	104	54-133	0.0319	20	
Ethylbenzene	5.00	0.0250	5.00	ND	99.9	61-133	0.104	20	
Toluene	5.10	0.0250	5.00	ND	102	61-130	0.00784	20	
o-Xylene	4.98	0.0250	5.00	ND	99.5	63-131	0.282	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	0.263	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	0.269	20	
Surrogate: 4-Bromochlorobenzene-PID	7.88		8.00		98.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/5/2024 1:58:19PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436027-BLK1) Prepared: 09/04/24 Analyzed: 09/04/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		8.00		94.7	70-130			

LCS (2436027-BS2) Prepared: 09/04/24 Analyzed: 09/04/24

Gasoline Range Organics (C6-C10)	42.4	20.0	50.0		84.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.78		8.00		97.2	70-130			

Matrix Spike (2436027-MS2) Source: E409003-07 Prepared: 09/04/24 Analyzed: 09/04/24

Gasoline Range Organics (C6-C10)	43.5	20.0	50.0	ND	87.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.74		8.00		96.8	70-130			

Matrix Spike Dup (2436027-MSD2) Source: E409003-07 Prepared: 09/04/24 Analyzed: 09/04/24

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.8	70-130	0.930	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.69		8.00		96.2	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/5/2024 1:58:19PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436023-BLK1)					Prepared: 09/04/24 Analyzed: 09/04/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	34.2		50.0		68.5	50-200			

LCS (2436023-BS1)					Prepared: 09/04/24 Analyzed: 09/04/24				
Diesel Range Organics (C10-C28)	196	25.0	250		78.3	38-132			
Surrogate: n-Nonane	43.0		50.0		86.1	50-200			

Matrix Spike (2436023-MS1)					Source: E409003-06		Prepared: 09/04/24 Analyzed: 09/04/24		
Diesel Range Organics (C10-C28)	203	25.0	250	ND	81.3	38-132			
Surrogate: n-Nonane	40.2		50.0		80.4	50-200			

Matrix Spike Dup (2436023-MSD1)					Source: E409003-06		Prepared: 09/04/24 Analyzed: 09/04/24		
Diesel Range Organics (C10-C28)	205	25.0	250	ND	82.2	38-132	1.04	20	
Surrogate: n-Nonane	40.0		50.0		80.0	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/5/2024 1:58:19PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436029-BLK1)					Prepared: 09/04/24 Analyzed: 09/04/24				
Chloride	ND	20.0							
LCS (2436029-BS1)					Prepared: 09/04/24 Analyzed: 09/04/24				
Chloride	249	20.0	250		99.8	90-110			
Matrix Spike (2436029-MS1)					Source: E409003-03		Prepared: 09/04/24 Analyzed: 09/04/24		
Chloride	280	20.0	250	25.0	102	80-120			
Matrix Spike Dup (2436029-MSD1)					Source: E409003-03		Prepared: 09/04/24 Analyzed: 09/04/24		
Chloride	278	20.0	250	25.0	101	80-120	0.670	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/05/24 13:58

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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



Page 1 of 1

## Project Information

## Chain of Custody

Client: <b>MCC Energy</b>					Bill To					Lab Use Only					TAT				EPA Program					
Project: <b>West Mont Spill F</b>					Attention: <b>ENERGY STAFFING SERVICES</b>					Lab WO# <b>409004</b>					Job Number <b>20046-0001</b>				ID 2D 3D Standard			CWA SDWA		
Project Manager					Address: <b>2724 NW COUNTY RD</b>					Analysis and Method									RCRA					
Address:					City, State, Zip <b>HOBBS NM 88240</b>																			
City, State, Zip					Phone: <b>575-393-9048</b>														State					
Phone:					Email: <b>NATALIE@ENERGYSTAFFINGLLC.COM</b>														NM CO UT AZ TX					
Email:					Email: <b>BRITTNEY@ENERGYSTAFFINGLLC.COM</b>														Remarks					
Report due by:																								

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRG/ORG BY 8015	GRG/ORG BY 8015	BTX BY 8022	VOC BY 8020	Metals 8017	PH/EC/TEMP	SGDUC NM	SGDUC TX
	08/30	S	1	SW Corp 23 - 10'	1							X	
				SW Corp 24 - 10'	2								
				SW Corp 25 - 10'	3								
				SW Corp 26 - 10'	4								
				SW Corp 27 - 10'	5								
				SW Corp 28 - 10'	6								
	08/30	S	1	SW Corp 29 - 10'	7							X	

Additional Instructions:

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

Sampled by: **Juan Solis**

Relinquished by: (Signature) **Juan Solis** Date: **08/30/24** Time:

Received by: (Signature) **Michelle Gonzales** Date: **9-3-24** Time: **1315**

Relinquished by: (Signature) **Michelle Gonzales** Date: **9-3-24** Time: **1530**

Received by: (Signature) **Andrew Hesso** Date: **9-3-24** Time: **2130**

Relinquished by: (Signature) **Andrew Hesso** Date: **9-3-24** Time: **2130**

Received by: (Signature) **Michelle R Heeler** Date: **9-4-24** Time: **0600**

Lab Use Only

Received on ice: **Y / N**

T1 T2 T3

AVG Temp °C **4**

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

## Envirotech Analytical Laboratory

Printed: 9/4/2024 6:14:38AM

## 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:	09/04/24 06:00	Work Order ID:	E409004
Phone:	(575) 390-6397	Date Logged In:	09/03/24 17:37	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	09/05/24 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled are missing on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

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? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

**MACK ENERGY: WEST MOUNT SPILL F  
REMEDIATION AND FINAL PHOTOS**









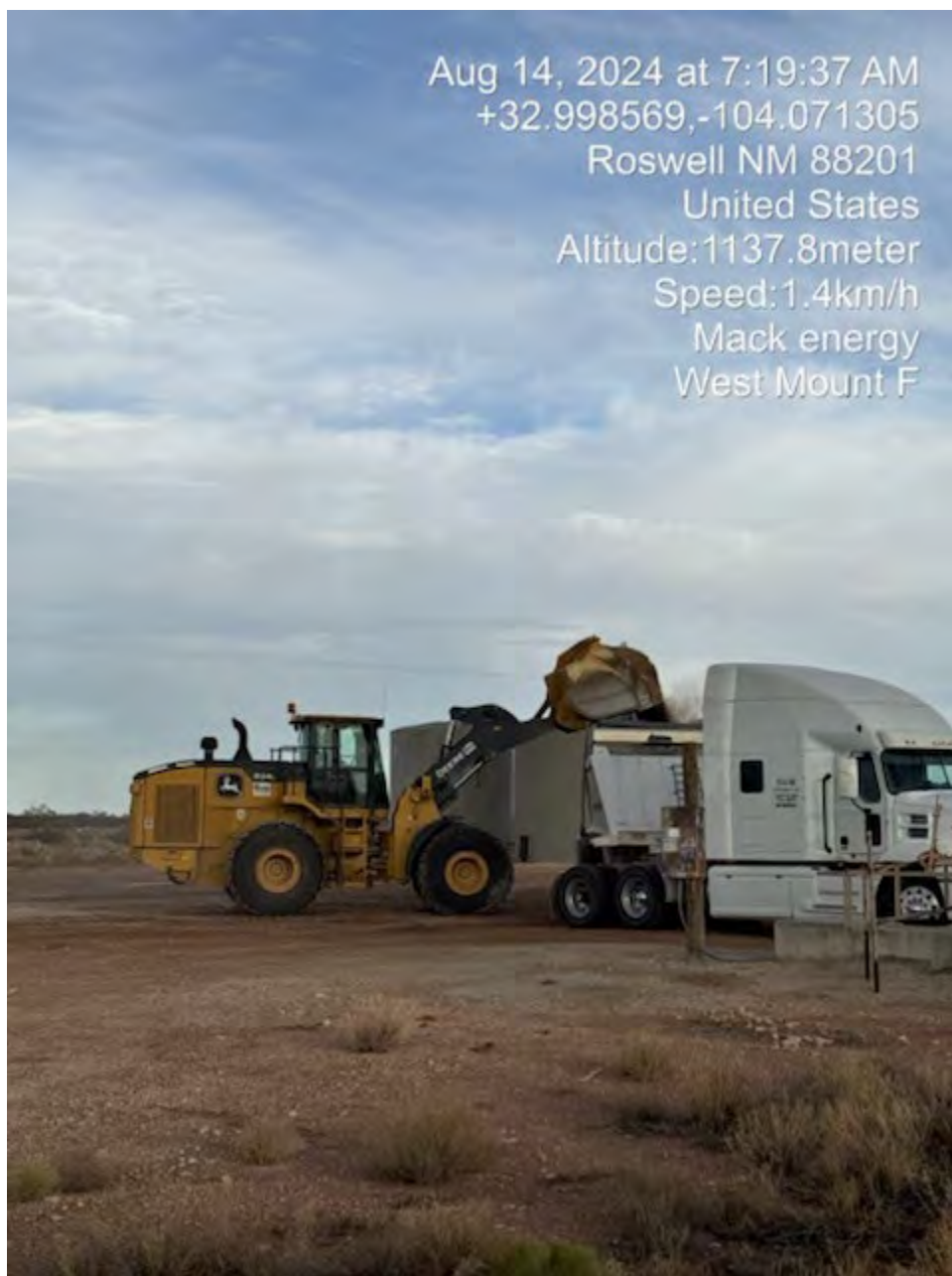




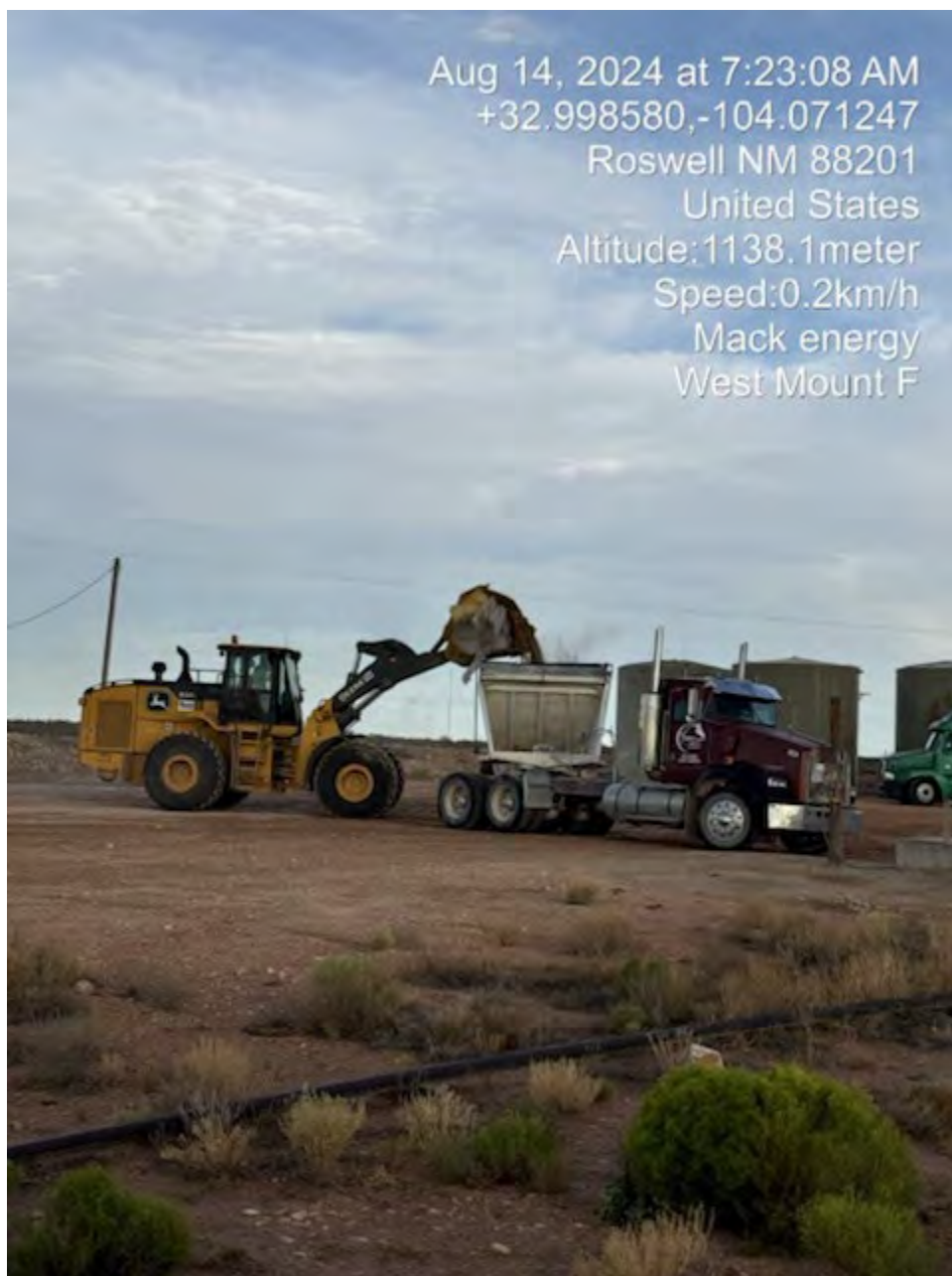


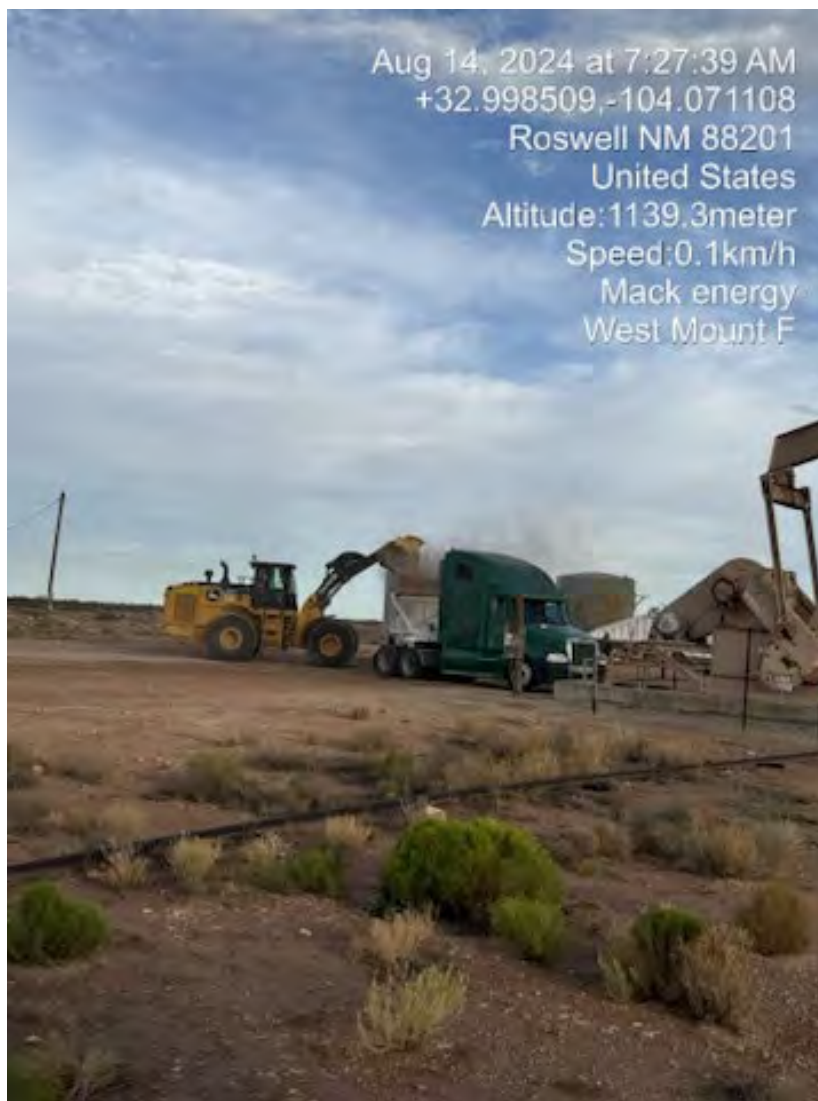








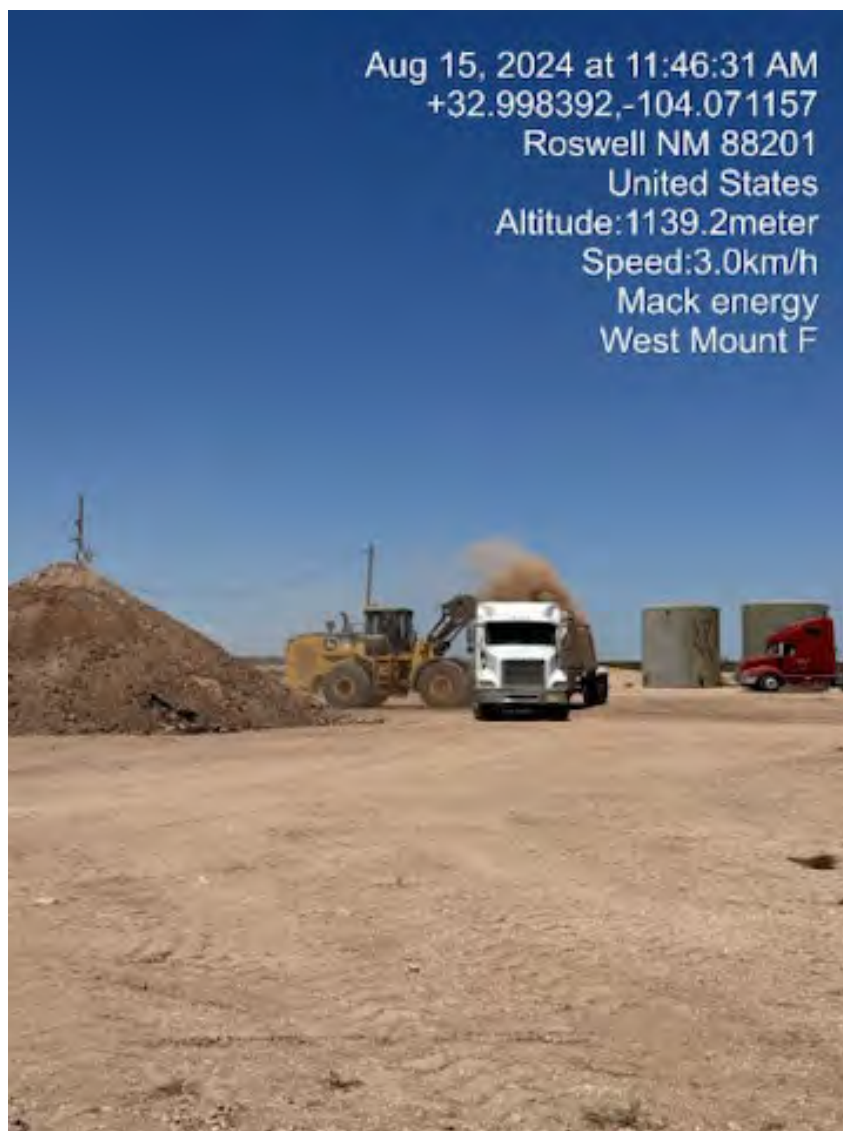




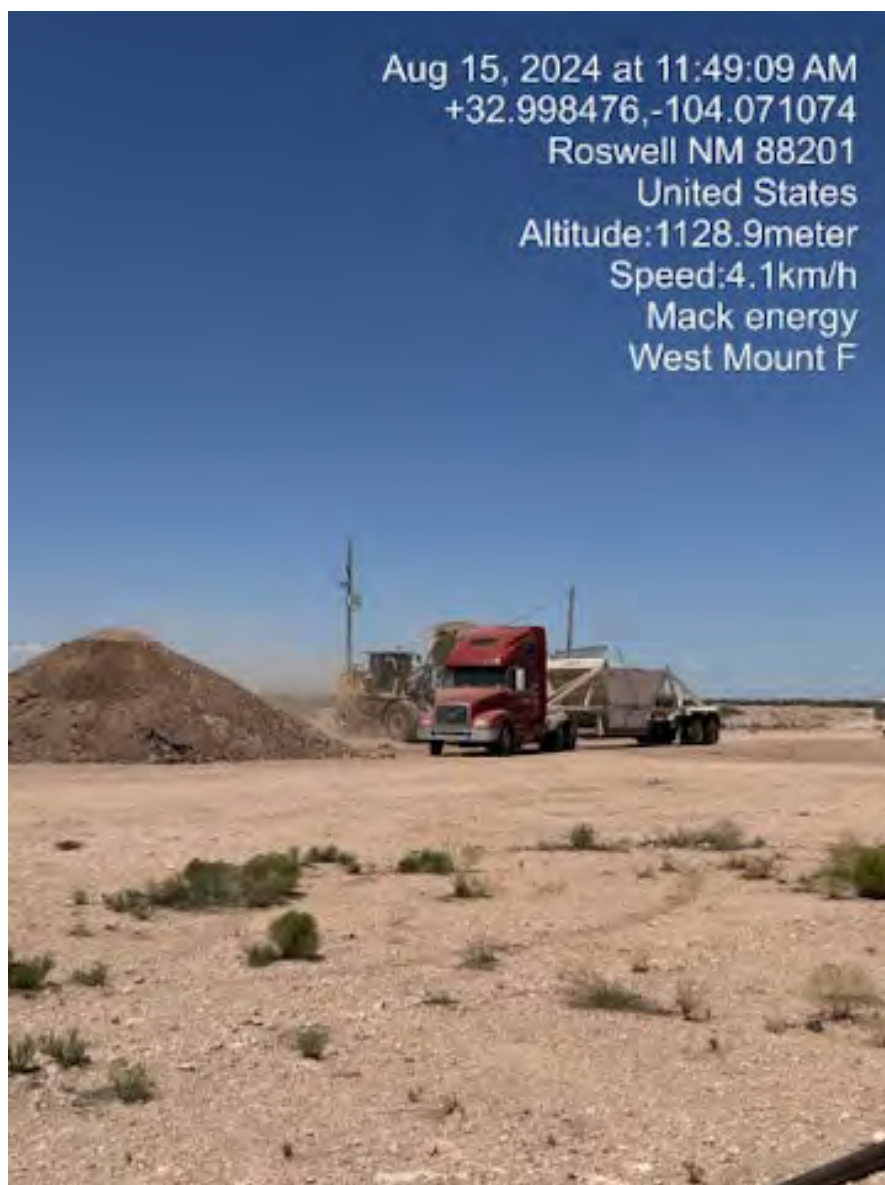














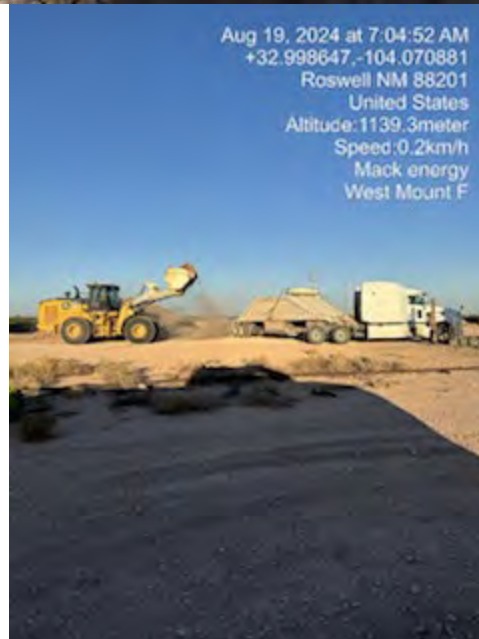
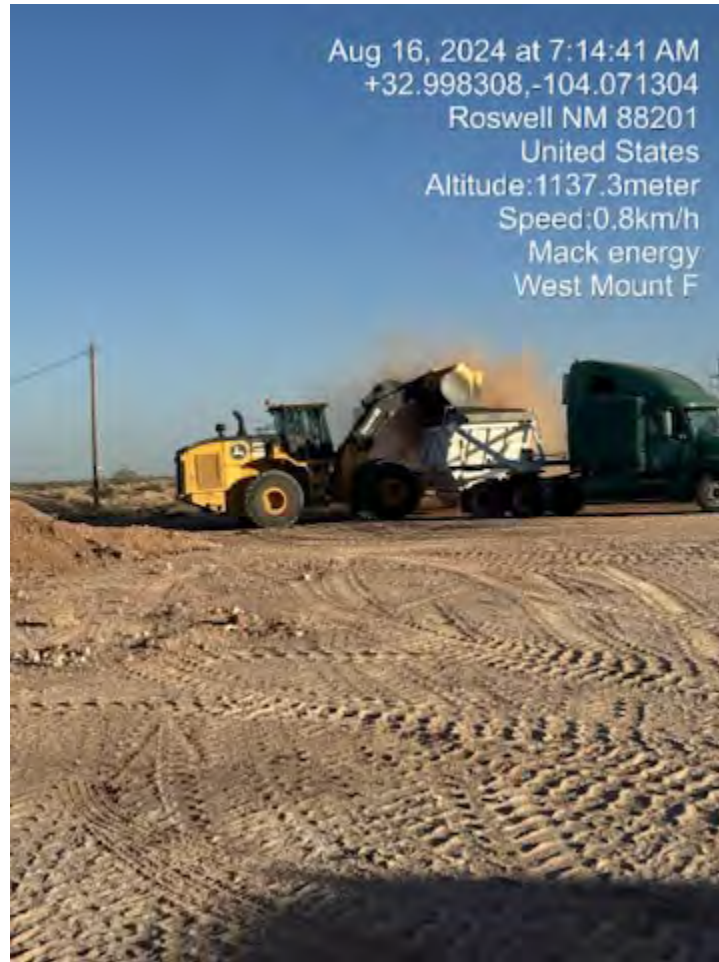




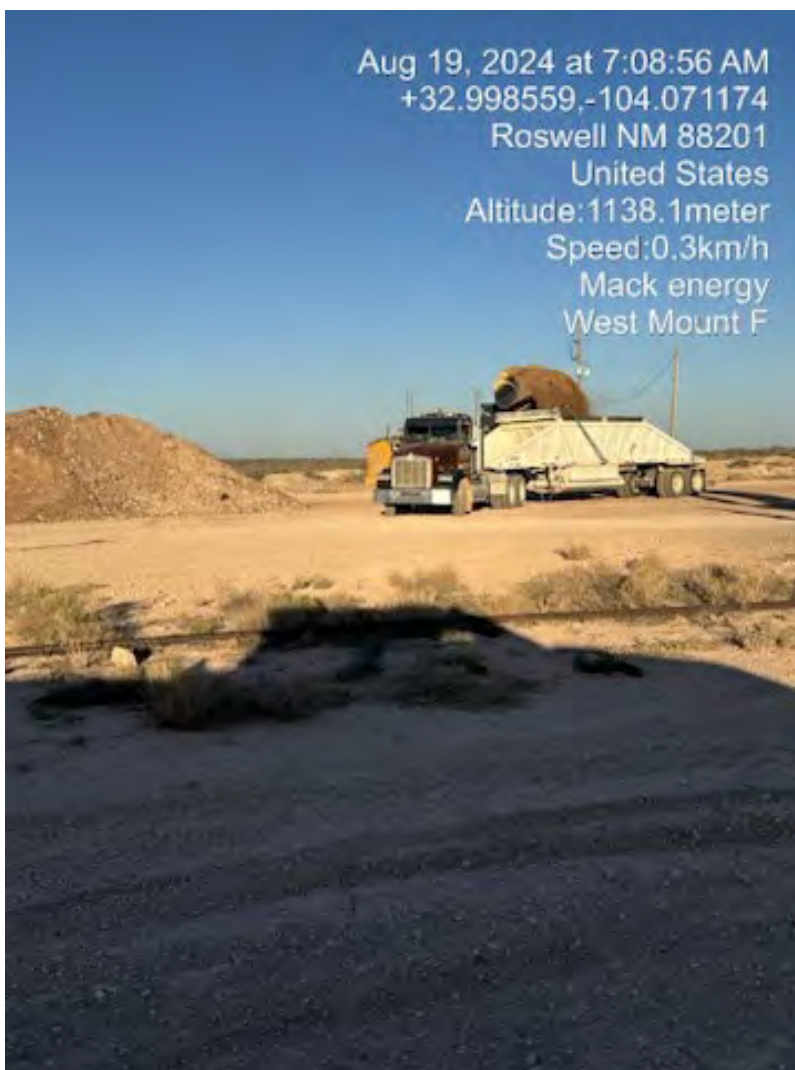








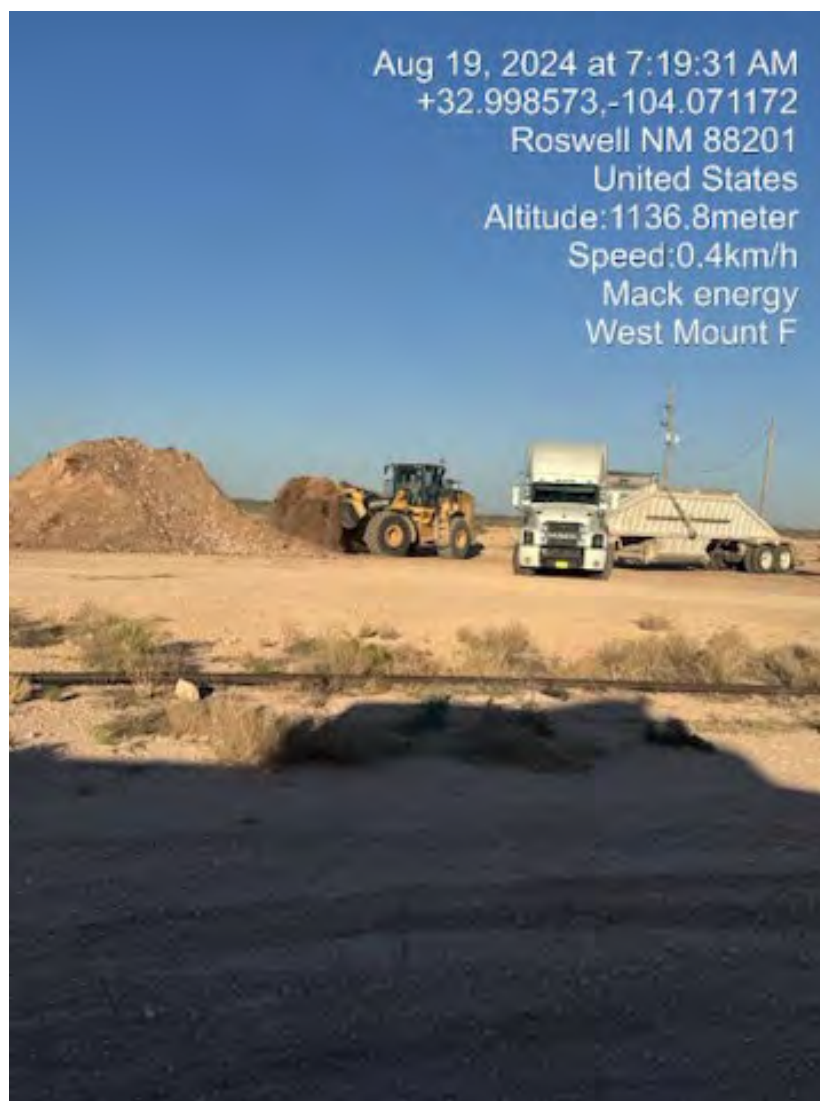


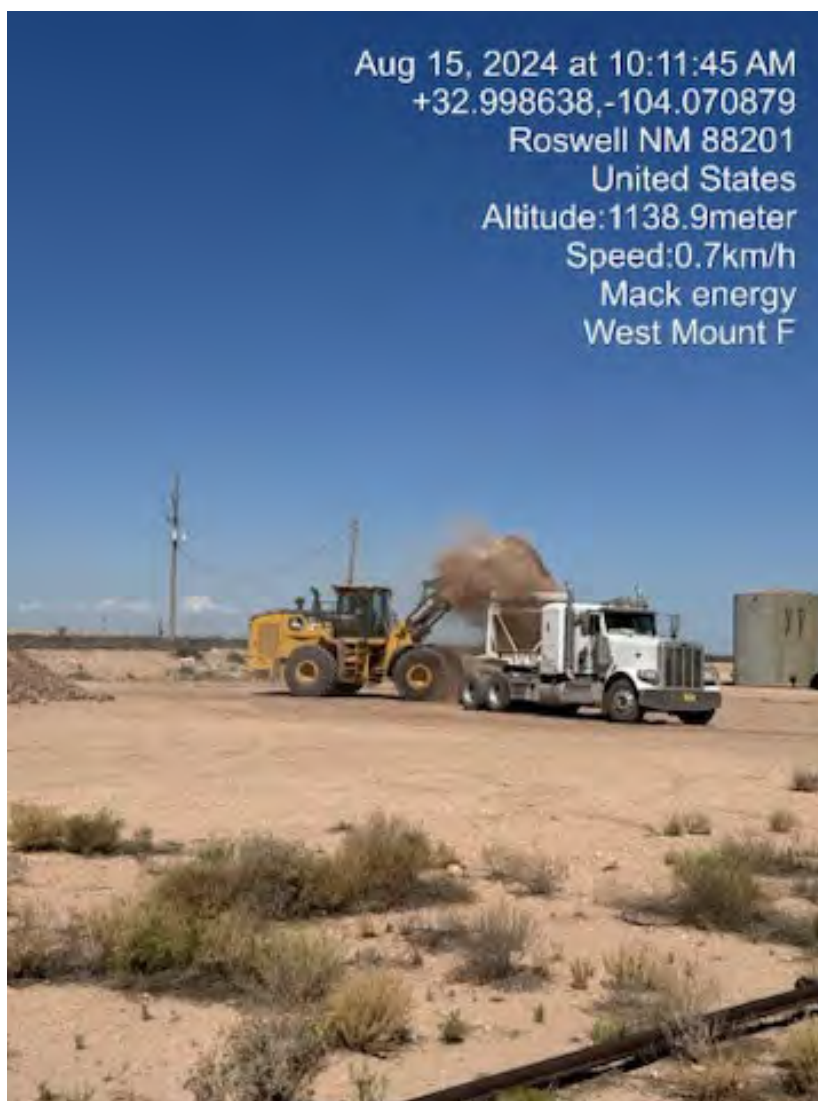








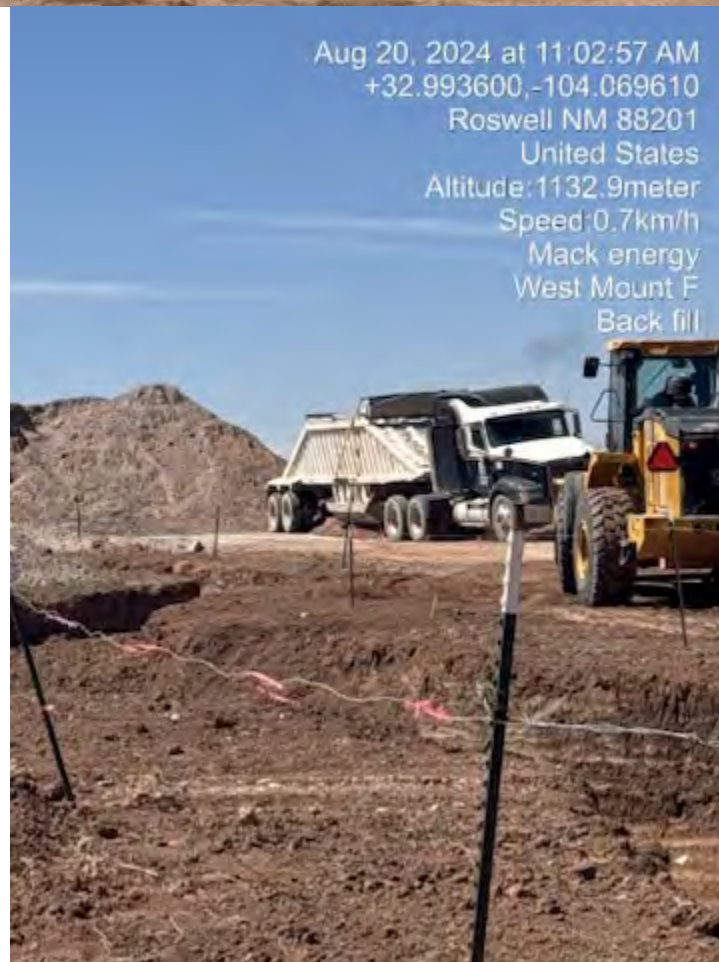








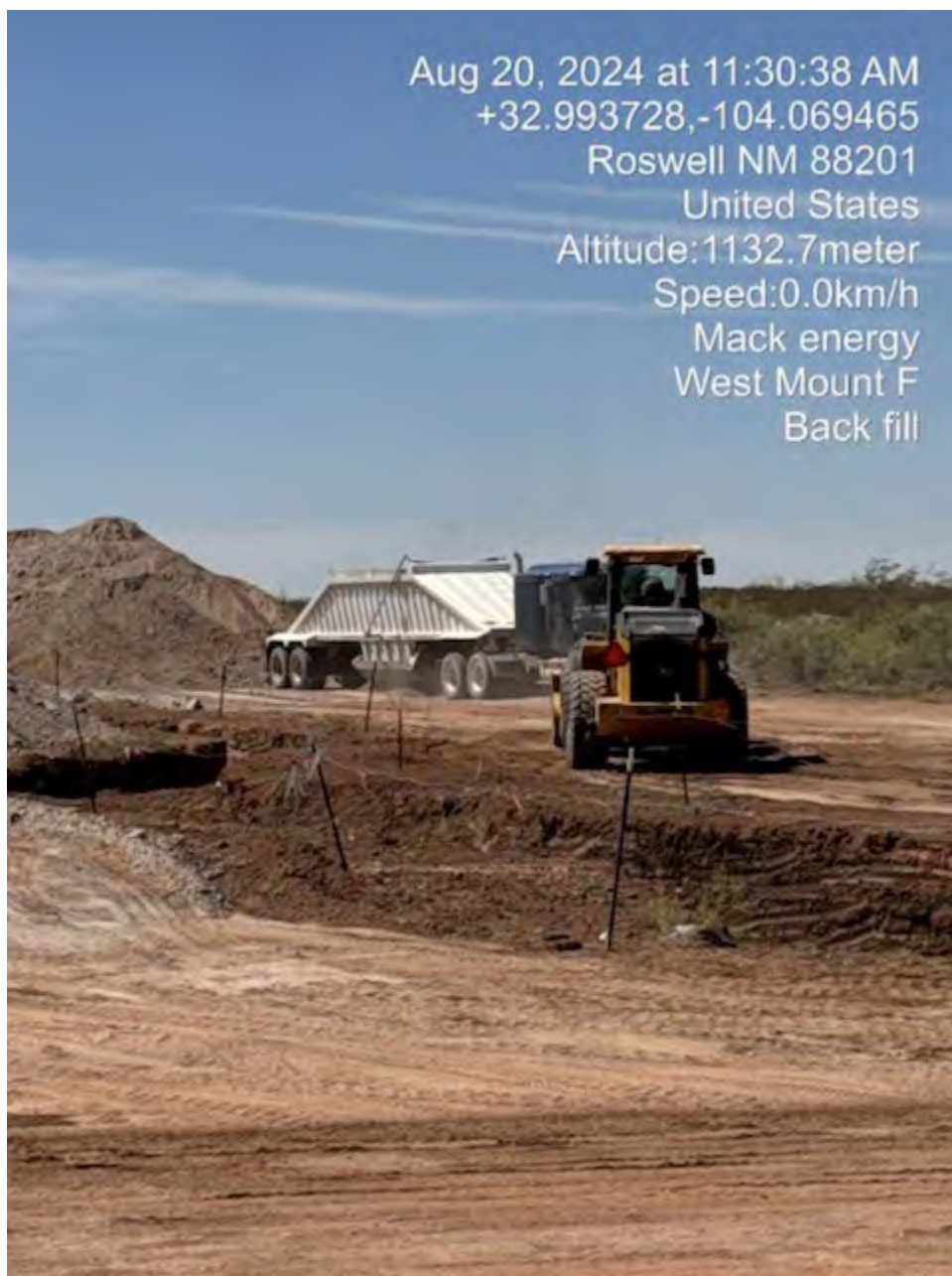


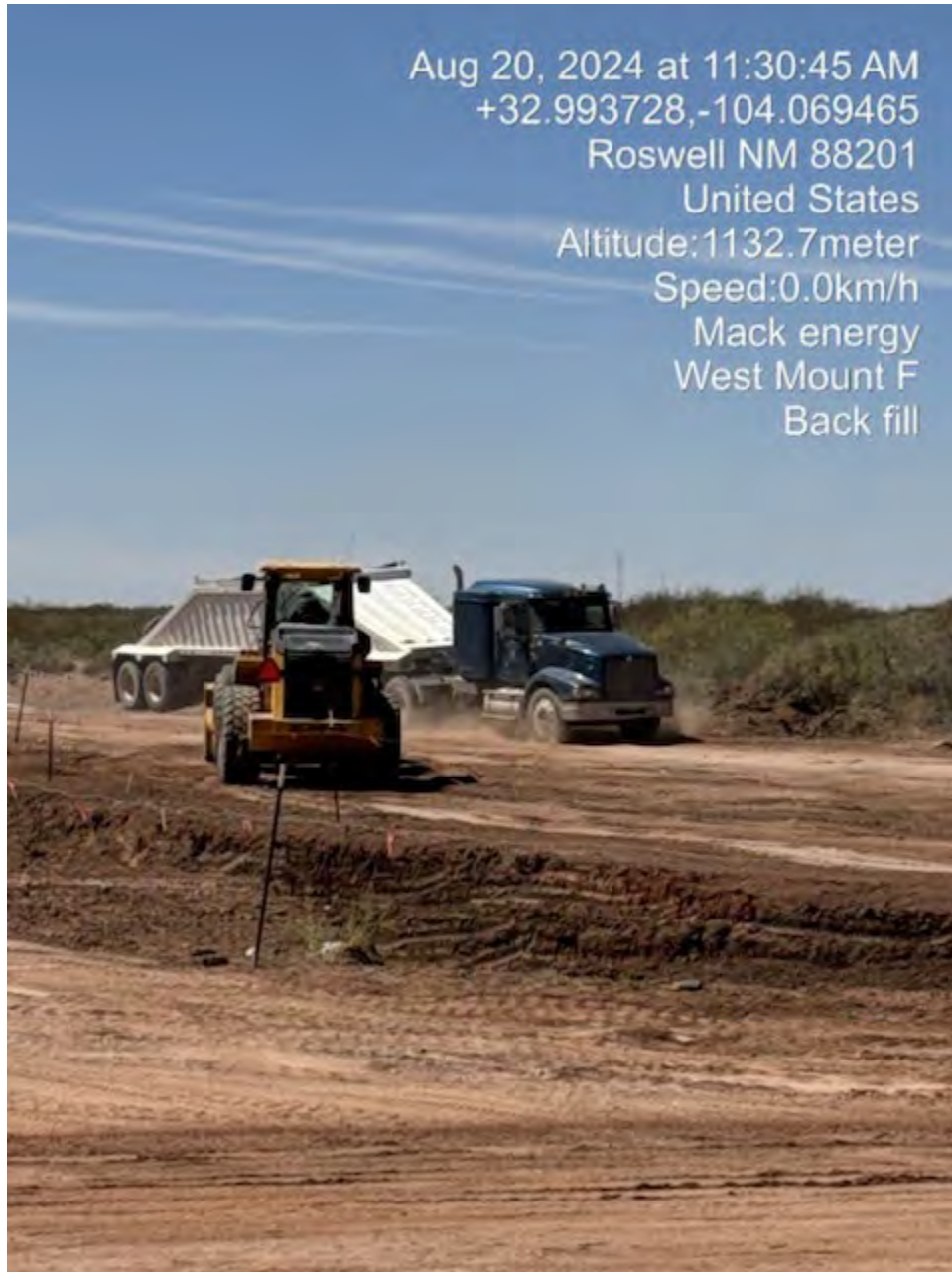




































**MACK ENERGY CORPORATION  
WEST MOUNT SPILL F  
RECLAMATION EXECUTIVE SUMMARY  
INCIDENT NO. NAPP2329733486**

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

### Reclamation Executive Summary

**Subject:** Final Reclamation Summary – West Mount Spill F (Incident No. NAPP2329733486)

On January 3, 2025 ESS initiated and completed reclamation activities at the West Mount Spill E site following the finalization of remediation efforts for the release that occurred on September 20, 2023 (Incident Number: NAPP2329733486).

A total of 1049.93 cubic yards of topsoil was loaded and hauled from Kingston's Pit. The topsoil was evenly spread across the entire 7,087 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 7,087 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 32.992691 -104.069836. 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 F 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](mailto:natalie@energystaffingllc.com).

Sincerely,



**Natalie Gladden**

**COO and 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](mailto:natalie@energystaffingllc.com)**



**Attachments:**

**Composite Map**

**Site Photos**

**Seed Tag**



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 F

Work Order: E507267

Job Number: 20046-0001

Received: 7/23/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
7/24/25

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

Date Reported: 7/24/25

Natalie Gladden  
7 W. Compress Road  
Artesia, NM 88210



Project Name: West Mount Spill F  
Workorder: E507267  
Date Received: 7/23/2025 7:30:39AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/23/2025 7:30:39AM, under the Project Name: West Mount Spill F.

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

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

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

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

Respectfully,

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

**Raina Schwanz**  
Laboratory Administrator  
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**Southern New Mexico Area**

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/24/25 10:13

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BACKFILL COMP 1 - SURF	E507267-01A	Soil	07/21/25	07/23/25	Glass Jar, 2 oz.





## Sample Data

Mack Energy  
7 W. Compress Road  
Artesia NM, 88210

Project Name: West Mount Spill F  
Project Number: 20046-0001  
Project Manager: Natalie Gladden

**Reported:**  
7/24/2025 10:13:33AM

### BACKFILL COMP 1 - SURF

**E507267-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2530065	
Benzene	ND	0.0250	1	07/23/25	07/23/25	
Ethylbenzene	ND	0.0250	1	07/23/25	07/23/25	
Toluene	ND	0.0250	1	07/23/25	07/23/25	
o-Xylene	ND	0.0250	1	07/23/25	07/23/25	
p,m-Xylene	ND	0.0500	1	07/23/25	07/23/25	
Total Xylenes	ND	0.0250	1	07/23/25	07/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	87.4 %	70-130		07/23/25	07/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2530065	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/25	07/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	82.1 %	70-130		07/23/25	07/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KH		Batch: 2530088	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/25	07/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/25	07/23/25	
<i>Surrogate: n-Nonane</i>	78.0 %	61-141		07/23/25	07/23/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2530066	
Chloride	ND	20.0	1	07/23/25	07/23/25	



## QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/24/2025 10:13:33AM

## Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2530065-BLK1)

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

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	6.87		8.00		85.8	70-130			

## LCS (2530065-BS1)

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

Benzene	5.26	0.0250	5.00		105	70-130			
Ethylbenzene	5.15	0.0250	5.00		103	70-130			
Toluene	5.22	0.0250	5.00		104	70-130			
o-Xylene	5.10	0.0250	5.00		102	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.5	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.84		8.00		85.5	70-130			

## Matrix Spike (2530065-MS1)

Source: E507275-03

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

Benzene	4.71	0.0250	5.00	ND	94.3	70-130			
Ethylbenzene	4.60	0.0250	5.00	ND	92.1	70-130			
Toluene	4.71	0.0250	5.00	0.0367	93.5	70-130			
o-Xylene	4.63	0.0250	5.00	0.0794	91.0	70-130			
p,m-Xylene	9.58	0.0500	10.0	0.267	93.1	70-130			
Total Xylenes	14.2	0.0250	15.0	0.346	92.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.84		8.00		85.5	70-130			

## Matrix Spike Dup (2530065-MSD1)

Source: E507275-03

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

Benzene	5.39	0.0250	5.00	ND	108	70-130	13.4	27	
Ethylbenzene	5.28	0.0250	5.00	ND	106	70-130	13.6	26	
Toluene	5.39	0.0250	5.00	0.0367	107	70-130	13.4	20	
o-Xylene	5.31	0.0250	5.00	0.0794	105	70-130	13.7	25	
p,m-Xylene	10.9	0.0500	10.0	0.267	107	70-130	13.3	23	
Total Xylenes	16.2	0.0250	15.0	0.346	106	70-130	13.4	26	
Surrogate: 4-Bromochlorobenzene-PID	6.79		8.00		84.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/24/2025 10:13:33AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2530065-BLK1) Prepared: 07/23/25 Analyzed: 07/23/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.64		8.00		83.0	70-130			

LCS (2530065-BS2) Prepared: 07/23/25 Analyzed: 07/23/25

Gasoline Range Organics (C6-C10)	37.3	20.0	50.0		74.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.75		8.00		84.4	70-130			

Matrix Spike (2530065-MS2) Source: E507275-03 Prepared: 07/23/25 Analyzed: 07/23/25

Gasoline Range Organics (C6-C10)	49.7	20.0	50.0	ND	99.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.2	70-130			

Matrix Spike Dup (2530065-MSD2) Source: E507275-03 Prepared: 07/23/25 Analyzed: 07/23/25

Gasoline Range Organics (C6-C10)	44.5	20.0	50.0	ND	88.9	70-130	11.2	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.97		8.00		87.1	70-130			



## QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/24/2025 10:13:33AM

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2530088-BLK1)

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

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	39.3		50.0		78.6	61-141			

## LCS (2530088-BS1)

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

Diesel Range Organics (C10-C28)	228	25.0	250		91.1	66-144			
Surrogate: <i>n</i> -Nonane	40.2		50.0		80.3	61-141			

## Matrix Spike (2530088-MS1)

Source: E507275-03

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

Diesel Range Organics (C10-C28)	236	25.0	250	ND	94.3	56-156			
Surrogate: <i>n</i> -Nonane	40.2		50.0		80.4	61-141			

## Matrix Spike Dup (2530088-MSD1)

Source: E507275-03

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

Diesel Range Organics (C10-C28)	228	25.0	250	ND	91.0	56-156	3.56	20	
Surrogate: <i>n</i> -Nonane	40.5		50.0		81.1	61-141			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill F	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/24/2025 10:13:33AM

Anions by EPA 300.0/9056A

Analyst: DT

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

Blank (2530066-BLK1)					Prepared: 07/23/25 Analyzed: 07/23/25				
Chloride	ND	20.0							
LCS (2530066-BS1)					Prepared: 07/23/25 Analyzed: 07/23/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2530066-MS1)					Source: E507264-01		Prepared: 07/23/25 Analyzed: 07/23/25		
Chloride	252	20.0	250	ND	101	80-120			
Matrix Spike Dup (2530066-MSD1)					Source: E507264-01		Prepared: 07/23/25 Analyzed: 07/23/25		
Chloride	253	20.0	250	ND	101	80-120	0.252	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 F	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/24/25 10:13

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



## Project Information

## Chain of Custody

Client: Mack Enceby

Project: West Mount Spill "F"

Project Manager:

Address:

City, State, Zip

Phone:

Email:

Report due by:

Bill To

Attention: ENERGY STAFFING SERVICES

Address: 2724 NW COUNTY RD

City, State, Zip HOBBS, NM 88240

Phone: 575-393-9048

Email: NATALIE@ENERGYSTAFFINGLLC.COM

Lab Use Only

Lab WO# E507267

Job Number 20046-0001

Analysis and Method

TAT

1D

2D

3D

Standard

EPA Program

CWA

SDWA

RCRA

State

NM

CO

UT

AZ

TX

Remarks

3.4

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX
	7/21/25	S	1	Backfill comp 1 - 542r	1							X	

Additional Instructions:

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

Signed by: Michelle Gonzales

Sampled by: M. Rivera

Relinquished by: (Signature) [Signature]

Date 7/21/25

Time

Received by: (Signature) M. Rivera

Date 7-22-25

Time 1300

Relinquished by: (Signature) Michelle Gonzales

Date 7-22-25

Time 1445

Received by: (Signature) Marissa Gonzales

Date 7-22-25

Time 1445

Relinquished by: (Signature) Marissa Gonzales

Date 7-22-25

Time 1825

Received by: (Signature) Andrew M.

Date 7-22-25

Time 1825

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

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

Received on ice: Y/N

T1

T2

T3

AVG Temp °C

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Andrew M.

7-22-25

2230

Cathy Mar

7-23-25

130

enviro+ecol

## Envirotech Analytical Laboratory

Printed: 7/23/2025 8:31:52AM

## 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:	07/23/25 07:30	Work Order ID:	E507267
Phone:	(575) 390-6397	Date Logged In:	07/22/25 14:12	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	07/24/25 17:00 (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 match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

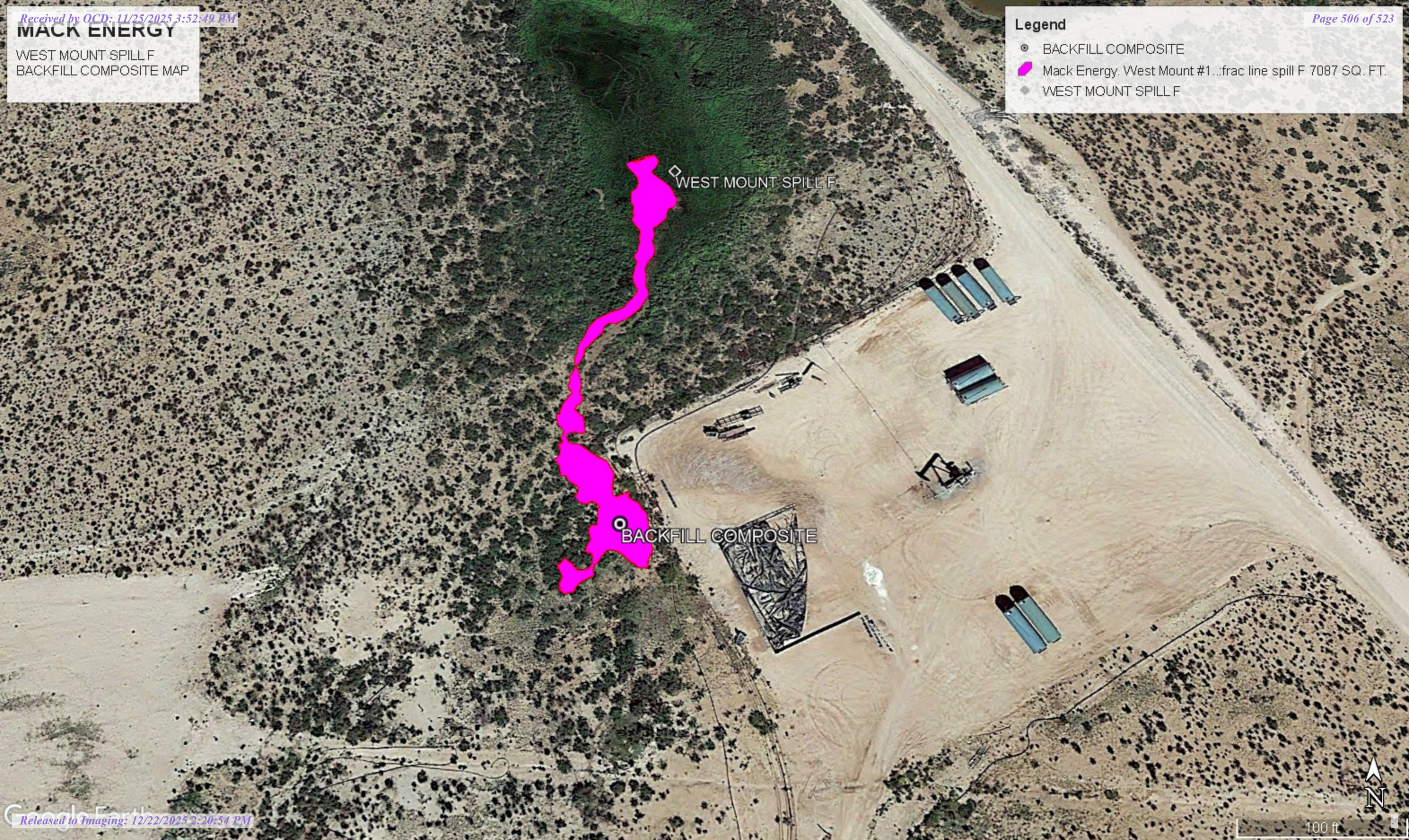


**MACK ENERGY**

WEST MOUNT SPILL F  
BACKFILL COMPOSITE MAP

**Legend**

- BACKFILL COMPOSITE
- Mack Energy. West Mount #1...frac line spill F 7087 SQ. FT.
- WEST MOUNT SPILL F

















**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%	59.00%	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
Sidecoats Grama, Niner	7.21%	Texas	71.10%	16.00%	81.00%	97.00%		12/2024
Four-wing Saltbush, Variety Not Stated	7.07%	New Mexico	91.52%	0.00%	0.00%	99.00%		11/2024
Winter Fat, Variety Not Stated	6.66%	New Mexico	88.97%	90.00%	2.00%	92.00%		8/2024
Palmer Penstemon, Variety Not Stated	3.72%	Utah	98.86%	15.00%	79.00%	94.00%		7/2024
Sand Dropseed, Variety Not Stated	3.61%	Oklahoma	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%	Washington	98.42%	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
<b>Seed Total</b>	<b>65.39%</b>							
Inert Matter:	34.54%							
Other Crop:	0.08%							
Weed Seed:	0.01%							

curtisseed.com Noxious Weed: None

4500 North Prince, Clovis, NM 88101

NMSLO Sandy Loam-1.8 AC Broadcasted.  
 Bag into 3) 0.5 acre Bag into 3) 0.5 ac  
 broadcasted bags @ 28.29 bulk pounds

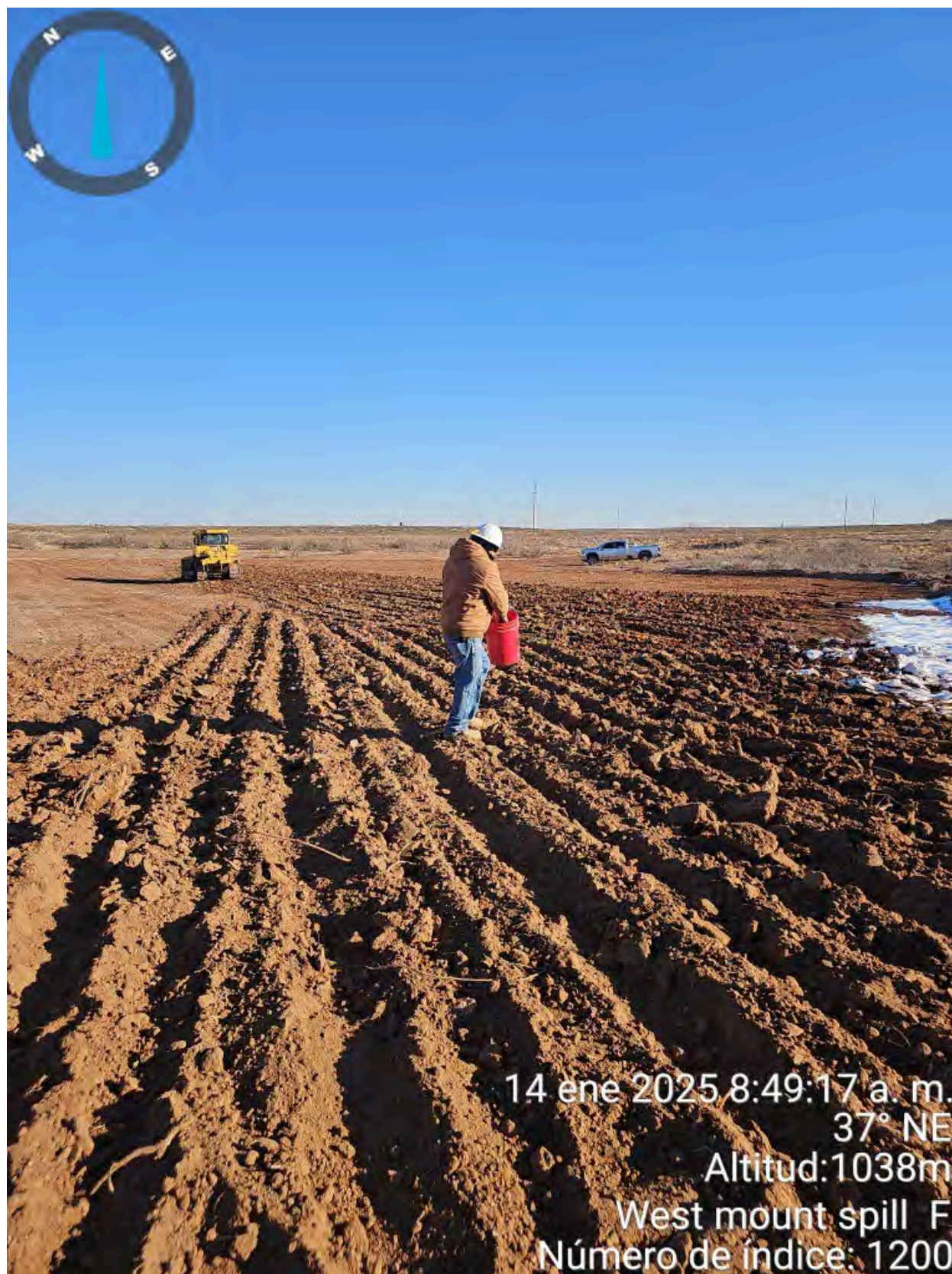
(575) 762-4759











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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

Action 529997

**QUESTIONS**

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 529997
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2329733486
Incident Name	NAPP2329733486 WEST MOUNT SPILL F @ 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 F
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: Equipment Failure   Flow Line - Production   Produced Water   Released: 52 BBL   Recovered: 0 BBL   Lost: 52 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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QUESTIONS, Page 2

Action 529997

**QUESTIONS (continued)**

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 529997
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

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

**Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 11/25/2025
--	---

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**Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 529997

**QUESTIONS (continued)**

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 529997
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Site Characterization</b>	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 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
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	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

<b>Remediation Plan</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	23200
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	322.9
GRO+DRO (EPA SW-846 Method 8015M)	322.9
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	08/09/2024
On what date will (or did) the final sampling or liner inspection occur	08/26/2024
On what date will (or was) the remediation complete(d)	01/06/2025
What is the estimated surface area (in square feet) that will be reclaimed	7087
What is the estimated volume (in cubic yards) that will be reclaimed	2740
What is the estimated surface area (in square feet) that will be remediated	7087
What is the estimated volume (in cubic yards) that will be remediated	2540
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 4

Action 529997

**QUESTIONS (continued)**

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 529997
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	fEEM0112338393 GANDY MARLEY LANDFARM/LANDFILL
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: <a href="mailto:natalie@energystaffingllc.com">natalie@energystaffingllc.com</a> Date: 11/25/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

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Action 529997

QUESTIONS (continued)

Operator:  MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID:  13837
	Action Number:  529997
	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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Action 529997

**QUESTIONS (continued)**

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 529997
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	375229
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	36
What was the sampling surface area in square feet	7087

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	7087
What was the total volume (cubic yards) remediated	2540
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	7087
What was the total volume (in cubic yards) reclaimed	3376
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.

I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: <a href="mailto:natalie@energystaffingllc.com">natalie@energystaffingllc.com</a> Date: 11/25/2025
--	--

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Action 529997

**QUESTIONS (continued)**

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 529997
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	7087
What was the total volume of replacement material (in cubic yards) for this site	3376
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	01/14/2025
Summarize any additional reclamation activities not included by answers (above)	SITE WAS CROSS RIPPED, SEEDED, CROSS RIPPED AGAIN AND WATERED TO BURY SEED.
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: <a href="mailto:natalie@energystaffingllc.com">natalie@energystaffingllc.com</a> Date: 11/25/2025

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QUESTIONS, Page 8

Action 529997

QUESTIONS (continued)

Operator:  MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID:  13837
	Action Number:  529997
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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CONDITIONS

Action 529997

CONDITIONS

Operator:  MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID:  13837
	Action Number:  529997
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your reclamation/remediation closure report for Incident #NAPP2329733486 WEST MOUNT SPILL F, thank you. The reclamation/remediation closure report is approved.	12/22/2025