



**WEST MOUNT #1A
CLOSURE REQUEST**

**API NO. 30-005-64381
Unit Letter M, Section 27, Township 15S, Range 28E
CHAVES COUNTY, NEW MEXICO**

**DATE OF RELEASE: 09/08/2023
INCIDENT NO. NAPP2327753701**

**01/29/2025
Prepared by:**



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

January 29, 2025

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

Mack Energy Corporation
11344 Lovington Hwy
Artesia, NM 88210

Subject: Closure Report for Mack Energy Corporation – West Mount #1A

API No. 30-005-64381

Incident No. NAPP2327753701

Unit letter M, Section 27, Township 15S, Range 28E

Chaves County, New Mexico

To Whom it May Concern:

Mack Energy retained Energy Staffing Services, LLC (ESS) to conduct a spill assessment for the West Mount 1A for the produced water release that occurred on September 8th, 2023. On September 22nd, 2023, at 4:12 p.m., ESS provided the immediate notification of the release to the *New Mexico Oil Conservation Division (NMOCD), District I Office* via email. (Notification Attached). On behalf of Mack Energy, ESS also submitted the initial C141 Release Notification, along with the spill calculator used to determine the volume of the release (attached) on October 4th, 2023. The NMOCD accepted the C141 as record on October th, 2023, at 11:28 a.m. The incident number assigned to the release is NAPP2327753701. (Notification of correspondence is attached).

This report provides a detailed description of the spill assessment, delineation, and remedial activities, which demonstrate that the closure criteria has been established in the 19.15.29.12 *New Mexico Administrative Code (NMAC: New Mexico Oil Conservation Division, 2018)* have been met and all applicable regulations have been followed. This document is intended to serve as the final report to obtain approval from the NMOCD for the closure of the above-mentioned release.

Incident Description

On September 8th, 2023, the water transfer company Well Spring found a failure on their lay flat line, which had released produced water into the pasture area.

Upon discovery of the release, ESS was notified and dispatched to the location to conduct a full environmental site assessment of the release. It was determined, after measuring the impact area, that approximately 156.17 barrels of produced water, with no fluid able to be recovered, had been released into the pasture area of the West Mount #1A. Initial site photos and measuring of the impacted area were conducted. Please see initial site photos attached.

Site Characterization

The release at the West Mount #1A occurred on State Land and is located at 32.978520 latitude and -104.092530 longitude, 22.2 miles southeast of Hagerman, New Mexico. The legal description of the site is Unit letter M, Section 27, Township 15S, and Range 28E. The site is located in Chaves County, New Mexico. Please see the site schematic attached.

The West Mount #1A consists of production lines and is near production facilities and well pads. The area of the release occurred in the pasture area of the West Mount #1A. The elevation is 3,577 feet. The area is historically or has been primarily dominated by Adonis blazingstar, alkali sacaton, black grama, blue grama, coldenia, and other perennial grasses and forbs. Please find attached the Rangeland and Vegetation Classification information attached.

The *United States Department of Agriculture Natural Resources Conservation Services* indicates that the soil type in the area of the West Mount #1A consists of 73.8% Alama loam and 26.2% Holloman-Gypsum land complex, 3 to 5 percent slopes. (Soil Map Attached). In the area of the West Mount #1A, the *FEMA National Flood Hazard Layer* indicates that there is a 0.2% chance of a flood hazard with a 1% chance of flood with an average depth of one foot or with drainage areas of less than one square mile. (See Map Attached).

There is "low potential" for Karst Geology to be present near the West Mount #1A site, according to the *United States Department of the Interior, Bureau of Land Management*. Please find the Karst Map attached herein.

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

The nearest and most recent water well to site according to the *New Mexico Office of the State Engineer* is RA12428, drilled in 2016 with a well depth of 170 feet and a groundwater depth of 125 feet. This well is located 5,200 yards from the site. The second well is RA12429 POD1, drilled in 2016 with a well depth of 62 feet and a groundwater depth of 27 feet, 5,767 yards

from the site. The third well is RA09248, drilled in 1996 with a well depth of 150 feet and a groundwater depth of 45 feet. This well is located 7,081 yards from the site. The fourth well is RA10280, drilled in 2002 with a well depth of 70 feet and a groundwater depth of 40 feet, 7,156 yards from the site. The fifth well is RA09059, drilled in 1996 with a well depth of 110 feet and a groundwater depth of 35 feet. The well is located 7,603 yards from the site. An extended groundwater search was conducted using the *OSE POD Location Mapping System* and it has been determined that no other wells were found within a ½ mile radius of the West Mount #1A release. Please find the NMOSE, OSE POD, and the groundwater map attached to this report.

Closure Criteria Determination

The Closure Criteria for Soils impacted by a Release is shown in the chart below. With no groundwater data available within a ½ mile radius from the release point, being on State Land and with having “low karst potential,” the site fell under <50’ to groundwater. This is only due to not having any recent or available water depths.

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 that this release has impacted the soil at the West Mount #1A release site and that the protocol is consistent with the remediation/abatement goals and objectives set forth in the *NMOCD Closure Criteria for Soils Impacted by a Release, dated August 14, 2018*. This document provides direction for Mack Energy’s initial response actions, site assessment and sample procedures conducted by ESS Staff. We would like to present to you the following information concerning the delineation process for the release detailed herein.

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 September 20th, 2023, ESS arrived on site of the West Mount #1A, set delineation sample points, GPS'd each sample point, and began to obtain surface samples. Each surface sample was field tested, logged, and submitted to Envirotech Laboratory for confirmation. A total of 28 vertical sample points were placed along with 50 horizontal sample points. Each sample point was then sampled by use of backhoe in 1' and 2' intervals. Bottom hole samples were then submitted to the lab for confirmation. Please see the delineation sample data below, with the lab data indicated in yellow. Attached to this report you will find the sample data, delineation sample map, and the lab analysis.

SP ID	Depth	Titration	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
SP1	SURF	>4000	L	ND	ND	ND	ND	ND	5750
	2	240							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP2	SURF	>4000	L	ND	ND	ND	ND	ND	6460
	2	880							
	4	640							
	6	480							
	8	400							
	10	160	L	ND	ND	ND	ND	ND	ND
SP3	SURF	>4000	L	ND	ND	191	ND	191	23400
	2	>4000							
	4	2480							
	6	1120							

	8	320							
	10	160	L	ND	ND	ND	ND	ND	ND
SP4	SURF	>4000	L	ND	ND	145	ND	145	20700
	2	>4000							
	4	3440							
	6	2160							
	8	720							
	10	400							
	12	160	L	ND	ND	ND	ND	ND	ND
SP5	SURF	>4000	L	ND	ND	ND	ND	ND	9730
	2	720							
	4	560							
	6	240							
	8	160	L	ND	ND	ND	ND	ND	ND
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	6600
	2	240							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP7	SURF	>4000	L	ND	ND	ND	ND	ND	9940
	2	480							
	4	400							
	6	320							
	8	160	L	ND	ND	ND	ND	ND	ND
SP8	SURF	>4000	L	ND	ND	ND	ND	ND	19800
	2	640							
	4	560							
	6	160							
	8	160	L	ND	ND	ND	ND	ND	ND
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	13200
	2	400							
	4	240							
	6	160	L	ND	ND	ND	ND	ND	ND
SP10	SURF	160	L	ND	ND	ND	ND	ND	91.6
	2	320							

	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP11	SURF	>4000	L	ND	ND	ND	ND	ND	7200
	2	400							
	4	240							
	6	160	L	ND	ND	ND	ND	ND	ND
SP12	SURF	>4000	L	ND	ND	ND	ND	ND	11300
	2	>4000							
	4	3760							
	6	>4000							
	8	>4000							
	10	3440							
	12	480							
	14	400							
	16	160	L	ND	ND	ND	ND	ND	ND
SP13	SURF	>4000	L	ND	ND	ND	ND	ND	15900
	2	880							
	4	320							
	6	160	L	ND	ND	ND	ND	ND	ND
SP14	SURF	>4000	L	ND	ND	264	ND	264	25000
	2	560							
	4	400							
	6	160	L	ND	ND	ND	ND	ND	ND
SP15	SURF	>4000	L	ND	ND	171	ND	171	5940
	2	2640							
	4	1760							
	6	320							
	8	160	L	ND	ND	ND	ND	ND	ND
SP16	SURF	>4000	L	ND	ND	ND	ND	ND	4380
	2	>4000							
	4	2080							
	6	400							
	8	160	L	ND	ND	ND	ND	ND	ND
SP17	SURF	3120	L	ND	ND	ND	ND	ND	3220

	2	1840							
	4	800							
	6	240							
	8	160	L	ND	ND	ND	ND	ND	ND
SP18	SURF	>4000	L	ND	ND	ND	ND	ND	15500
	2	640							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP19	SURF	>4000	L	ND	ND	ND	ND	ND	14600
	2	480							
	4	240							
	6	160	L	ND	ND	ND	ND	ND	ND
SP20	SURF	>4000	L	ND	ND	ND	ND	ND	15600
	2	320							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP21	SURF	>4000	L	ND	ND	ND	ND	ND	20300
	2	400							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP22	SURF	>4000	L	ND	ND	ND	ND	ND	20500
	2	640							
	4	320							
	6	160	L	ND	ND	ND	ND	ND	ND
SP23	SURF	>4000	L	ND	ND	ND	ND	ND	21700
	2	240							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP24	SURF	>4000	L	ND	ND	ND	ND	ND	15800
	2	400							
	4	240							
	6	160	L	ND	ND	ND	ND	ND	ND
SP25	SURF	>4000	L	ND	ND	29.6	ND	29.6	15600

	2	400							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SP26	SURF	>4000	L	ND	ND	ND	ND	ND	133
	2	320							
	4	240							
	6	160	L	ND	ND	ND	ND	ND	ND
SP27	SURF	>4000	L	ND	ND	ND	ND	ND	18500
	2	560							
	4	400							
	6	160	L	ND	ND	ND	ND	ND	ND
SP28	SURF	>4000	L	ND	ND	ND	ND	ND	307
	2	240							
	4	160							
	6	160	L	ND	ND	ND	ND	ND	ND
SW1	SURF	>4000	L	ND	ND	ND	ND	ND	13500
	1	80							
	2	80	L	ND	ND	ND	ND	ND	139
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	20800
	1	160							
	2	160	L	ND	ND	ND	ND	ND	22.9
SW3	SURF	>4000	L	ND	ND	ND	ND	ND	3080
	1	80							
	2	80	L	ND	ND	ND	ND	ND	143
SW4	SURF	>4000	L	ND	ND	ND	ND	ND	16500
	1	160							
	2	80	L	ND	ND	ND	ND	ND	150
SW5	SURF	>4000	L	ND	ND	ND	ND	ND	19400
	1	80							
	2	80	L	ND	ND	ND	ND	ND	143
SW6	SURF	>4000	L	ND	ND	ND	ND	ND	275
	1	160							

	2	160	L	ND	ND	ND	ND	ND	221
SW7	SURF	>4000	L	ND	ND	ND	ND	ND	3160
	1	240							
	2	160	L	ND	ND	ND	ND	ND	214
SW8	SURF	>4000	L	ND	ND	ND	ND	ND	14400
	1	320							
	2	160	L	ND	ND	ND	ND	ND	221
SW9	SURF	>4000	L	ND	ND	ND	ND	ND	3410
	1	160							
	2	160	L	ND	ND	ND	ND	ND	224
SW10	SURF	>4000	L	ND	ND	ND	ND	ND	3580
	1	240							
	2	80	L	ND	ND	ND	ND	ND	ND
SW11	SURF	240	L	ND	ND	ND	ND	ND	ND
	1	400							
	2	400							
	3	240							
	4	160	L	ND	ND	ND	ND	ND	ND
SW12	SURF	240	L	ND	ND	ND	ND	ND	271
	1	640							
	2	160							
	3	160	L	ND	ND	ND	ND	ND	ND
SW13	SURF	2560	L	ND	ND	ND	ND	ND	3560
	1	240							
	2	160	L	ND	ND	ND	ND	ND	ND
SW14	SURF	2400	L	ND	ND	ND	ND	ND	4260
	1	320							
	2	160	L	ND	ND	ND	ND	ND	ND
SW15	SURF	>4000	L	ND	ND	ND	ND	ND	22800
	1	320							
	2	160	L	ND	ND	ND	ND	ND	ND

SW16	SURF	>4000	L	ND	ND	ND	ND	ND	16000
	1	1920							
	2	320							
	3	160	L	ND	ND	ND	ND	ND	ND
SW17	SURF	>4000	L	ND	ND	ND	ND	ND	7720
	1	2400							
	2	400							
	3	160	L	ND	ND	ND	ND	ND	ND
SW18	SURF	160	L	ND	ND	ND	ND	ND	ND
	1	160							
	2	80	L	ND	ND	ND	ND	ND	ND
SW19	SURF	160	L	ND	ND	ND	ND	ND	ND
	1	80							
	2	80	L	ND	ND	ND	ND	ND	ND
SW20	SURF	2720	L	ND	ND	ND	ND	ND	5460
	1	240							
	2	160	L	ND	ND	ND	ND	ND	ND
SW21	SURF	80	L	ND	ND	ND	ND	ND	29.9
	1	320							
	2	160	L	ND	ND	ND	ND	ND	ND
SW22	SURF	80	L	ND	ND	ND	ND	ND	50.9
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW23	SURF	>4000	L	ND	ND	ND	ND	ND	7560
	1	>4000							
	2	2800							
	3	240							
	4	160	L	ND	ND	ND	ND	ND	ND
SW24	SURF	800	L	ND	ND	ND	ND	ND	419
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW25	SURF	160	L	ND	ND	ND	ND	ND	66.3

	1	880							
	2	240							
	3	160	L	ND	ND	ND	ND	ND	ND
SW26	SURF	>4000	L	ND	ND	ND	ND	ND	12600
	1	640							
	2	240							
	3	160	L	ND	ND	ND	ND	ND	ND
SW27	SURF	>4000	L	ND	ND	ND	ND	ND	6950
	1	800							
	2	320							
	3	160	L	ND	ND	ND	ND	ND	ND
SW28	SURF	2880	L	ND	ND	ND	ND	ND	2720
	1	400							
	2	240							
	3	160							
	4	160	L	ND	ND	ND	ND	ND	ND
SW29	SURF	240	L	ND	ND	ND	ND	ND	ND
	1	240							
	2	160	L	ND	ND	ND	ND	ND	ND
SW30	SURF	2000	L	ND	ND	ND	ND	ND	3560
	1	260							
	2	160	L	ND	ND	ND	ND	ND	199
SW31	SURF	>4000	L	ND	ND	ND	ND	ND	7600
	1	320							
	2	240	L	ND	ND	ND	ND	ND	ND
SW32	SURF	>4000	L	ND	ND	ND	ND	ND	10400
	1	>4000							
	2	>4000							
	3	160							
	4	80	L	ND	ND	ND	ND	ND	ND
SW33	SURF	>4000	L	ND	ND	ND	ND	ND	12300
	1	240							
	2	160	L	ND	ND	ND	ND	ND	ND

SW34	SURF	2240	L	ND	ND	ND	ND	ND	2210
	1	240							
	2	240	L	ND	ND	ND	ND	ND	ND
SW35	SURF	>4000	L	ND	ND	ND	ND	ND	35600
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW36	SURF	1600	L	ND	ND	ND	ND	ND	2610
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW37	SURF	>4000	L	ND	ND	ND	ND	ND	11500
	1	80							
	2	80	L	ND	ND	ND	ND	ND	ND
SW38	SURF	>4000	L	ND	ND	ND	ND	ND	5660
	1	160							
	2	80	L	ND	ND	ND	ND	ND	ND
SW39	SURF	1600	L	ND	ND	ND	ND	ND	1950
	1	80							
	2	80	L	ND	ND	ND	ND	ND	ND
SW40	SURF	160	L	ND	ND	ND	ND	ND	54.5
	1	80							
	2	80	L	ND	ND	ND	ND	ND	ND
SW41	SURF	1360	L	ND	ND	ND	ND	ND	2080
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW42	SURF	640	L	ND	ND	ND	ND	ND	575
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW43	SURF	>4000	L	ND	ND	ND	ND	ND	21700
	1	640							
	2	240							
	3	160	L	ND	ND	ND	ND	ND	ND

SW44	SURF	2400	L	ND	ND	ND	ND	ND	4630
	1	160							
	2	160	L	ND	ND	ND	ND	ND	ND
SW45	SURF	320	L	ND	ND	ND	ND	ND	ND
	1	240							
	2	160	L	ND	ND	ND	ND	ND	ND
SW46	SURF	480	L	ND	ND	ND	ND	ND	256
	1	800							
	2	320							
	3	160	L	ND	ND	ND	ND	ND	ND
SW47	SURF	640	L	ND	ND	ND	ND	ND	566
	1	640							
	2	160							
	3	80	L	ND	ND	ND	ND	ND	ND
SW48	SURF	320	L	ND	ND	ND	ND	ND	ND
	1	560							
	2	240							
	3	80	L	ND	ND	ND	ND	ND	ND
SW49	SURF	160	L	ND	ND	ND	ND	ND	ND
	1	1440							
	2	400							
	3	160							
	4	80	L	ND	ND	ND	ND	ND	ND
SW50	SURF	160	L	ND	ND	ND	ND	ND	ND
	1	1200							
	2	720							
	3	320							
	4	160	L	ND	ND	ND	ND	ND	ND

Please see the delineation photos attached to this report.

On June 27, 2024, ESS sent the official notification to the NMOCD for the composite phase of the release on the West Mount #1A. On June 27, 2024, the NMOCD received and accepted the

notification for the composite phase of the release. (Please see the email correspondence attached).

On July 8, 2024, ESS crews began obtaining 200 sq. ft. composites from the excavation area of the West Mount #1A. A total of 108 bottom hole composites were obtained, field tested and submitted to Envirotech Laboratory for confirmation. Please find the composite sample data below as well as attached to this report followed by the lab confirmation data.

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
COMP1	4	240	L	ND	ND	ND	ND	ND	ND
COMP2	6	240	L	ND	ND	ND	ND	ND	ND
COMP3	8	160	L	ND	ND	ND	ND	ND	ND
COMP4	8	240	L	ND	ND	ND	ND	ND	ND
COMP5	10	240	L	ND	ND	ND	ND	ND	ND
COMP6	4	320	L	ND	ND	ND	ND	ND	ND
COMP7	8	80	L	ND	ND	ND	ND	ND	29.8
COMP8	8	80	L	ND	ND	ND	ND	ND	32.6
COMP9	10	240	L	ND	ND	ND	ND	ND	101
COMP10	10	320	L	ND	ND	ND	ND	ND	241
COMP11	10	400	L	ND	ND	ND	ND	ND	ND
COMP12	10	320	L	ND	ND	ND	ND	ND	ND
COMP13	10	480	L	ND	ND	ND	ND	ND	332
COMP14	10	320	L	ND	ND	ND	ND	ND	ND
COMP15	6	320	L	ND	ND	ND	ND	ND	ND
COMP16	4	400	L	ND	ND	ND	ND	ND	250
COMP17	4	240	L	ND	ND	ND	ND	ND	ND

COMP18	4	320	L	ND	ND	ND	ND	ND	ND
COMP19	4	400	L	ND	ND	ND	ND	ND	437
COMP20	4	240	L	ND	ND	ND	ND	ND	ND
COMP21	8	80	L	ND	ND	ND	ND	ND	58
COMP22	4	400	L	ND	ND	ND	ND	ND	364
COMP23	4	320	L	ND	ND	ND	ND	ND	ND
COMP24	10	240	L	ND	ND	ND	ND	ND	ND
COMP25	10	160	L	ND	ND	ND	ND	ND	ND
COMP26	10	160	L	ND	ND	ND	ND	ND	ND
COMP27	8	240	L	ND	ND	ND	ND	ND	ND
COMP28	6	240	L	ND	ND	ND	ND	ND	ND
COMP29	6	240	L	ND	ND	ND	ND	ND	ND
COMP30	6	320	L	ND	ND	ND	ND	ND	ND
COMP31	4	400	L	ND	ND	ND	ND	ND	211
COMP32	4	320	L	ND	ND	ND	ND	ND	ND
COMP33	4	240	L	ND	ND	ND	ND	ND	ND
COMP34	4	320	L	ND	ND	ND	ND	ND	ND
COMP35	8	240	L	ND	ND	ND	ND	ND	ND
COMP36	8	400	L	ND	ND	ND	ND	ND	277
COMP37	8	160	L	ND	ND	ND	ND	ND	ND

COMP38	8	160	L	ND	ND	ND	ND	ND	ND
COMP39	8	160	L	ND	ND	ND	ND	ND	ND
COMP40	8	240	L	ND	ND	ND	ND	ND	ND
COMP41	4	160	L	ND	ND	ND	ND	ND	ND
COMP42	4	160	L	ND	ND	ND	ND	ND	ND
COMP43	4	240	L	ND	ND	ND	ND	ND	ND
COMP44	4	160	L	ND	ND	ND	ND	ND	ND
COMP45	4	160	L	ND	ND	ND	ND	ND	ND
COMP46	4	160	L	ND	ND	ND	ND	ND	ND
COMP47	4	240	L	ND	ND	ND	ND	ND	ND
COMP48	4	160	L	ND	ND	ND	ND	ND	ND
COMP49	4	160	L	ND	ND	ND	ND	ND	ND
COMP50	4	160	L	ND	ND	ND	ND	ND	ND
COMP51	4	160	L	ND	ND	ND	ND	ND	ND
COMP52	4	160	L	ND	ND	ND	ND	ND	ND
COMP53	4	160	L	ND	ND	ND	ND	ND	ND
COMP54	4	160	L	ND	ND	ND	ND	ND	ND
COMP55	4	80	L	ND	ND	ND	ND	ND	ND
COMP56	4	160	L	ND	ND	ND	ND	ND	ND
COMP57	4	160	L	ND	ND	ND	ND	ND	ND
COMP58	4	160	L	ND	ND	ND	ND	ND	ND

COMP59	4	240	L	ND	ND	ND	ND	ND	ND
COMP60	4	160	L	ND	ND	ND	ND	ND	ND
COMP61	4	80	L	ND	ND	ND	ND	ND	ND
COMP62	4	160	L	ND	ND	ND	ND	ND	ND
COMP63	4	80	L	ND	ND	ND	ND	ND	ND
COMP64	4	160	L	ND	ND	ND	ND	ND	ND
COMP65	4	160	L	ND	ND	ND	ND	ND	ND
COMP66	4	240	L	ND	ND	ND	ND	ND	157
COMP67	4	160	L	ND	ND	ND	ND	ND	ND
COMP68	4	160	L	ND	ND	ND	ND	ND	25.7
COMP69	4	160	L	ND	ND	ND	ND	ND	ND
COMP70	4	320	L	ND	ND	ND	ND	ND	193
COMP71	4	240	L	ND	ND	ND	ND	ND	ND
COMP72	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP1	8	160	L	ND	ND	ND	ND	ND	ND
SWCOMP2	8	320	L	ND	ND	ND	ND	ND	ND
SWCOMP3	8	320	L	ND	ND	ND	ND	ND	131
SWCOMP4	10	240	L	ND	ND	ND	ND	ND	ND
SWCOMP5	6	240	L	ND	ND	ND	ND	ND	ND
SWCOMP6	4	160	L	ND	ND	ND	ND	ND	ND

SWCOMP7	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP8	8	240	L	ND	ND	ND	ND	ND	ND
SWCOMP9	6	240	L	ND	ND	ND	ND	ND	ND
SWCOMP10	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP11	4	160	L	ND	ND	ND	ND	ND	23
SWCOMP12	4	320	L	ND	ND	ND	ND	ND	182
SWCOMP13	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP14	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP15	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP16	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP17	4	320	L	ND	ND	ND	ND	ND	202
SWCOMP18	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP19	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP20	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP21	4	320	L	ND	ND	ND	ND	ND	174
SWCOMP22	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP23	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP24	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP25	4	320	L	ND	ND	ND	ND	ND	198
SWCOMP26	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP27	4	320	L	ND	ND	ND	ND	ND	166

SWCOMP28	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP29	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP30	4	160	L	ND	ND	ND	ND	ND	26.4
SWCOMP31	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP32	4	320	L	ND	ND	ND	ND	ND	173
SWCOMP33	4	320	L	ND	ND	ND	ND	ND	174
SWCOMP34	4	160	L	ND	ND	ND	ND	ND	25.9
SWCOMP35	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP36	4	240	L	ND	ND	ND	ND	ND	ND

Please find the remediation photos attached herein.

The impacted area of the West Mount #1A measured 13,652 square feet. During the remediation phase, a total of 4,318 cubic yards of contaminated soil was excavated and hauled to Gandy's Disposal. A total of 5,348 cubic yards of caliche was pushed up and hauled from Gandy's Disposal to location for backfill along with 360 cubic yards of topsoil sourced from the landowner's pit. The site was contoured, sloped back to its natural grade, and broad-casted with NMSLO Loamy seed mix. Backfilling and seeding of the site was completed on December 27, 2024. Please find the final photos attached to this report.

Closure Request

On behalf of Mack Energy, Energy Staffing Services, LLC requests that the incident (NAPP2327753701) be closed for the produced water release that occurred in the pasture area of the West Mount #1A. Mack Energy and ESS certify that all information provided and that is detailed in this report to be true and correct. Both Mack Energy and ESS have complied with all applicable closure requirements for the release that occurred on the West Mount #1A.

After review of this report, if you have any questions or concerns regarding this closure request, please do not hesitate to contact the undersigned at (575)390-6397 or (575)393-9048. You may also email any issues to natalie@energystaffingllc.com.

Sincerely,

Natalie Gladden

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

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



Attachments

Spill Notification
Initial C141 and Spill Calculator Form
Impact Map
Site Map
Rangeland and Vegetation
Classification Soil Map
FEMA National Flood Hazard Layer
Map Karst Geology Map
Wetlands Map
Watercourse Water Map
Groundwater Information
Groundwater Map
OSE POD Map
Delineation Sample Data
Delineation Sample Map and GPS Log
Lab Analysis for Delineation
Initial and Delineation Site Photos
Composite Notification
Composite Sample Data
Composite Sample Map and GPS Log
Lab analysis for Remediation
Remediation and Final Photos
Final C141

From: Natalie Gladden

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

To: ocdonline, emnrd, EMNRD <EMNRD.OCOnline@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



From: Natalie Gladden

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

To: ocdonline, emnrd, EMNRD <EMNRD.OCDOnline@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; CFO_Spill, BLM_NM <BLM_NM_CFO_Spill@blm.gov>; Amos, James A <JAMOS@BLM.GOV>; staylor@blm.gov

Cc: mattbuckles@mec.com

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

Importance: High

All,

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

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

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

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

If you have any questions, please let me know.

Natalie Gladden

Director of Environmental and Regulatory Services

Energy Staffing Services, LLC.

2724 NW County Road

Hobbs, NM 88240

Cell: 575-390-6397

Office: 575-393-9048

Email: natalie@energystaffingllc.com





FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 272560

From Natalie Gladden <natalie@energystaffingllc.com>

Date Thu 1/30/2025 11:27 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



From: Natalie Gladden

Sent: Wednesday, October 4, 2023 3:45 PM

To: mattbuckles@mec.com

Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 272560

WEST MOUNT 1A

Natalie Gladden

Director of Environmental and Regulatory Services

Energy Staffing Services, LLC.

2724 NW County Road

Hobbs, NM 88240

Cell: 575-390-6397

Office: 575-393-9048

Email: natalie@energystaffingllc.com



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

Sent: Wednesday, October 4, 2023 2:55 PM

To: Natalie Gladden <natalie@energystaffingllc.com>

Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 272560

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

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2327753701,
with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2327753701, on all subsequent C-141 submissions and communications regarding the remediation of this release.

NOTE: As of December 2019, NMOCD has discontinued the use of the "RP" number.

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

ocd.enviro@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505

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

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude **32.978520**

Longitude **-104.092530**

(NAD 83 in decimal degrees to 5 decimal places)

Site Name WESTMOUNT #1A	Site Type PRODUCTION AREA
Date Release Discovered 9/8/2023	API# <i>(if applicable)</i> 30-005-64381

Unit Letter	Section	Township	Range	County
M	27	15S	28E	CHAVES

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) 156.17	Volume Recovered (bbls) 0BBLs
	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

Oil Conservation Division


Page 2

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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, Griswold 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: <u>NATALIE GLADDEN</u> Title: <u>DIRECTOR OF ENVIRONMENTAL AND REGULATORY</u>
Signature: <u></u> Date: <u>10/4/23</u>
email: <u>natalie@energystaffingll.com</u> Telephone: <u>575-390-6397</u>
<u>OCD Only</u> Received by: _____ Date: _____

WEST MOUNT SPILL 1A

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	835.244	50.55	0.083	3504.3915	156.17	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)





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

WESTMOUNT #1A

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
		Lb/ac	Lb/ac	Lb/ac		Pct dry wt	Pct dry wt	
Aa—Alama loam								
Alama	Loamy (R070BC007NM)	1,200	—	650	Adonis blazingstar	30		
					black grama	15		
					other perennial grasses	15		
					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

WESTMOUNT #1A

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>	
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
(WESTMOUNT #1A)Natural Resources
Conservation ServiceWeb Soil Survey
National Cooperative Soil Survey6/4/2024
Page 1 of 3

Soil Map—Chaves County, New Mexico, Southern Part
(WESTMOUNT #1A)

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
Aa	Alama loam	10.7	73.8%
HrC	Holloman-Gypsum land complex, 3 to 5 percent slopes	3.8	26.2%
Totals for Area of Interest		14.5	100.0%

National Flood Hazard Layer FIRMette



104°5'52"W 32°58'58"N



Released to Imaging: 6/13/2025 4:00 PM
250 500 1,000 1,500 2,000 Feet

1:6,000

104°5'14"W 32°58'28"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect 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 12:40 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.



MACK ENERGY

WEST MOUNT #1A
WETLANDS MAP


Legend

- PEM
- RIVERINE
- WESTMOUNT #1A





Received by QCD: 5/16/2025 12:00:30 AM
MACK ENERGY
WEST MOUNT #1A
WATERCOURSE MAP

Legend Page 43 of 664
 WESTMOUNT #1A

 WESTMOUNT #1A

Google Earth
Released to Imaging: 6/13/2025 1:16:40 PM
Image © 2024 Airbus

 N
 3000 ft



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 584794 **Northing (Y):** 3649271.2 **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.



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 584794

Northing (Y): 3649271.2

Radius: 5000

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6/4/24 10:44 AM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION



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 Sub-Code	basin	County	Source	q 6	q 4	q 1	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
RA 12428	RA	CH	Shallow	4	2	1	21	15S	28E		580579	3652317	5200	07/28/2016	08/04/2016	08/08/2016	170	125	DONALD KUEHN III	1058
RA 12429 POD1	RA	CH	Shallow	1	1	4	32	15S	28E		579093	3648401	5767	11/17/2016	11/17/2016	11/28/2016	62	27	EADES, ALAN	1044
RA 09248	RA	CH	Shallow	1	4	3	17	15S	28E		578704	3652884*	7081	07/10/1996	07/13/1996	07/25/1996	150	45	RAYMOND ANDERSON	1344
RA 10280	RA	CH	Shallow	4	3	3	17	15S	28E		578501	3652680*	7156	06/20/2002	07/15/2002	04/23/2003	70	40	CARREON, FERNANDO	1490
RA 09059	RA	CH	Shallow	2	4	4	18	15S	28E		578099	3652875*	7603	11/13/1995	01/15/1996	02/08/1997	110	35	RAYMOND ANDERSON	1344
RA 09342	RA	ED	Shallow	4	4	3	19	16S	29E		582737	3640640*	8872	05/02/1998	05/03/1998	05/08/1998	220	110	DELORD MARTIN	1064
RA 05736	RA	CH	Shallow	3	2	1	24	15S	27E		575467	3652244*	9789			04/30/1973				

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 584794

Northing (Y): 3649271.2

Radius: 10000

*UTM location was derived from PLSS - see Help

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6/4/24 10:45 AM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION




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 

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

Driller Name: DONALD KUEHN III

Drill Start Date: 07/28/2016	Drill Finish Date: 08/04/2016	Plug Date:
Log File Date: 08/08/2016	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 15 GPM
Casing Size: 4.50	Depth Well: 170 feet	Depth Water: 125 feet

Water Bearing Stratifications:	Top	Bottom	Description
	125	140	Sandstone/Gravel/Conglomerate
	140	160	Sandstone/Gravel/Conglomerate
	160	170	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	125	170

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6/4/24 10:49 AM

Page 1 of 1

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

Driller License: 1044	Driller Company: EADES WELL DRILLING & PUMP SERVICE
Driller Name: EADES, ALAN	
Drill Start Date: 11/17/2016	Drill Finish Date: 11/17/2016
Log File Date: 11/28/2016	PCW Rcv Date:
Pump Type:	Pipe Discharge Size:
Casing Size: 5.13	Depth Well: 62 feet
	Plug Date:
	Source: Shallow
	Estimated Yield:
	Depth Water: 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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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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6/4/24 10:49 AM

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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*

Driller License: 1490	Driller Company: FERNANDO'S WATER WELL
Driller Name: CARREON, FERNANDO	
Drill Start Date: 06/20/2002	Drill Finish Date: 07/15/2002
Log File Date: 04/23/2003	PCW Rcv Date:
Pump Type: SUBMER	Pipe Discharge Size: 1.25
Casing Size: 5.00	Depth Well: 70 feet
	Plug Date:
	Source: Shallow
	Estimated Yield: 10 GPM
	Depth Water: 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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6/4/24 10:50 AM

Page 1 of 1

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
RA 09059		2	4	4	18	15S	28E	578099	3652875*

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

Driller Name: RAYMOND ANDERSON

Drill Start Date: 11/13/1995

Drill Finish Date: 01/15/1996

Plug Date:

Log File Date: 02/08/1997

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 4.50

Depth Well: 110 feet

Depth Water: 35 feet

Water Bearing Stratifications:

Top Bottom Description

60	65	Sandstone/Gravel/Conglomerate
----	----	-------------------------------

Casing Perforations:

Top Bottom

30	90
----	----

*UTM location was derived from PLSS - see Help

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6/4/24 10:50 AM

Page 1 of 1

POD SUMMARY - RA 09059

MACK

WESTMOUNT #1A
GROUNDWATER MAP

Legend

- RA09059-7,603-35 FT
- RA09248-7,081-45 FT
- RA10280-7,156-40 FT
- RA12428-5,200-125 FT
- RA12429 POD1-5,767-27 FT
- WESTMOUNT #1A

RA09059-7,603-35 FT

RA10280-7,156-40 FT

RA09248-7,081-45 FT

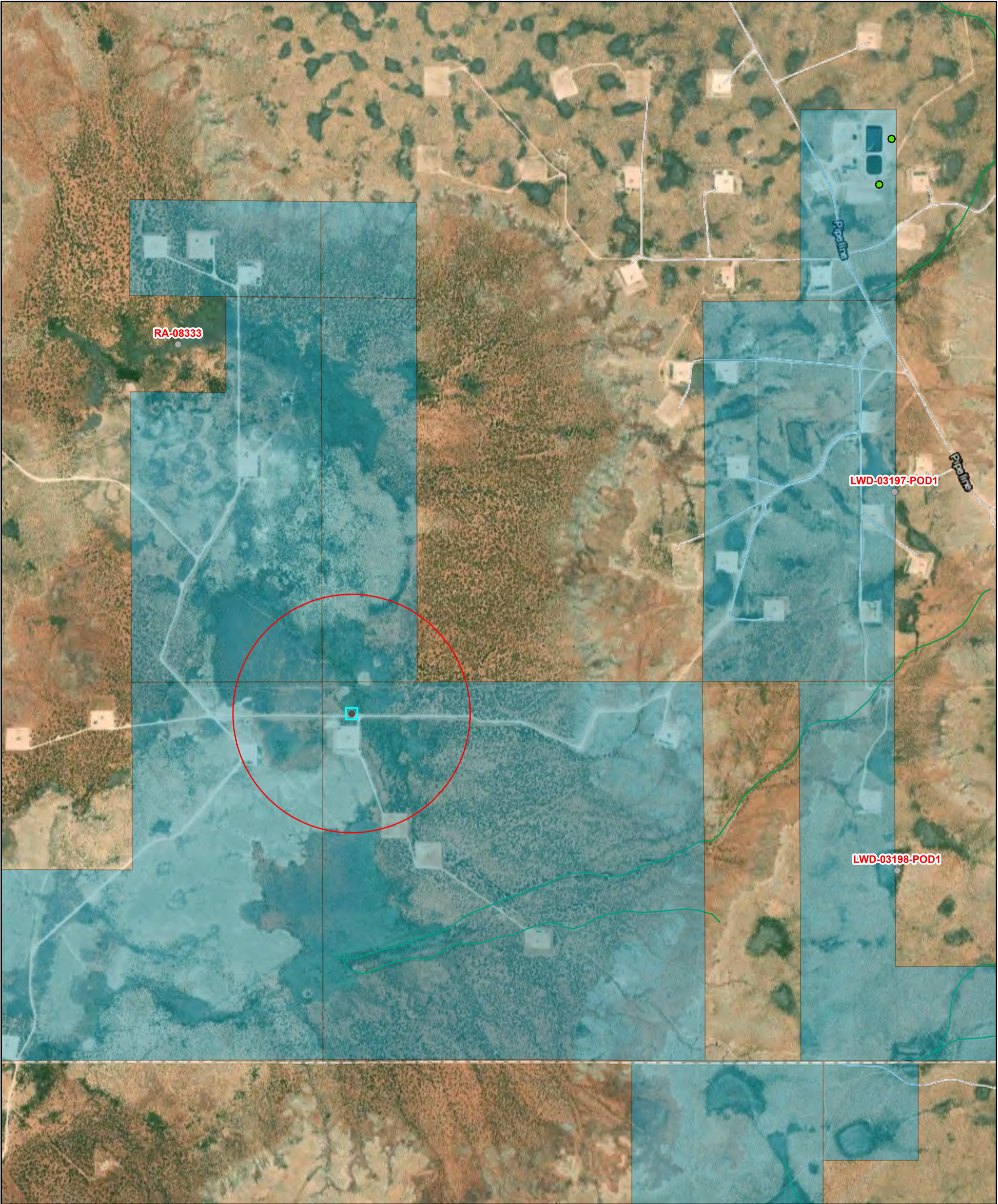
RA12428-5,200-125 FT

WESTMOUNT #1A

RA12429 POD1-5,767-27 FT



OSE POD Location Map



6/21/2024, 11:23:47 AM

GIS WATERS PODs

- Pending
-

OSE District Boundary

New Mexico State Trust Lands

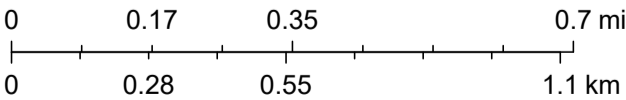
Both Estates

NHD Flowlines

— Artificial Path

— Stream River

1:18,056



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

Company Name: MACK Location Name: WEST MOUNT #1A Release Date: _____

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Soil	Notes
SP1	SURF	>4000	L	ND	ND	ND	ND	ND	5750		
	2	240									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP2	SURF	>4000	L	ND	ND	ND	ND	ND	6460		
	2	880									
	4	640									
	6	480									
	8	400									
	10	160	L	ND	ND	ND	ND	ND	ND		
SP3	SURF	>4000	L	ND	ND	191	ND	191	23400		
	2	>4000									
	4	2480									
	6	1120									
	8	320									
	10	160	L	ND	ND	ND	ND	ND	ND		
SP4	SURF	>4000	L	ND	ND	145	ND	145	20700		
	2	>4000									
	4	3440									
	6	2160									
	8	720									
	10	400									
	12	160	L	ND	ND	ND	ND	ND	ND		
SP5	SURF	>4000	L	ND	ND	ND	ND	ND	9730		
	2	720									
	4	560									
	6	240									

	8	160	L	ND	ND	ND	ND	ND	ND		
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	6600		
	2	240									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP7	SURF	>4000	L	ND	ND	ND	ND	ND	9940		
	2	480									
	4	400									
	6	320									
	8	160	L	ND	ND	ND	ND	ND	ND		
SP8	SURF	>4000	L	ND	ND	ND	ND	ND	19800		
	2	640									
	4	560									
	6	160									
	8	160	L	ND	ND	ND	ND	ND	ND		
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	13200		
	2	400									
	4	240									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP10	SURF	160	L	ND	ND	ND	ND	ND	91.6		
	2	320									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP11	SURF	>4000	L	ND	ND	ND	ND	ND	7200		
	2	400									
	4	240									
	6	160	L	ND	ND	ND	ND	ND	ND		

SP12	SURF	>4000	L	ND	ND	ND	ND	ND	11300		
	2	>4000									
	4	3760									
	6	>4000									
	8	>4000									
	10	3440									
	12	480									
	14	400									
	16	160	L	ND	ND	ND	ND	ND	ND		
SP13	SURF	>4000	L	ND	ND	ND	ND	ND	15900		
	2	880									
	4	320									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP14	SURF	>4000	L	ND	ND	264	ND	264	25000		
	2	560									
	4	400									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP15	SURF	>4000	L	ND	ND	171	ND	171	5940		
	2	2640									
	4	1760									
	6	320									
	8	160	L	ND	ND	ND	ND	ND	ND		
SP16	SURF	>4000	L	ND	ND	ND	ND	ND	4380		
	2	>4000									
	4	2080									
	6	400									
	8	160	L	ND	ND	ND	ND	ND	ND		
SP17	SURF	3120	L	ND	ND	ND	ND	ND	3220		
	2	1840									

	4	800									
	6	240									
	8	160	L	ND	ND	ND	ND	ND	ND		
SP18	SURF	>4000	L	ND	ND	ND	ND	ND	15500		
	2	640									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP19	SURF	>4000	L	ND	ND	ND	ND	ND	14600		
	2	480									
	4	240									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP20	SURF	>4000	L	ND	ND	ND	ND	ND	15600		
	2	320									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP21	SURF	>4000	L	ND	ND	ND	ND	ND	20300		
	2	400									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP22	SURF	>4000	L	ND	ND	ND	ND	ND	20500		
	2	640									
	4	320									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP23	SURF	>4000	L	ND	ND	ND	ND	ND	21700		
	2	240									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		

SP24	SURF	>4000	L	ND	ND	ND	ND	ND	15800		
	2	400									
	4	240									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP25	SURF	>4000	L	ND	ND	29.6	ND	29.6	15600		
	2	400									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP26	SURF	>4000	L	ND	ND	ND	ND	ND	133		
	2	320									
	4	240									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP27	SURF	>4000	L	ND	ND	ND	ND	ND	18500		
	2	560									
	4	400									
	6	160	L	ND	ND	ND	ND	ND	ND		
SP28	SURF	>4000	L	ND	ND	ND	ND	ND	307		
	2	240									
	4	160									
	6	160	L	ND	ND	ND	ND	ND	ND		
SW1	SURF	>4000	L	ND	ND	ND	ND	ND	13500		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	139		
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	20800		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	22.9		
SW3	SURF	>4000	L	ND	ND	ND	ND	ND	3080		

	1	80									
	2	80	L	ND	ND	ND	ND	ND	143		
SW4	SURF	>4000	L	ND	ND	ND	ND	ND	16500		
	1	160									
	2	80	L	ND	ND	ND	ND	ND	150		
SW5	SURF	>4000	L	ND	ND	ND	ND	ND	19400		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	143		
SW6	SURF	>4000	L	ND	ND	ND	ND	ND	275		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	221		
SW7	SURF	>4000	L	ND	ND	ND	ND	ND	3160		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	214		
SW8	SURF	>4000	L	ND	ND	ND	ND	ND	14400		
	1	320									
	2	160	L	ND	ND	ND	ND	ND	221		
SW9	SURF	>4000	L	ND	ND	ND	ND	ND	3410		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	224		
SW10	SURF	>4000	L	ND	ND	ND	ND	ND	3580		
	1	240									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW11	SURF	240	L	ND	ND	ND	ND	ND	ND		
	1	400									
	2	400									

	3	240									
	4	160	L	ND	ND	ND	ND	ND	ND		
SW12	SURF	240	L	ND	ND	ND	ND	ND	271		
	1	640									
	2	160									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW13	SURF	2560	L	ND	ND	ND	ND	ND	3560		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW14	SURF	2400	L	ND	ND	ND	ND	ND	4260		
	1	320									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW15	SURF	>4000	L	ND	ND	ND	ND	ND	22800		
	1	320									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW16	SURF	>4000	L	ND	ND	ND	ND	ND	16000		
	1	1920									
	2	320									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW17	SURF	>4000	L	ND	ND	ND	ND	ND	7720		
	1	2400									
	2	400									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW18	SURF	160	L	ND	ND	ND	ND	ND	ND		
	1	160									
	2	80	L	ND	ND	ND	ND	ND	ND		

SW19	SURF	160	L	ND	ND	ND	ND	ND	ND		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW20	SURF	2720	L	ND	ND	ND	ND	ND	5460		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW21	SURF	80	L	ND	ND	ND	ND	ND	29.9		
	1	320									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW22	SURF	80	L	ND	ND	ND	ND	ND	50.9		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW23	SURF	>4000	L	ND	ND	ND	ND	ND	7560		
	1	>4000									
	2	2800									
	3	240									
	4	160	L	ND	ND	ND	ND	ND	ND		
SW24	SURF	800	L	ND	ND	ND	ND	ND	419		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW25	SURF	160	L	ND	ND	ND	ND	ND	66.3		
	1	880									
	2	240									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW26	SURF	>4000	L	ND	ND	ND	ND	ND	12600		
	1	640									
	2	240									

	3	160	L	ND	ND	ND	ND	ND	ND		
SW27	SURF	>4000	L	ND	ND	ND	ND	ND	6950		
	1	800									
	2	320									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW28	SURF	2880	L	ND	ND	ND	ND	ND	2720		
	1	400									
	2	240									
	3	160									
	4	160	L	ND	ND	ND	ND	ND	ND		
SW29	SURF	240	L	ND	ND	ND	ND	ND	ND		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW30	SURF	2000	L	ND	ND	ND	ND	ND	3560		
	1	260									
	2	160	L	ND	ND	ND	ND	ND	199		
SW31	SURF	>4000	L	ND	ND	ND	ND	ND	7600		
	1	320									
	2	240	L	ND	ND	ND	ND	ND	ND		
SW32	SURF	>4000	L	ND	ND	ND	ND	ND	10400		
	1	>4000									
	2	>4000									
	3	160									
	4	80	L	ND	ND	ND	ND	ND	ND		
SW33	SURF	>4000	L	ND	ND	ND	ND	ND	12300		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	ND		

SW34	SURF	2240	L	ND	ND	ND	ND	ND	2210		
	1	240									
	2	240	L	ND	ND	ND	ND	ND	ND		
SW35	SURF	>4000	L	ND	ND	ND	ND	ND	35600		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW36	SURF	1600	L	ND	ND	ND	ND	ND	2610		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW37	SURF	>4000	L	ND	ND	ND	ND	ND	11500		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW38	SURF	>4000	L	ND	ND	ND	ND	ND	5660		
	1	160									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW39	SURF	1600	L	ND	ND	ND	ND	ND	1950		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW40	SURF	160	L	ND	ND	ND	ND	ND	54.5		
	1	80									
	2	80	L	ND	ND	ND	ND	ND	ND		
SW41	SURF	1360	L	ND	ND	ND	ND	ND	2080		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW42	SURF	640	L	ND	ND	ND	ND	ND	575		

	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW43	SURF	>4000	L	ND	ND	ND	ND	ND	21700		
	1	640									
	2	240									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW44	SURF	2400	L	ND	ND	ND	ND	ND	4630		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW45	SURF	320	L	ND	ND	ND	ND	ND	ND		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	ND		
SW46	SURF	480	L	ND	ND	ND	ND	ND	256		
	1	800									
	2	320									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW47	SURF	640	L	ND	ND	ND	ND	ND	566		
	1	640									
	2	160									
	3	80	L	ND	ND	ND	ND	ND	ND		
SW48	SURF	320	L	ND	ND	ND	ND	ND	ND		
	1	560									
	2	240									
	3	80	L	ND	ND	ND	ND	ND	ND		
SW49	SURF	160	L	ND	ND	ND	ND	ND	ND		
	1	1440									
	2	400									

	3	160									
	4	80	L	ND	ND	ND	ND	ND	ND		
SW50	SURF	160	L	ND	ND	ND	ND	ND	ND		
	1	1200									
	2	720									
	3	320									
	4	160	L	ND	ND	ND	ND	ND	ND		

MACK ENERGY

WEST MOUNT #1A
DELINEATION MAP

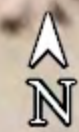
Legend

- HORIZONTAL SAMPLE POINTS
- VERTICAL SAMPLE POINTS
- █ WEST MOUNT #1A- 13,852 SQFT



WESTMOUNT #1A

Google Earth

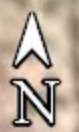


MACK ENERGY

WEST MOUNT #1A
DELINEATION MAP

Legend

- HORIZONTAL SAMPLE POINTS
- VERTICAL SAMPLE POINTS
- WEST MOUNT #1A- 13,652 SQFT

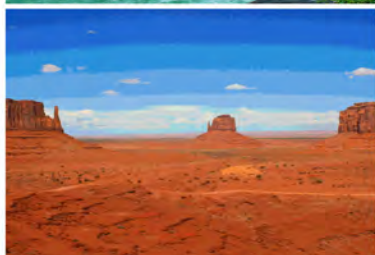


COMPANY: MACK ENERGY**LOCATION: WEST MOUNT #1A**

POINT	LATITUDE	LONGITUDE
SP1	32.978527°	-104.092683°
SP2	32.978523°	-104.092790°
SP3	32.978531°	-104.092952°
SP4	32.978530°	-104.093067°
SP5	32.978534°	-104.093189°
SP6	32.978537°	-104.093291°
SP7	32.978531°	-104.093423°
SP8	32.978716°	-104.093334°
SP9	32.978638°	-104.093452°
SP10	32.978545°	-104.093512°
SP11	32.978440°	-104.093557°
SP12	32.978324°	-104.093604°
SP13	32.978263°	-104.093669°
SP14	32.978210°	-104.093771°
SP15	32.978152°	-104.093838°
SP16	32.978085°	-104.093788°
SP17	32.978077°	-104.093877°
SP18	32.978027°	-104.093833°
SP19	32.977991°	-104.093930°
SP20	32.977915°	-104.094012°
SP21	32.977852°	-104.094107°
SP22	32.977774°	-104.094182°
SP23	32.977692°	-104.094229°
SP24	32.977616°	-104.094268°
SP25	32.977530°	-104.094286°
SW1	32.978543°	-104.092626°
SW2	32.978500°	-104.092730°
SW3	32.978517°	-104.092869°
SW4	32.978504°	-104.093004°
SW5	32.978518°	-104.093127°
SW6	32.978516°	-104.093252°
SW7	32.978510°	-104.093398°
SW8	32.978490°	-104.093534°
SW9	32.978372°	-104.093550°
SW10	32.978309°	-104.093612°
SW11	32.978226°	-104.093677°
SW12	32.978188°	-104.093731°
SW13	32.978106°	-104.093750°
SW14	32.978042°	-104.093776°
SW15	32.977995°	-104.093865°
SW16	32.977952°	-104.093928°

SW17	32.977902°	-104.093986°
SW18	32.977868°	-104.094043°
SW19	32.977829°	-104.094096°
SW20	32.977775°	-104.094150°
SW21	32.977710°	-104.094191°
SW22	32.977640°	-104.094221°
SW23	32.977570°	-104.094249°
SW24	32.977490°	-104.094271°
SW25	32.977548°	-104.094307°
SW26	32.977603°	-104.094298°
SW27	32.977669°	-104.094264°
SW28	32.977744°	-104.094237°
SW29	32.977812°	-104.094190°
SW30	32.977856°	-104.094127°
SW31	32.977913°	-104.094062°
SW32	32.977969°	-104.094004°
SW33	32.978039°	-104.093947°
SW34	32.978116°	-104.093901°
SW35	32.978171°	-104.093853°
SW36	32.978254°	-104.093839°
SW37	32.978259°	-104.093725°
SW38	32.978296°	-104.093646°
SW39	32.978380°	-104.093595°
SW40	32.978478°	-104.093569°
SW41	32.978548°	-104.093531°
SW42	32.978636°	-104.093471°
SW43	32.978704°	-104.093398°
SW44	32.978750°	-104.093294°
SW45	32.978676°	-104.093366°
SW46	32.978567°	-104.093453°
SW47	32.978564°	-104.093340°
SW48	32.978561°	-104.093195°
SW49	32.978568°	-104.092995°
SW50	32.978536°	-104.092838°

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E309161

Job Number: 20046-0001

Received: 9/22/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/25/23

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.
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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: 9/25/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E309161
Date Received: 9/22/2023 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/22/2023 8:00:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
09/25/23 15:06

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1 SURF	E309161-01A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP2 SURF	E309161-02A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP3 SURF	E309161-03A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP4 SURF	E309161-04A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP5 SURF	E309161-05A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP6 SURF	E309161-06A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP7 SURF	E309161-07A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP8 SURF	E309161-08A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP9 SURF	E309161-09A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP10 SURF	E309161-10A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP11 SURF	E309161-11A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP12 SURF	E309161-12A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP13 SURF	E309161-13A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP14 SURF	E309161-14A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP15 SURF	E309161-15A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP16 SURF	E309161-16A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP17 SURF	E309161-17A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP18 SURF	E309161-18A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP19 SURF	E309161-19A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP20 SURF	E309161-20A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP21 SURF	E309161-21A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP22 SURF	E309161-22A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP23 SURF	E309161-23A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP24 SURF	E309161-24A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP25 SURF	E309161-25A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP26 SURF	E309161-26A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP27 SURF	E309161-27A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.
SP28 SURF	E309161-28A	Soil	09/20/23	09/22/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/25/2023 3:06:28PM
--	--	---

SP1 SURF

E309161-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/22/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/22/23	
Toluene	ND	0.0250	1	09/22/23	09/22/23	
o-Xylene	ND	0.0250	1	09/22/23	09/22/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/22/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/22/23	
Surrogate: 4-Bromochlorobenzene-PID	96.0 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/22/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	86.1 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
Surrogate: n-Nonane	81.7 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	5750	100	5	09/22/23	09/23/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP2 SURF

E309161-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Benzene	ND	0.0250	1	09/22/23	09/22/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/22/23	
Toluene	ND	0.0250	1	09/22/23	09/22/23	
o-Xylene	ND	0.0250	1	09/22/23	09/22/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/22/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/22/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.7 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/22/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.2 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2338094	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	80.9 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2338107	
Chloride	6460	200	10	09/22/23	09/23/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP3 SURF

E309161-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/22/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/22/23	
Toluene	ND	0.0250	1	09/22/23	09/22/23	
o-Xylene	ND	0.0250	1	09/22/23	09/22/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/22/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/22/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/22/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.8 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	191	125	5	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	250	5	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	23400	2000	100	09/22/23	09/23/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP4 SURF

E309161-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Benzene	ND	0.0250	1	09/22/23	09/22/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/22/23	
Toluene	ND	0.0250	1	09/22/23	09/22/23	
o-Xylene	ND	0.0250	1	09/22/23	09/22/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/22/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/22/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	97.6 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/22/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	85.6 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2338094	
Diesel Range Organics (C10-C28)	145	125	5	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	250	5	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>	88.9 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2338107	
Chloride	20700	2000	100	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP5 SURF

E309161-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/22/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/22/23	
Toluene	ND	0.0250	1	09/22/23	09/22/23	
o-Xylene	ND	0.0250	1	09/22/23	09/22/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/22/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/22/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/22/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.4 %	70-130		09/22/23	09/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	78.1 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	9730	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP6 SURF

E309161-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.9 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	76.6 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	6600	400	20	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP7 SURF

E309161-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	79.4 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	9940	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP8 SURF

E309161-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.9 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	78.4 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	19800	2000	100	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP9 SURF

E309161-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.1 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	86.2 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2338094	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>	78.6 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2338107	
Chloride	13200	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP10 SURF

E309161-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.9 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.0 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	81.1 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	91.6	20.0	1	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP11 SURF

E309161-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.7 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.5 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	76.3 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	7200	400	20	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP12 SURF

E309161-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.7 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>						
	82.8 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	11300	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

SP13 SURF

E309161-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	93.9 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	85.7 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2338094	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/22/23	
<i>Surrogate: n-Nonane</i>	79.3 %	50-200		09/22/23	09/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2338107	
Chloride	15900	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP14 SURF

E309161-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	97.1 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	85.9 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2338094	
Diesel Range Organics (C10-C28)	264	125	5	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	250	5	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>	88.0 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2338107	
Chloride	25000	2000	100	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP15 SURF

E309161-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.9 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2338095	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2338094	
Diesel Range Organics (C10-C28)	171	125	5	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	250	5	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	76.5 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2338107	
Chloride	5940	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP16 SURF

E309161-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.6 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	82.4 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	4380	400	20	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP17 SURF

E309161-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.7 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	80.4 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	3220	400	20	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP18 SURF

E309161-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.7 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	77.9 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	15500	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP19 SURF

E309161-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.1 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	79.0 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	14600	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP20 SURF

E309161-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338095
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338094
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	80.5 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338107
Chloride	15600	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP21 SURF

E309161-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.6 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.7 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338098
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	79.2 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338106
Chloride	20300	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP22 SURF

E309161-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.9 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338098
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	78.8 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338106
Chloride	20500	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP23 SURF

E309161-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.6 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.2 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338098
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	80.9 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338106
Chloride	21700	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP24 SURF

E309161-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.8 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338098
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/23/23	
<i>Surrogate: n-Nonane</i>						
	82.6 %	50-200		09/22/23	09/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338106
Chloride	15800	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP25 SURF

E309161-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.7 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338098
Diesel Range Organics (C10-C28)	29.6	25.0	1	09/22/23	09/25/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/25/23	
<i>Surrogate: n-Nonane</i>						
	80.0 %	50-200		09/22/23	09/25/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338106
Chloride	15600	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP26 SURF

E309161-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2338097	
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2338097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2338098	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/25/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/25/23	
<i>Surrogate: n-Nonane</i>	85.6 %	50-200		09/22/23	09/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2338106	
Chloride	133	40.0	2	09/22/23	09/24/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

SP27 SURF

E309161-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2338097	
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.4 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2338097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	90.6 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2338098	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/25/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/25/23	
<i>Surrogate: n-Nonane</i>	86.7 %	50-200		09/22/23	09/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2338106	
Chloride	18500	1000	50	09/22/23	09/24/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
9/25/2023 3:06:28PM

SP28 SURF

E309161-28

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Benzene	ND	0.0250	1	09/22/23	09/23/23	
Ethylbenzene	ND	0.0250	1	09/22/23	09/23/23	
Toluene	ND	0.0250	1	09/22/23	09/23/23	
o-Xylene	ND	0.0250	1	09/22/23	09/23/23	
p,m-Xylene	ND	0.0500	1	09/22/23	09/23/23	
Total Xylenes	ND	0.0250	1	09/22/23	09/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2338097
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/22/23	09/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.3 %	70-130		09/22/23	09/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2338098
Diesel Range Organics (C10-C28)	ND	25.0	1	09/22/23	09/25/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/22/23	09/25/23	
<i>Surrogate: n-Nonane</i>						
	68.8 %	50-200		09/22/23	09/25/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2338106
Chloride	307	40.0	2	09/22/23	09/24/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

Volatile Organics by EPA 8021B

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 (2338095-BLK1)

Prepared: 09/22/23 Analyzed: 09/22/23

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: 4-Bromochlorobenzene-PID	7.45		8.00		93.1	70-130			

LCS (2338095-BS1)

Prepared: 09/22/23 Analyzed: 09/22/23

Benzene	4.64	0.0250	5.00		92.7	70-130			
Ethylbenzene	4.46	0.0250	5.00		89.3	70-130			
Toluene	4.64	0.0250	5.00		92.7	70-130			
o-Xylene	4.59	0.0250	5.00		91.9	70-130			
p,m-Xylene	9.24	0.0500	10.0		92.4	70-130			
Total Xylenes	13.8	0.0250	15.0		92.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.47		8.00		93.4	70-130			

Matrix Spike (2338095-MS1)

Source: E309161-04

Prepared: 09/22/23 Analyzed: 09/22/23

Benzene	4.51	0.0250	5.00	ND	90.1	54-133			
Ethylbenzene	4.35	0.0250	5.00	ND	87.0	61-133			
Toluene	4.51	0.0250	5.00	ND	90.3	61-130			
o-Xylene	4.49	0.0250	5.00	ND	89.9	63-131			
p,m-Xylene	9.01	0.0500	10.0	ND	90.1	63-131			
Total Xylenes	13.5	0.0250	15.0	ND	90.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.88		8.00		98.4	70-130			

Matrix Spike Dup (2338095-MSD1)

Source: E309161-04

Prepared: 09/22/23 Analyzed: 09/22/23

Benzene	4.46	0.0250	5.00	ND	89.2	54-133	1.01	20	
Ethylbenzene	4.31	0.0250	5.00	ND	86.1	61-133	0.979	20	
Toluene	4.46	0.0250	5.00	ND	89.3	61-130	1.10	20	
o-Xylene	4.44	0.0250	5.00	ND	88.8	63-131	1.13	20	
p,m-Xylene	8.92	0.0500	10.0	ND	89.2	63-131	1.06	20	
Total Xylenes	13.4	0.0250	15.0	ND	89.1	63-131	1.08	20	
Surrogate: 4-Bromochlorobenzene-PID	7.92		8.00		99.1	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

Volatile Organics by EPA 8021B

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 (2338097-BLK1) Prepared: 09/22/23 Analyzed: 09/23/23

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: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			

LCS (2338097-BS1) Prepared: 09/22/23 Analyzed: 09/23/23

Benzene	4.40	0.0250	5.00		87.9	70-130			
Ethylbenzene	4.34	0.0250	5.00		86.7	70-130			
Toluene	4.38	0.0250	5.00		87.6	70-130			
o-Xylene	4.39	0.0250	5.00		87.7	70-130			
p,m-Xylene	8.84	0.0500	10.0		88.4	70-130			
Total Xylenes	13.2	0.0250	15.0		88.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.65		8.00		95.6	70-130			

Matrix Spike (2338097-MS1) Source: E309161-28 Prepared: 09/22/23 Analyzed: 09/23/23

Benzene	4.78	0.0250	5.00	ND	95.6	54-133			
Ethylbenzene	4.67	0.0250	5.00	ND	93.5	61-133			
Toluene	4.75	0.0250	5.00	ND	94.9	61-130			
o-Xylene	4.74	0.0250	5.00	ND	94.8	63-131			
p,m-Xylene	9.53	0.0500	10.0	ND	95.3	63-131			
Total Xylenes	14.3	0.0250	15.0	ND	95.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.72		8.00		96.6	70-130			

Matrix Spike Dup (2338097-MSD1) Source: E309161-28 Prepared: 09/22/23 Analyzed: 09/23/23

Benzene	4.74	0.0250	5.00	ND	94.7	54-133	0.950	20	
Ethylbenzene	4.65	0.0250	5.00	ND	93.1	61-133	0.439	20	
Toluene	4.71	0.0250	5.00	ND	94.1	61-130	0.845	20	
o-Xylene	4.70	0.0250	5.00	ND	94.1	63-131	0.715	20	
p,m-Xylene	9.49	0.0500	10.0	ND	94.9	63-131	0.364	20	
Total Xylenes	14.2	0.0250	15.0	ND	94.6	63-131	0.480	20	
Surrogate: 4-Bromochlorobenzene-PID	7.67		8.00		95.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2338095-BLK1) Prepared: 09/22/23 Analyzed: 09/22/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.90		8.00		86.3	70-130			

LCS (2338095-BS2) Prepared: 09/22/23 Analyzed: 09/22/23

Gasoline Range Organics (C6-C10)	39.9	20.0	50.0		79.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.01		8.00		87.6	70-130			

Matrix Spike (2338095-MS2) Source: E309161-04 Prepared: 09/22/23 Analyzed: 09/22/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.92		8.00		86.5	70-130			

Matrix Spike Dup (2338095-MSD2) Source: E309161-04 Prepared: 09/22/23 Analyzed: 09/22/23

Gasoline Range Organics (C6-C10)	47.2	20.0	50.0	ND	94.3	70-130	1.29	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.89		8.00		86.2	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2338097-BLK1) Prepared: 09/22/23 Analyzed: 09/23/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.36		8.00		92.1	70-130			

LCS (2338097-BS2) Prepared: 09/22/23 Analyzed: 09/23/23

Gasoline Range Organics (C6-C10)	46.1	20.0	50.0		92.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.48		8.00		93.5	70-130			

Matrix Spike (2338097-MS2) Source: E309161-28 Prepared: 09/22/23 Analyzed: 09/23/23

Gasoline Range Organics (C6-C10)	48.0	20.0	50.0	ND	96.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.41		8.00		92.7	70-130			

Matrix Spike Dup (2338097-MSD2) Source: E309161-28 Prepared: 09/22/23 Analyzed: 09/23/23

Gasoline Range Organics (C6-C10)	44.4	20.0	50.0	ND	88.7	70-130	7.84	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.50		8.00		93.8	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

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 (2338094-BLK1)					Prepared: 09/22/23 Analyzed: 09/22/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.5		50.0		91.0	50-200			

LCS (2338094-BS1)					Prepared: 09/22/23 Analyzed: 09/22/23				
Diesel Range Organics (C10-C28)	226	25.0	250		90.2	38-132			
Surrogate: n-Nonane	39.6		50.0		79.1	50-200			

Matrix Spike (2338094-MS1)					Source: E309161-01		Prepared: 09/22/23 Analyzed: 09/22/23		
Diesel Range Organics (C10-C28)	229	25.0	250	ND	91.7	38-132			
Surrogate: n-Nonane	38.4		50.0		76.9	50-200			

Matrix Spike Dup (2338094-MSD1)					Source: E309161-01		Prepared: 09/22/23 Analyzed: 09/22/23		
Diesel Range Organics (C10-C28)	228	25.0	250	ND	91.2	38-132	0.592	20	
Surrogate: n-Nonane	38.8		50.0		77.6	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

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 (2338098-BLK1)					Prepared: 09/22/23 Analyzed: 09/23/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.1		50.0		90.2	50-200			

LCS (2338098-BS1)					Prepared: 09/22/23 Analyzed: 09/23/23				
Diesel Range Organics (C10-C28)	234	25.0	250		93.6	38-132			
Surrogate: n-Nonane	43.4		50.0		86.9	50-200			

Matrix Spike (2338098-MS1)					Source: E309161-25		Prepared: 09/22/23 Analyzed: 09/23/23		
Diesel Range Organics (C10-C28)	263	25.0	250	29.6	93.5	38-132			
Surrogate: n-Nonane	40.0		50.0		80.1	50-200			

Matrix Spike Dup (2338098-MSD1)					Source: E309161-25		Prepared: 09/22/23 Analyzed: 09/23/23		
Diesel Range Organics (C10-C28)	263	25.0	250	29.6	93.2	38-132	0.264	20	
Surrogate: n-Nonane	39.4		50.0		78.9	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

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 (2338106-BLK1)					Prepared: 09/22/23 Analyzed: 09/24/23				
Chloride	ND	20.0							
LCS (2338106-BS1)					Prepared: 09/22/23 Analyzed: 09/24/23				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2338106-MS1)					Source: E309161-21		Prepared: 09/22/23 Analyzed: 09/24/23		
Chloride	19700	1000	250	20300	NR	80-120			M4
Matrix Spike Dup (2338106-MSD1)					Source: E309161-21		Prepared: 09/22/23 Analyzed: 09/24/23		
Chloride	20200	1000	250	20300	NR	80-120	2.62	20	M4



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	9/25/2023 3:06:28PM

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 (2338107-BLK1)					Prepared: 09/22/23 Analyzed: 09/23/23				
Chloride	ND	20.0							
LCS (2338107-BS1)					Prepared: 09/22/23 Analyzed: 09/23/23				
Chloride	257	20.0	250		103	90-110			
Matrix Spike (2338107-MS1)					Source: E309161-01		Prepared: 09/22/23 Analyzed: 09/23/23		
Chloride	5950	100	250	5750	78.1	80-120			M4
Matrix Spike Dup (2338107-MSD1)					Source: E309161-01		Prepared: 09/22/23 Analyzed: 09/23/23		
Chloride	6070	100	250	5750	128	80-120	2.07	20	M4

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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/25/23 15:06

- 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

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

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



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Chain of Custody

Project Information

Client: MACK ENERGY Project: WEST MOUNT #1A Project Manager: Natalie Gladden 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# E309161 Job Number 200410001 Analysis and Method				TAT 1D 2D 3D Standard X				EPA Program CWA SDWA RCRA	
								State NM CO UT AZ TX X				Remarks					
Time Sampled	Date Sampled	Matrix	% of Containers	Sample ID	Lab Number	DRO/ORO by 8015	SRO/DRO by 8015	BTEX by 8021	VOC by 8060	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX				
	9/20/23	S	1	SP1 SURF	1							X					
				SP2 SURF	2												
				SP3 SURF	3												
				SP4 SURF	4												
				SP5 SURF	5												
				SP6 SURF	6												
				SP7 SURF	7												
				SP8 SURF	8												
				SP9 SURF	9												
				SP10 SURF	10												

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) *Arnell Mack* Date: 9/20/23 Time: 1415
 Relinquished by: (Signature) *Arnell Mack* Date: 9/21/23 Time: 1710
 Relinquished by: (Signature) *Arnell Mack* Date: 9/21/23 Time: 2400

Received by: (Signature) *Arnell Mack* Date: 8/21/23 Time: 1415
 Received by: (Signature) *Arnell Mack* Date: 9/21/23 Time: 1800
 Received by: (Signature) *Arnell Mack* Date: 9/22/23 Time: 800

Lab Use Only
 Received on ice: ☒ Y ☐ N
 T1 T2 T3
 AVG Temp: 4

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

Sample Matrix: S - Soil, SB - Solid, Sp - Sludge, A - Aqueous, O - Other

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.

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) *Arnell Mack* Date: 9/20/23 Time: 1415
 Relinquished by: (Signature) *Arnell Mack* Date: 9/21/23 Time: 1710
 Relinquished by: (Signature) *Arnell Mack* Date: 9/21/23 Time: 2400

Lab Use Only
 Received on ice: ☒ Y ☐ N
 T1 T2 T3
 AVG Temp: 4

Sample Matrix: S - Soil, SB - Solid, Sp - Sludge, A - Aqueous, O - Other

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

Project Information

Chain of Custody

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Client: MAACK ENERGY		Attention: ENERGY STAFFING SERVICES	
Project: WEST MOUNT #1A		Address: 2724 NW COUNTY RD	
Project Manager: Natasha Gooden		City, State, Zip: HOBBBS, NM 88240	
Address:		Phone: 575-393-9048	
City, State, Zip:		Email: NATASHA@ENERGYSTAFFING.COM	
Phone:		Email: BRITTNEY@ENERGYSTAFFING.COM	
Report due by:			

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Lab Use Only	Job Number	Job ID	Job 2D	Job 3D	Standard	EPA Program
	9/20/23	S	1	SP 15 CAT	11							
				SP 12 CAT	12							
				SP 13 CAT	13							
				SP 14 CAT	14							
				SP 15 CAT	15							
				SP 16 CAT	16							
				SP 17 CAT	17							
				SP 18 CAT	18							
				SP 19 CAT	19							
				SP 20 CAT	20							

DRO/DRO by 8015		GRO/DRO by 8015		BTEX by 8021		VOC by 8260		Metals 8010		Chloride 300.0		BGDOC NM		BGDOC TX	

State		Remarks	
NM	CO	UT	AZ
TX			

Date		Time		Date		Time	
9/20/23		1415		9/21/23		1415	
9/21/23		1710		9/21/23		1800	
9/21/23		2400		9/22/23		800	

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Project Information

Chain of Custody

Client: <u>Mpek Energy</u>				Bill To				Lab Use Only				TAT				EPA Program			
Project: <u>West Point #1A</u>				Attention: <u>ENERGY STAFFING SERVICES</u>				Lab WO# <u>E3091121</u>				Job Number <u>200460001</u>				1D 2D 3D Standard			
Project Manager: <u>Natalie Gadden</u>				Address: <u>2724 NW COUNTY RD</u>				Analysis and Method								CWA SDWA			
Address:				City, State, Zip <u>HOBBS, NM 88240</u>												RCRA			
City, State, Zip				Phone: <u>575-393-9048</u>												State			
Phone:				Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>												NM CO UT AZ TX			
Email:				BRITTNEY@ENERGYSTAFFINGLLC.COM												Remarks			
Report due by:																			

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/GRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
	9/29/23	S	1	SP21 SURF	21							X		
				SP22 SURF	22									
				SP23 SURF	23									
				SP24 SURF	24									
				SP25 SURF	25									
				SP26 SURF	26									
				SP27 SURF	27									
	9/20/23	S	1	SP28 SURF	28							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: M. Rivera

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
<u>Carroll</u>	9/20/23	1415	<u>Carroll</u>	8-21-23	1415	Received on ice: <u>Y</u>
<u>Carroll</u>	8-21-23	1710	<u>Carroll</u>	9-21-23	1800	T1 T2 T3
<u>Carroll</u>	9-21-23	2400	<u>Carroll</u>	9-22-23	800	AVG Temp: <u>4</u>

Sample Matrix: S - Soil, Sl - Solid, Sp - Sludge, A - Aqueous, O - Other

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

Envirotech Analytical Laboratory

Printed: 9/22/2023 2:59:19PM

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:	09/22/23 08:00	Work Order ID:	E309161
Phone:	(575) 390-6397	Date Logged In:	09/21/23 15:39	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	09/25/23 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: Courier**Comments/Resolution****Sample Turn Around Time (TAT)**

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

Sample Cooler

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

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 #1A

Work Order: E311051

Job Number: 20046-0001

Received: 11/7/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/8/23

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: 11/8/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E311051
Date Received: 11/7/2023 8:20:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/7/2023 8:20:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/08/23 14:27
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 1- Surf	E311051-01A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 2 - SURF	E311051-02A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 3- SURF	E311051-03A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 4- SURF	E311051-04A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 5- SURF	E311051-05A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 6- SURF	E311051-06A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 7- SURF	E311051-07A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 8- SURF	E311051-08A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 9 SURF	E311051-09A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.
SW 10- SURF	E311051-10A	Solid	11/03/23	11/07/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/8/2023 2:27:14PM
--	--	---

SW 1- Surf

E311051-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2345033	
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.7 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2345033	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	91.5 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2345034	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/07/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/07/23	
<i>Surrogate: n-Nonane</i>	95.8 %	50-200		11/07/23	11/07/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2345042	
Chloride	13500	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 2 - SURF

E311051-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.9 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.2 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/07/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/07/23	
<i>Surrogate: n-Nonane</i>						
	90.1 %	50-200		11/07/23	11/07/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	20800	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 3- SURF

E311051-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.8 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.8 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/07/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/07/23	
<i>Surrogate: n-Nonane</i>						
	94.1 %	50-200		11/07/23	11/07/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	3080	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 4- SURF

E311051-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.9 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.5 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/07/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/07/23	
<i>Surrogate: n-Nonane</i>						
	98.3 %	50-200		11/07/23	11/07/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	16500	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 5- SURF

E311051-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.2 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.6 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/07/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/07/23	
<i>Surrogate: n-Nonane</i>						
	92.3 %	50-200		11/07/23	11/07/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	19400	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 6- SURF

E311051-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.2 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.7 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/07/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/07/23	
<i>Surrogate: n-Nonane</i>						
	96.7 %	50-200		11/07/23	11/07/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	275	20.0	1	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 7- SURF

E311051-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.3 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.1 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/07/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/07/23	
<i>Surrogate: n-Nonane</i>						
	93.9 %	50-200		11/07/23	11/07/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	3160	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 8- SURF

E311051-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.9 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	96.3 %	50-200		11/07/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	14400	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 9 SURF

E311051-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.9 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.7 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	96.5 %	50-200		11/07/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	3410	400	20	11/07/23	11/07/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/8/2023 2:27:14PM

SW 10- SURF

E311051-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Benzene	ND	0.0250	1	11/07/23	11/07/23	
Ethylbenzene	ND	0.0250	1	11/07/23	11/07/23	
Toluene	ND	0.0250	1	11/07/23	11/07/23	
o-Xylene	ND	0.0250	1	11/07/23	11/07/23	
p,m-Xylene	ND	0.0500	1	11/07/23	11/07/23	
Total Xylenes	ND	0.0250	1	11/07/23	11/07/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.8 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345033
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/07/23	11/07/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.5 %	70-130		11/07/23	11/07/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345034
Diesel Range Organics (C10-C28)	ND	25.0	1	11/07/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/07/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	96.6 %	50-200		11/07/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345042
Chloride	3580	400	20	11/07/23	11/07/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/8/2023 2:27:14PM

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 (2345033-BLK1)

Prepared: 11/07/23 Analyzed: 11/08/23

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: 4-Bromochlorobenzene-PID	7.39		8.00		92.3	70-130			

LCS (2345033-BS1)

Prepared: 11/07/23 Analyzed: 11/07/23

Benzene	5.08	0.0250	5.00		102	70-130			
Ethylbenzene	5.06	0.0250	5.00		101	70-130			
Toluene	5.09	0.0250	5.00		102	70-130			
o-Xylene	5.06	0.0250	5.00		101	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.4	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.75		8.00		96.8	70-130			

Matrix Spike (2345033-MS1)

Source: E311047-22

Prepared: 11/07/23 Analyzed: 11/07/23

Benzene	4.93	0.0250	5.00	ND	98.5	54-133			
Ethylbenzene	4.91	0.0250	5.00	ND	98.1	61-133			
Toluene	4.93	0.0250	5.00	ND	98.7	61-130			
o-Xylene	4.92	0.0250	5.00	ND	98.3	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.3	70-130			

Matrix Spike Dup (2345033-MSD1)

Source: E311047-22

Prepared: 11/07/23 Analyzed: 11/07/23

Benzene	4.89	0.0250	5.00	ND	97.7	54-133	0.817	20	
Ethylbenzene	4.87	0.0250	5.00	ND	97.4	61-133	0.771	20	
Toluene	4.89	0.0250	5.00	ND	97.7	61-130	0.933	20	
o-Xylene	4.88	0.0250	5.00	ND	97.5	63-131	0.811	20	
p,m-Xylene	9.89	0.0500	10.0	ND	98.9	63-131	1.10	20	
Total Xylenes	14.8	0.0250	15.0	ND	98.5	63-131	1.01	20	
Surrogate: 4-Bromochlorobenzene-PID	7.76		8.00		97.0	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/8/2023 2:27:14PM

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 (2345033-BLK1) Prepared: 11/07/23 Analyzed: 11/08/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.31		8.00		91.4	70-130			

LCS (2345033-BS2) Prepared: 11/07/23 Analyzed: 11/07/23

Gasoline Range Organics (C6-C10)	52.2	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.45		8.00		93.2	70-130			

Matrix Spike (2345033-MS2) Source: E311047-22 Prepared: 11/07/23 Analyzed: 11/07/23

Gasoline Range Organics (C6-C10)	50.8	20.0	50.0	ND	102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.31		8.00		91.4	70-130			

Matrix Spike Dup (2345033-MSD2) Source: E311047-22 Prepared: 11/07/23 Analyzed: 11/07/23

Gasoline Range Organics (C6-C10)	51.7	20.0	50.0	ND	103	70-130	1.62	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.50		8.00		93.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/8/2023 2:27:14PM

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 (2345034-BLK1)					Prepared: 11/07/23 Analyzed: 11/07/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	47.6		50.0		95.1	50-200			

LCS (2345034-BS1)					Prepared: 11/07/23 Analyzed: 11/07/23				
Diesel Range Organics (C10-C28)	228	25.0	250		91.3	38-132			
Surrogate: n-Nonane	48.3		50.0		96.6	50-200			

Matrix Spike (2345034-MS1)					Source: E311051-05		Prepared: 11/07/23 Analyzed: 11/07/23		
Diesel Range Organics (C10-C28)	227	25.0	250	ND	91.0	38-132			
Surrogate: n-Nonane	47.0		50.0		94.0	50-200			

Matrix Spike Dup (2345034-MSD1)					Source: E311051-05		Prepared: 11/07/23 Analyzed: 11/07/23		
Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.5	38-132	8.96	20	
Surrogate: n-Nonane	51.5		50.0		103	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/8/2023 2:27:14PM

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 (2345042-BLK1)					Prepared: 11/07/23 Analyzed: 11/07/23				
Chloride	ND	20.0							
LCS (2345042-BS1)					Prepared: 11/07/23 Analyzed: 11/07/23				
Chloride	246	20.0	250		98.5	90-110			
Matrix Spike (2345042-MS1)					Source: E311051-06		Prepared: 11/07/23 Analyzed: 11/07/23		
Chloride	525	20.0	250	275	100	80-120			
Matrix Spike Dup (2345042-MSD1)					Source: E311051-06		Prepared: 11/07/23 Analyzed: 11/07/23		
Chloride	521	20.0	250	275	98.7	80-120	0.759	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/08/23 14:27

- 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: TRUCK ENERGY				Bill To				Lab Use Only				TAT				EPA Program					
Project: West Mount #1A				Attention: ENERGY STAFFING SERVICES				Lab WO# E 311051				Job Number 20046-0001				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/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
	11/03/23	S	1	SW 1 - Surf	1							X		
				SW 2 - Surf	2									
				SW 3 - Surf	3									
				SW 4 - Surf	4									
				SW 5 - Surf	5									
				SW 6 - Surf	6									
				SW 7 - Surf	7									
				SW 8 - Surf	8									
				SW 9 - Surf	9									
	11/03/23	S	1	SW 10 - Surf	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.						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: Juan Solis											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time	
Juan Solis		11/03/23				Michelle Gayle		11-6-23		1315	
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time	
Michelle Gayle		11-6-23		1630		Andrew M880		11-6-23		1800	
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time	
Andrew M880		11-6-23		2400		Michelle		11/7/23		8:20	
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: 11/7/2023 8:40:06AM

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:	11/07/23 08:20	Work Order ID:	E311051
Phone:	(575) 390-6397	Date Logged In:	11/06/23 15:22	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/08/23 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?	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:

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 #1A

Work Order: E311055

Job Number: 20046-0001

Received: 11/8/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/9/23

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: 11/9/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E311055
Date Received: 11/8/2023 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/8/2023 8:00:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 11/09/23 17:04
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
SW 11- SURF	E311055-01A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 12- SURF	E311055-02A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 13- SURF	E311055-03A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 14- SURF	E311055-04A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 15- SURF	E311055-05A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 16 - SURF	E311055-06A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 17- SURF	E311055-07A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 18- SURF	E311055-08A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 19- SURF	E311055-09A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 20- SURF	E311055-10A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 21- SURF	E311055-11A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 22- SURF	E311055-12A	Soil	11/06/23	11/08/23	Glass Jar, 2 oz.
SW 23- SURF	E311055-13A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 24- SURF	E311055-14A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 25- SURF	E311055-15A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 26- SURF	E311055-16A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 27- SURF	E311055-17A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 28- SURF	E311055-18A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 29- SURF	E311055-19A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 30- SURF	E311055-20A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 31- SURF	E311055-21A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 32- SURF	E311055-22A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 33- SURF	E311055-23A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.
SW 34- SURF	E311055-24A	Soil	11/07/23	11/08/23	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 11- SURF

E311055-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
Surrogate: 4-Bromochlorobenzene-PID	96.0 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.1 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/08/23	
Surrogate: n-Nonane	120 %	50-200		11/08/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	ND	200	10	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW-12- SURF

E311055-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.5 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	117 %	50-200		11/08/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	271	200	10	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 13- SURF

E311055-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.2 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	117 %	50-200		11/08/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	3560	200	10	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 14- SURF

E311055-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.5 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.6 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	129 %	50-200		11/08/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	4260	200	10	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 15- SURF

E311055-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.0 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.0 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		11/08/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	22800	2000	100	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 16 - SURF

E311055-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.4 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		11/08/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	16000	400	20	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
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SW 17- SURF

E311055-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.6 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/08/23	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		11/08/23	11/08/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	7720	200	10	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
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SW 18- SURF

E311055-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.8 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.2 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	89.2 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	ND	20.0	1	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 19- SURF

E311055-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	ND	40.0	2	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
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SW 20- SURF

E311055-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.8 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	5460	200	10	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 21- SURF

E311055-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	29.9	20.0	1	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 22- SURF

E311055-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.5 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	50.9	20.0	1	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 23- SURF

E311055-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.2 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	7560	400	20	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 24- SURF

E311055-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.5 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.7 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	419	200	10	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 25- SURF

E311055-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.2 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	66.3	20.0	1	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 26- SURF

E311055-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.5 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	43.7	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	98.6 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	12600	400	20	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 27- SURF

E311055-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.2 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	99.2 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	6950	400	20	11/08/23	11/09/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 28- SURF

E311055-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.8 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	2720	400	20	11/08/23	11/09/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 29- SURF

E311055-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.2 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345059
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.5 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345052
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345063
Chloride	ND	200	10	11/08/23	11/09/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

SW 30- SURF

E311055-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2345059	
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	<i>94.8 %</i>	<i>70-130</i>		<i>11/08/23</i>	<i>11/08/23</i>	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2345059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	<i>89.2 %</i>	<i>70-130</i>		<i>11/08/23</i>	<i>11/08/23</i>	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2345052	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>	<i>104 %</i>	<i>50-200</i>		<i>11/08/23</i>	<i>11/09/23</i>	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2345063	
Chloride	3560	40.0	2	11/08/23	11/09/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 31- SURF

E311055-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345053
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	95.4 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345062
Chloride	7600	400	20	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 32- SURF

E311055-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.5 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.8 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345053
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345062
Chloride	10400	400	20	11/08/23	11/08/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 33- SURF

E311055-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.2 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.7 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345053
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345062
Chloride	12300	400	20	11/08/23	11/09/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/9/2023 5:04:36PM

SW 34- SURF

E311055-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Benzene	ND	0.0250	1	11/08/23	11/08/23	
Ethylbenzene	ND	0.0250	1	11/08/23	11/08/23	
Toluene	ND	0.0250	1	11/08/23	11/08/23	
o-Xylene	ND	0.0250	1	11/08/23	11/08/23	
p,m-Xylene	ND	0.0500	1	11/08/23	11/08/23	
Total Xylenes	ND	0.0250	1	11/08/23	11/08/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345054
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/08/23	11/08/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.8 %	70-130		11/08/23	11/08/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345053
Diesel Range Organics (C10-C28)	ND	25.0	1	11/08/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/08/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		11/08/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345062
Chloride	2210	200	10	11/08/23	11/09/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345054-BLK1)

Prepared: 11/08/23 Analyzed: 11/08/23

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: 4-Bromochlorobenzene-PID	7.60		8.00		95.0	70-130			

LCS (2345054-BS1)

Prepared: 11/08/23 Analyzed: 11/08/23

Benzene	4.71	0.0250	5.00		94.2	70-130			
Ethylbenzene	4.62	0.0250	5.00		92.4	70-130			
Toluene	4.77	0.0250	5.00		95.4	70-130			
o-Xylene	4.76	0.0250	5.00		95.1	70-130			
p,m-Xylene	9.56	0.0500	10.0		95.6	70-130			
Total Xylenes	14.3	0.0250	15.0		95.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.67		8.00		95.9	70-130			

Matrix Spike (2345054-MS1)

Source: E311052-04

Prepared: 11/08/23 Analyzed: 11/08/23

Benzene	4.89	0.0250	5.00	ND	97.7	54-133			
Ethylbenzene	4.83	0.0250	5.00	ND	96.5	61-133			
Toluene	4.98	0.0250	5.00	ND	99.5	61-130			
o-Xylene	4.96	0.0250	5.00	ND	99.1	63-131			
p,m-Xylene	9.99	0.0500	10.0	ND	99.9	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.59		8.00		94.9	70-130			

Matrix Spike Dup (2345054-MSD1)

Source: E311052-04

Prepared: 11/08/23 Analyzed: 11/08/23

Benzene	4.67	0.0250	5.00	ND	93.4	54-133	4.52	20	
Ethylbenzene	4.63	0.0250	5.00	ND	92.6	61-133	4.17	20	
Toluene	4.77	0.0250	5.00	ND	95.3	61-130	4.29	20	
o-Xylene	4.76	0.0250	5.00	ND	95.1	63-131	4.15	20	
p,m-Xylene	9.58	0.0500	10.0	ND	95.8	63-131	4.11	20	
Total Xylenes	14.3	0.0250	15.0	ND	95.6	63-131	4.12	20	
Surrogate: 4-Bromochlorobenzene-PID	7.58		8.00		94.8	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345059-BLK1)

Prepared: 11/08/23 Analyzed: 11/08/23

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: 4-Bromochlorobenzene-PID	7.67		8.00		95.9	70-130			

LCS (2345059-BS1)

Prepared: 11/08/23 Analyzed: 11/08/23

Benzene	5.06	0.0250	5.00		101	70-130			
Ethylbenzene	5.10	0.0250	5.00		102	70-130			
Toluene	5.12	0.0250	5.00		102	70-130			
o-Xylene	5.12	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	7.65		8.00		95.6	70-130			

Matrix Spike (2345059-MS1)

Source: E311055-01 Prepared: 11/08/23 Analyzed: 11/08/23

Benzene	4.68	0.0250	5.00	ND	93.6	54-133			
Ethylbenzene	4.73	0.0250	5.00	ND	94.6	61-133			
Toluene	4.74	0.0250	5.00	ND	94.9	61-130			
o-Xylene	4.74	0.0250	5.00	ND	94.9	63-131			
p,m-Xylene	9.63	0.0500	10.0	ND	96.3	63-131			
Total Xylenes	14.4	0.0250	15.0	ND	95.8	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.69		8.00		96.1	70-130			

Matrix Spike Dup (2345059-MSD1)

Source: E311055-01 Prepared: 11/08/23 Analyzed: 11/08/23

Benzene	4.96	0.0250	5.00	ND	99.2	54-133	5.80	20	
Ethylbenzene	5.02	0.0250	5.00	ND	100	61-133	6.01	20	
Toluene	5.03	0.0250	5.00	ND	101	61-130	5.81	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	6.09	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	6.07	20	
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131	6.08	20	
Surrogate: 4-Bromochlorobenzene-PID	7.66		8.00		95.8	70-130			

QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345054-BLK1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.36		8.00		92.0	70-130			

LCS (2345054-BS2)					Prepared: 11/08/23 Analyzed: 11/08/23				
Gasoline Range Organics (C6-C10)	45.7	20.0	50.0		91.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.39		8.00		92.4	70-130			

Matrix Spike (2345054-MS2)					Source: E311052-04	Prepared: 11/08/23 Analyzed: 11/08/23			
Gasoline Range Organics (C6-C10)	43.4	20.0	50.0	ND	86.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.40		8.00		92.5	70-130			

Matrix Spike Dup (2345054-MSD2)					Source: E311052-04	Prepared: 11/08/23 Analyzed: 11/08/23			
Gasoline Range Organics (C6-C10)	40.5	20.0	50.0	ND	81.0	70-130	6.94	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345059-BLK1) Prepared: 11/08/23 Analyzed: 11/08/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.30		8.00		91.3	70-130			

LCS (2345059-BS2) Prepared: 11/08/23 Analyzed: 11/08/23

Gasoline Range Organics (C6-C10)	48.3	20.0	50.0		96.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

Matrix Spike (2345059-MS2) Source: E311055-01 Prepared: 11/08/23 Analyzed: 11/08/23

Gasoline Range Organics (C6-C10)	44.7	20.0	50.0	ND	89.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.30		8.00		91.2	70-130			

Matrix Spike Dup (2345059-MSD2) Source: E311055-01 Prepared: 11/08/23 Analyzed: 11/08/23

Gasoline Range Organics (C6-C10)	42.1	20.0	50.0	ND	84.2	70-130	5.97	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.40		8.00		92.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345052-BLK1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	61.0		50.0		122	50-200			

LCS (2345052-BS1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Diesel Range Organics (C10-C28)	249	25.0	250		99.5	38-132			
Surrogate: n-Nonane	60.8		50.0		122	50-200			

Matrix Spike (2345052-MS1)					Source: E311055-05		Prepared: 11/08/23 Analyzed: 11/08/23		
Diesel Range Organics (C10-C28)	254	25.0	250	ND	102	38-132			
Surrogate: n-Nonane	55.9		50.0		112	50-200			

Matrix Spike Dup (2345052-MSD1)					Source: E311055-05		Prepared: 11/08/23 Analyzed: 11/08/23		
Diesel Range Organics (C10-C28)	250	25.0	250	ND	100	38-132	1.56	20	
Surrogate: n-Nonane	58.5		50.0		117	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345053-BLK1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	49.6		50.0		99.2	50-200			

LCS (2345053-BS1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Diesel Range Organics (C10-C28)	229	25.0	250		91.5	38-132			
Surrogate: n-Nonane	47.3		50.0		94.7	50-200			

Matrix Spike (2345053-MS1)					Source: E311054-07		Prepared: 11/08/23 Analyzed: 11/08/23		
Diesel Range Organics (C10-C28)	265	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	44.9		50.0		89.8	50-200			

Matrix Spike Dup (2345053-MSD1)					Source: E311054-07		Prepared: 11/08/23 Analyzed: 11/08/23		
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132	0.577	20	
Surrogate: n-Nonane	52.2		50.0		104	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345062-BLK1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Chloride	ND	20.0							
LCS (2345062-BS1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2345062-MS1)					Source: E311054-03		Prepared: 11/08/23 Analyzed: 11/08/23		
Chloride	37100	2000	250	40400	NR	80-120			M4
Matrix Spike Dup (2345062-MSD1)					Source: E311054-03		Prepared: 11/08/23 Analyzed: 11/08/23		
Chloride	36700	2000	250	40400	NR	80-120	0.845	20	M4



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/9/2023 5:04:36PM

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 (2345063-BLK1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Chloride	ND	20.0							
LCS (2345063-BS1)					Prepared: 11/08/23 Analyzed: 11/08/23				
Chloride	245	20.0	250		97.9	90-110			
Matrix Spike (2345063-MS1)					Source: E311055-04		Prepared: 11/08/23 Analyzed: 11/08/23		
Chloride	5110	200	250	4260	337	80-120			M4
Matrix Spike Dup (2345063-MSD1)					Source: E311055-04		Prepared: 11/08/23 Analyzed: 11/08/23		
Chloride	4490	200	250	4260	88.4	80-120	12.9	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/09/23 17:04

- 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.



Chain of Custody

Client: MACIL Energy Project: West Mount #1A 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 BRITTNEY@ENERGYSTAFFINGLLC.COM				Lab Use Only Lab WO# E 311055 Job Number 20046-0001 Analysis and Method				TAT 1D 2D 3D Standard X State NM CO UT AZ TX X Remarks				EPA Program CWA SDWA RCRA			
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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
	11/06/23	S	1	SW 11 - SURF	1							X		
				SW 12 - SURF	2									
				SW 13 - SURF	3									
				SW 14 - SURF	4									
				SW 15 - SURF	5									
				SW 16 - SURF	6									
				SW 17 - SURF	7									
				SW 18 - SURF	8									
				SW 19 - SURF	9									
	11/06/23	S	1	SW 20 - SURF	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: Juan Solis

Relinquished by: (Signature) <u>Juan Solis</u>		Date <u>11/06/23</u>	Time	Received by: (Signature) <u>Michelle Goyl</u>	Date <u>11-7-23</u>	Time <u>1315</u>	Lab Use Only Received on ice: <u>Y</u> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Goyl</u>		Date <u>11-7-23</u>	Time <u>1700</u>	Received by: (Signature) <u>Andrew</u>	Date <u>11-7-23</u>	Time <u>1200</u>	
Relinquished by: (Signature) <u>Andrew</u>		Date <u>11-7-23</u>	Time <u>2400</u>	Received by: (Signature) <u>Murphy</u>	Date <u>11/8/23</u>	Time <u>8:00</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>MCC Energy</u>					Bill To					Lab Use Only					TAT				EPA Program											
Project: <u>West Mount #1A</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E 311055</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>																									
City, State, Zip					Phone: <u>575-393-9048</u>					DRO/ORO by 8015					BGDOC NM				BGDOC TX											
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>																									
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM					GRO/DRO by 8015					BTEx by 8021				VOC by 8260				Metals 6010				Chloride 300.0			
Report due by:																														
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	State																								
						NM CO UT AZ TX																								
						Remarks																								
	11/06/23	S	1	SW 21 - SURF	11	<div style="display: flex; align-items: center;"> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> <div style="border-left: 2px solid black; height: 100px; margin-right: 10px;"></div> </div>																								
				SW 22 - SURF	12																									
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				SW 27 - SURF	17																									
				SW 28 - SURF	18																									
				SW 29 - SURF	19																									
	11/06/23	S	1	SW 30 - SURF	20																									

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: Jan 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)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>Jan Solis</u>	11/06/23		<u>Michelle Boyle</u>	11-7-23	1315	
<u>Michelle Boyle</u>	11-7-23	1700	<u>Jan Solis</u>	11-7-23	1700	
<u>Jan Solis</u>	11-7-23	2400	<u>Jan Solis</u>	11/8/23	8:00	

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: 11/8/2023 8:49:11AM

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:	11/08/23 08:00	Work Order ID:	E311055
Phone:	(575) 390-6397	Date Logged In:	11/07/23 14:42	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/09/23 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? 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: N/A

Client Instruction

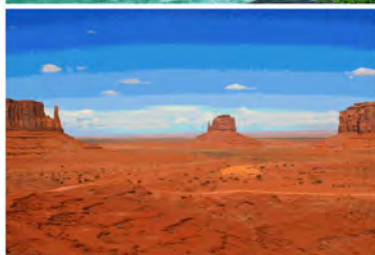
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E311065

Job Number: 20046-0001

Received: 11/9/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/10/23

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: 11/10/23



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount #1A
Workorder: E311065
Date Received: 11/9/2023 8:45:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/9/2023 8:45:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/10/23 16:44

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 35- SURF	E311065-01A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 36- SURF	E311065-02A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 37- SURF	E311065-03A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 38- SURF	E311065-04A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 39- SURF	E311065-05A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 40- SURF	E311065-06A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 41- SURF	E311065-07A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 42- SURF	E311065-08A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 43- SURF	E311065-09A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 44- SURF	E311065-10A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 45- SURF	E311065-11A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 46- SURF	E311065-12A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 47- SURF	E311065-13A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 48- SURF	E311065-14A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW 49- SURF	E311065-15A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.
SW-50- SURF	E311065-16A	Soil	11/07/23	11/09/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/10/2023 4:44:10PM
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SW 35- SURF

E311065-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
Surrogate: 4-Bromochlorobenzene-PID	90.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	91.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/09/23	
Surrogate: n-Nonane	90.8 %	50-200		11/09/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	35600	1000	50	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 36- SURF

E311065-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.6 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.3 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	93.4 %	50-200		11/09/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	2610	40.0	2	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 37- SURF

E311065-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.4 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.4 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/09/23	
<i>Surrogate: n-Nonane</i>						
	93.5 %	50-200		11/09/23	11/09/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	11500	400	20	11/09/23	11/10/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 11/10/2023 4:44:10PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW 38- SURF

E311065-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2345075	
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2345075	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2345079	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/09/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/09/23	
<i>Surrogate: n-Nonane</i>	89.1 %	50-200		11/09/23	11/09/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2345086	
Chloride	5660	200	10	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 39- SURF

E311065-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.3 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.5 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	93.1 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	1950	40.0	2	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 40- SURF

E311065-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	90.6 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	54.5	20.0	1	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 41- SURF

E311065-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.8 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.3 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	41.7	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	94.4 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	2080	20.0	1	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 42- SURF

E311065-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.2 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.8 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	94.6 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	575	20.0	1	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 43- SURF

E311065-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.4 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.4 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	88.5	25.0	1	11/09/23	11/10/23	T17
Oil Range Organics (C28-C36)	136	50.0	1	11/09/23	11/10/23	T17
<i>Surrogate: n-Nonane</i>						
	89.1 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	21700	1000	50	11/09/23	11/10/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 11/10/2023 4:44:10PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW 44- SURF

E311065-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2345075	
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	89.5 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2345075	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2345079	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>	90.5 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2345086	
Chloride	4630	20.0	1	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 45- SURF

E311065-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.2 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.3 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	91.6 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	ND	40.0	2	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 46- SURF

E311065-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.0 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.7 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	96.1 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	256	200	10	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 47- SURF

E311065-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.4 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	92.9 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	566	200	10	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 48- SURF

E311065-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.0 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.1 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	94.7 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	ND	200	10	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW 49- SURF

E311065-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.6 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.7 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	91.7 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	ND	200	10	11/09/23	11/10/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/10/2023 4:44:10PM

SW-50- SURF

E311065-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Benzene	ND	0.0250	1	11/09/23	11/10/23	
Ethylbenzene	ND	0.0250	1	11/09/23	11/10/23	
Toluene	ND	0.0250	1	11/09/23	11/10/23	
o-Xylene	ND	0.0250	1	11/09/23	11/10/23	
p,m-Xylene	ND	0.0500	1	11/09/23	11/10/23	
Total Xylenes	ND	0.0250	1	11/09/23	11/10/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.3 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2345075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/09/23	11/10/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.9 %	70-130		11/09/23	11/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2345079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/09/23	11/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/09/23	11/10/23	
<i>Surrogate: n-Nonane</i>						
	94.0 %	50-200		11/09/23	11/10/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2345086
Chloride	ND	200	10	11/09/23	11/10/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/10/2023 4:44:10PM

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 (2345075-BLK1)

Prepared: 11/09/23 Analyzed: 11/09/23

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: 4-Bromochlorobenzene-PID	7.54		8.00		94.3	70-130			

LCS (2345075-BS1)

Prepared: 11/09/23 Analyzed: 11/09/23

Benzene	4.13	0.0250	5.00		82.6	70-130			
Ethylbenzene	4.26	0.0250	5.00		85.2	70-130			
Toluene	4.34	0.0250	5.00		86.8	70-130			
o-Xylene	4.37	0.0250	5.00		87.4	70-130			
p,m-Xylene	8.82	0.0500	10.0		88.2	70-130			
Total Xylenes	13.2	0.0250	15.0		87.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.41		8.00		92.6	70-130			

Matrix Spike (2345075-MS1)

Source: E311065-04

Prepared: 11/09/23 Analyzed: 11/10/23

Benzene	5.02	0.0250	5.00	ND	100	54-133			
Ethylbenzene	4.84	0.0250	5.00	ND	96.8	61-133			
Toluene	5.02	0.0250	5.00	ND	100	61-130			
o-Xylene	4.96	0.0250	5.00	ND	99.2	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	15.0	0.0250	15.0	ND	99.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.94		8.00		99.3	70-130			

Matrix Spike Dup (2345075-MSD1)

Source: E311065-04

Prepared: 11/09/23 Analyzed: 11/10/23

Benzene	4.98	0.0250	5.00	ND	99.6	54-133	0.793	20	
Ethylbenzene	4.82	0.0250	5.00	ND	96.3	61-133	0.514	20	
Toluene	4.99	0.0250	5.00	ND	99.8	61-130	0.657	20	
o-Xylene	4.94	0.0250	5.00	ND	98.7	63-131	0.439	20	
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131	0.560	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.2	63-131	0.520	20	
Surrogate: 4-Bromochlorobenzene-PID	8.04		8.00		100	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/10/2023 4:44:10PM

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 (2345075-BLK1) Prepared: 11/09/23 Analyzed: 11/09/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.1	70-130			

LCS (2345075-BS2) Prepared: 11/09/23 Analyzed: 11/09/23

Gasoline Range Organics (C6-C10)	45.4	20.0	50.0		90.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.4	70-130			

Matrix Spike (2345075-MS2) Source: E311065-04 Prepared: 11/09/23 Analyzed: 11/10/23

Gasoline Range Organics (C6-C10)	37.5	20.0	50.0	ND	74.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.42		8.00		92.8	70-130			

Matrix Spike Dup (2345075-MSD2) Source: E311065-04 Prepared: 11/09/23 Analyzed: 11/10/23

Gasoline Range Organics (C6-C10)	37.3	20.0	50.0	ND	74.6	70-130	0.461	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.2	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/10/2023 4:44:10PM

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 (2345079-BLK1)					Prepared: 11/09/23 Analyzed: 11/09/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.3		50.0		101	50-200			

LCS (2345079-BS1)					Prepared: 11/09/23 Analyzed: 11/09/23				
Diesel Range Organics (C10-C28)	238	25.0	250		95.1	38-132			
Surrogate: n-Nonane	45.5		50.0		91.1	50-200			

Matrix Spike (2345079-MS1)					Source: E311045-24		Prepared: 11/09/23 Analyzed: 11/09/23		
Diesel Range Organics (C10-C28)	246	25.0	250	ND	98.4	38-132			
Surrogate: n-Nonane	46.9		50.0		93.7	50-200			

Matrix Spike Dup (2345079-MSD1)					Source: E311045-24		Prepared: 11/09/23 Analyzed: 11/09/23		
Diesel Range Organics (C10-C28)	247	25.0	250	ND	98.7	38-132	0.302	20	
Surrogate: n-Nonane	48.2		50.0		96.3	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/10/2023 4:44:10PM

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 (2345086-BLK1)					Prepared: 11/09/23 Analyzed: 11/10/23				
Chloride	ND	20.0							
LCS (2345086-BS1)					Prepared: 11/09/23 Analyzed: 11/10/23				
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2345086-MS1)					Source: E311065-12		Prepared: 11/09/23 Analyzed: 11/10/23		
Chloride	480	200	250	256	89.5	80-120			
Matrix Spike Dup (2345086-MSD1)					Source: E311065-12		Prepared: 11/09/23 Analyzed: 11/10/23		
Chloride	490	200	250	256	93.7	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/10/23 16:44

- T17 The sample chromatographic pattern does not resemble the typical fuel standard used for quantitation.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

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

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



Project Information

Chain of Custody

Page 1 of 2

Client: <u>McGuck Energy</u> Project: <u>West Mount #1A</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								TAT				EPA Program	
										Lab WO# <u>E311965</u>				Job Number <u>20046-000</u>				1D	2D	3D	Standard	CWA	SDWA
										Analysis and Method												RCRA	
																						State	
													NM	CO	UT	AZ	TX						
													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 6010	Chloride 300.0		BGDOC NM	BGDOC TX									
	11/07/23	S	1	SW 35 - Surf	1								X										
				SW 36 - Surf	2																		
				SW 37 - Surf	3																		
				SW 38 - Surf	4																		
				SW 39 - Surf	5																		
				SW 40 - Surf	6																		
				SW 41 - Surf	7																		
				SW 42 - Surf	8																		
				SW 43 - Surf	9																		
	11/07/23	S	1	SW 44 - Surf	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: <u>John Solis</u>																							
Relinquished by: (Signature) <u>John Solis</u> Date <u>11/07/23</u> Time _____ Relinquished by: (Signature) <u>Nichelle Cuyf</u> Date <u>11-8-23</u> Time <u>1645</u> Relinquished by: (Signature) <u>Andrew Nuss</u> Date <u>11-8-23</u> Time <u>2400</u>												Received by: (Signature) <u>Nichelle Cuyf</u> Date <u>11-8-23</u> Time <u>1330</u> Received by: (Signature) <u>Andrew Nuss</u> Date <u>11-8-23</u> Time <u>1700</u> Received by: (Signature) <u>Andrew Nuss</u> Date <u>11/9/23</u> Time <u>8:45</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: 11/9/2023 10:48:54AM

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:	11/09/23 08:45	Work Order ID:	E311065
Phone:	(575) 390-6397	Date Logged In:	11/08/23 16:18	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/10/23 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? 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: N/A

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 #1A

Work Order: E311208

Job Number: 20046-0001

Received: 11/28/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/29/23

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: 11/29/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E311208
Date Received: 11/28/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/28/2023 7:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/23 16:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 1-6'	E311208-01A	Soil	11/21/23	11/28/23	Glass Jar, 2 oz.
SP 2-10'	E311208-02A	Soil	11/21/23	11/28/23	Glass Jar, 2 oz.
SP 3-10'	E311208-03A	Soil	11/21/23	11/28/23	Glass Jar, 2 oz.
SP 4-12'	E311208-04A	Soil	11/21/23	11/28/23	Glass Jar, 2 oz.



Sample Data

Mack Energy	Project Name:	West Mount #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:10:13PM

SP 1-6'

E311208-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Benzene	ND	0.0250	1	11/28/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/28/23	
Toluene	ND	0.0250	1	11/28/23	11/28/23	
o-Xylene	ND	0.0250	1	11/28/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.6 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.8 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2348044	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>	82.5 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348046	
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:10:13PM

SP 2-10'

E311208-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Benzene	ND	0.0250	1	11/28/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/28/23	
Toluene	ND	0.0250	1	11/28/23	11/28/23	
o-Xylene	ND	0.0250	1	11/28/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.3 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	84.6 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348046
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:10:13PM

SP 3-10'

E311208-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Benzene	ND	0.0250	1	11/28/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/28/23	
Toluene	ND	0.0250	1	11/28/23	11/28/23	
o-Xylene	ND	0.0250	1	11/28/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.4 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.0 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	82.9 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348046
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:10:13PM

SP 4-12'

E311208-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Benzene	ND	0.0250	1	11/28/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/28/23	
Toluene	ND	0.0250	1	11/28/23	11/28/23	
o-Xylene	ND	0.0250	1	11/28/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.6 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	90.3 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348046
Chloride	ND	200	10	11/28/23	11/29/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:10:13PM

Volatile Organics by EPA 8021B

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 (2348038-BLK1)

Prepared: 11/28/23 Analyzed: 11/28/23

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: 4-Bromochlorobenzene-PID	7.92		8.00		99.0	70-130			

LCS (2348038-BS1)

Prepared: 11/28/23 Analyzed: 11/28/23

Benzene	5.56	0.0250	5.00		111	70-130			
Ethylbenzene	5.46	0.0250	5.00		109	70-130			
Toluene	5.53	0.0250	5.00		111	70-130			
o-Xylene	5.48	0.0250	5.00		110	70-130			
p,m-Xylene	11.1	0.0500	10.0		111	70-130			
Total Xylenes	16.6	0.0250	15.0		111	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.94		8.00		99.3	70-130			

Matrix Spike (2348038-MS1)

Source: E311208-03

Prepared: 11/28/23 Analyzed: 11/28/23

Benzene	5.41	0.0250	5.00	ND	108	54-133			
Ethylbenzene	5.32	0.0250	5.00	ND	106	61-133			
Toluene	5.38	0.0250	5.00	ND	108	61-130			
o-Xylene	5.34	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131			
Total Xylenes	16.2	0.0250	15.0	ND	108	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.85		8.00		98.1	70-130			

Matrix Spike Dup (2348038-MSD1)

Source: E311208-03

Prepared: 11/28/23 Analyzed: 11/28/23

Benzene	5.15	0.0250	5.00	ND	103	54-133	5.02	20	
Ethylbenzene	5.07	0.0250	5.00	ND	101	61-133	4.82	20	
Toluene	5.12	0.0250	5.00	ND	102	61-130	5.09	20	
o-Xylene	5.07	0.0250	5.00	ND	101	63-131	5.11	20	
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131	4.72	20	
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131	4.85	20	
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:10:13PM

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 (2348038-BLK1) Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.33		8.00		91.7	70-130			

LCS (2348038-BS2) Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	47.3	20.0	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.47		8.00		93.3	70-130			

Matrix Spike (2348038-MS2) Source: E311208-03 Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.49		8.00		93.6	70-130			

Matrix Spike Dup (2348038-MSD2) Source: E311208-03 Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	51.4	20.0	50.0	ND	103	70-130	0.766	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		8.00		94.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:10:13PM

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 (2348044-BLK1)					Prepared: 11/28/23 Analyzed: 11/28/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.4		50.0		96.9	50-200			

LCS (2348044-BS1)					Prepared: 11/28/23 Analyzed: 11/28/23				
Diesel Range Organics (C10-C28)	247	25.0	250		98.7	38-132			
Surrogate: n-Nonane	49.9		50.0		99.9	50-200			

Matrix Spike (2348044-MS1)					Source: E311208-01		Prepared: 11/28/23 Analyzed: 11/28/23		
Diesel Range Organics (C10-C28)	244	25.0	250	ND	97.6	38-132			
Surrogate: n-Nonane	48.6		50.0		97.2	50-200			

Matrix Spike Dup (2348044-MSD1)					Source: E311208-01		Prepared: 11/28/23 Analyzed: 11/28/23		
Diesel Range Organics (C10-C28)	243	25.0	250	ND	97.4	38-132	0.204	20	
Surrogate: n-Nonane	48.5		50.0		97.0	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:10:13PM

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 (2348046-BLK1)					Prepared: 11/28/23 Analyzed: 11/29/23				
Chloride	ND	20.0							
LCS (2348046-BS1)					Prepared: 11/28/23 Analyzed: 11/29/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2348046-MS1)					Source: E311157-03		Prepared: 11/28/23 Analyzed: 11/29/23		
Chloride	920	20.0	250	632	115	80-120			
Matrix Spike Dup (2348046-MSD1)					Source: E311157-03		Prepared: 11/28/23 Analyzed: 11/29/23		
Chloride	892	20.0	250	632	104	80-120	3.12	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/23 16:10

- ND Analyte NOT DETECTED at or above the reporting limit
 - NR Not Reported
 - RPD Relative Percent Difference
 - DNI Did Not Ignite
 - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 1

Client: <u>MOCK Energy</u>					Bill To					Lab Use Only					TAT				EPA Program																																			
Project: <u>West Mount #1A</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E 311208</u>					Job Number <u>20046-000</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>																																																	
City, State, Zip					Phone: <u>575-393-9048</u>					DRO/DRO by 8015					GRO/DRO by 8015					BTX by 8021					VOC by 8260					Metals 6010					Chloride 300.0					BGDOC NM					BGDOC TX					State				
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>																																																	
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM					NM					CO					UT					AZ					TX																								
Report due by:																																																						
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Remarks																																																
	11/21/23	S	1	SP 1 - 6'	1																																																	
		S	1	SP 2 - 10'	2																																																	
		S	1	SP 3 - 10'	3																																																	
	11/21/23	S	1	SP 4 - 12'	4																																																	

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) <u>Juan Solis</u>	Date <u>11/21/23</u>	Time	Received by: (Signature) <u>Michelle Gayle</u>	Date <u>11-27-23</u>	Time <u>1315</u>	Lab Use Only Received on ice: <u>Y</u> / N
Relinquished by: (Signature) <u>Michelle Gayle</u>	Date <u>11-27-23</u>	Time <u>1630</u>	Received by: (Signature) <u>Andrew Mueso</u>	Date <u>11-27-23</u>	Time <u>1700</u>	T1 _____ T2 _____ T3 _____
Relinquished by: (Signature) <u>Andrew Mueso</u>	Date <u>11-27-23</u>	Time <u>2245</u>	Received by: (Signature) <u>Q. Montano</u>	Date <u>11/28/23</u>	Time <u>7:30</u>	AVG Temp °C <u>4</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: 11/28/2023 9:52:58AM

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:	11/28/23 00:00	Work Order ID:	E311208
Phone:	(575) 390-6397	Date Logged In:	11/27/23 14:55	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/29/23 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.

Project manager not provided on COC per client. Natalie Gladden.

Sample 2 SP 2-8 on COC SP 2-10.

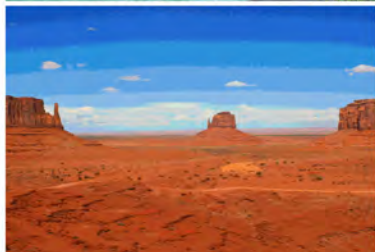
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E311209

Job Number: 20046-0001

Received: 11/28/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/29/23

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: 11/29/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E311209
Date Received: 11/28/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/28/2023 7:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 11/29/23 16:07
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
SP 5 -8'	E311209-01A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.
SP 6- 6'	E311209-02A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.
SP 7- 8'	E311209-03A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.
SP 8- 8'	E311209-04A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.
SP 9- 6'	E311209-05A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.
SP 10- 6'	E311209-06A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.
SP 11- 6'	E311209-07A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.
SP 12- 16'	E311209-08A	Soil	11/22/23	11/28/23	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:07:26PM

SP 5 -8'

E311209-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Benzene	ND	0.0250	1	11/28/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/28/23	
Toluene	ND	0.0250	1	11/28/23	11/28/23	
o-Xylene	ND	0.0250	1	11/28/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.1 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2348043	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2348046	
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:07:26PM

SP 6- 6'

E311209-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Benzene	ND	0.0250	1	11/28/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/28/23	
Toluene	ND	0.0250	1	11/28/23	11/28/23	
o-Xylene	ND	0.0250	1	11/28/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	94.8 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.7 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2348043	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>	96.4 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348046	
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 11/29/2023 4:07:26PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP 7- 8'

E311209-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Benzene	ND	0.0250	1	11/28/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/28/23	
Toluene	ND	0.0250	1	11/28/23	11/28/23	
o-Xylene	ND	0.0250	1	11/28/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	94.2 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.4 %	70-130		11/28/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2348043	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>	98.2 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348046	
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:07:26PM

SP 8- 8'

E311209-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.1 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348043
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	93.1 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348046
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 11/29/2023 4:07:26PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP 9- 6'

E311209-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	90.9 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2348038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.0 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2348043	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>	96.9 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348046	
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:07:26PM

SP 10- 6'

E311209-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.8 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.8 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348043
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	95.1 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348046
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:07:26PM

SP 11- 6'

E311209-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.9 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.4 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348043
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	95.1 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348046
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 4:07:26PM

SP 12- 16'

E311209-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.9 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348038
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348043
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/28/23	
<i>Surrogate: n-Nonane</i>						
	97.4 %	50-200		11/28/23	11/28/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348046
Chloride	ND	200	10	11/28/23	11/29/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:07:26PM

Volatile Organics by EPA 8021B

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 (2348038-BLK1) Prepared: 11/28/23 Analyzed: 11/28/23

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: 4-Bromochlorobenzene-PID	7.92		8.00		99.0	70-130			

LCS (2348038-BS1) Prepared: 11/28/23 Analyzed: 11/28/23

Benzene	5.56	0.0250	5.00		111	70-130			
Ethylbenzene	5.46	0.0250	5.00		109	70-130			
Toluene	5.53	0.0250	5.00		111	70-130			
o-Xylene	5.48	0.0250	5.00		110	70-130			
p,m-Xylene	11.1	0.0500	10.0		111	70-130			
Total Xylenes	16.6	0.0250	15.0		111	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.94		8.00		99.3	70-130			

Matrix Spike (2348038-MS1) Source: E311208-03 Prepared: 11/28/23 Analyzed: 11/28/23

Benzene	5.41	0.0250	5.00	ND	108	54-133			
Ethylbenzene	5.32	0.0250	5.00	ND	106	61-133			
Toluene	5.38	0.0250	5.00	ND	108	61-130			
o-Xylene	5.34	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131			
Total Xylenes	16.2	0.0250	15.0	ND	108	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.85		8.00		98.1	70-130			

Matrix Spike Dup (2348038-MSD1) Source: E311208-03 Prepared: 11/28/23 Analyzed: 11/28/23

Benzene	5.15	0.0250	5.00	ND	103	54-133	5.02	20	
Ethylbenzene	5.07	0.0250	5.00	ND	101	61-133	4.82	20	
Toluene	5.12	0.0250	5.00	ND	102	61-130	5.09	20	
o-Xylene	5.07	0.0250	5.00	ND	101	63-131	5.11	20	
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131	4.72	20	
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131	4.85	20	
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:07:26PM

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 (2348038-BLK1) Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.33		8.00		91.7	70-130			

LCS (2348038-BS2) Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	47.3	20.0	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.47		8.00		93.3	70-130			

Matrix Spike (2348038-MS2) Source: E311208-03 Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.49		8.00		93.6	70-130			

Matrix Spike Dup (2348038-MSD2) Source: E311208-03 Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	51.4	20.0	50.0	ND	103	70-130	0.766	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		8.00		94.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:07:26PM

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 (2348043-BLK1)					Prepared: 11/28/23 Analyzed: 11/28/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.2		50.0		100	50-200			

LCS (2348043-BS1)					Prepared: 11/28/23 Analyzed: 11/28/23				
Diesel Range Organics (C10-C28)	275	25.0	250		110	38-132			
Surrogate: n-Nonane	54.8		50.0		110	50-200			

Matrix Spike (2348043-MS1)					Source: E311209-05		Prepared: 11/28/23 Analyzed: 11/28/23		
Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	50.1		50.0		100	50-200			

Matrix Spike Dup (2348043-MSD1)					Source: E311209-05		Prepared: 11/28/23 Analyzed: 11/28/23		
Diesel Range Organics (C10-C28)	258	25.0	250	ND	103	38-132	2.29	20	
Surrogate: n-Nonane	50.3		50.0		101	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 4:07:26PM

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 (2348046-BLK1)					Prepared: 11/28/23 Analyzed: 11/29/23				
Chloride	ND	20.0							
LCS (2348046-BS1)					Prepared: 11/28/23 Analyzed: 11/29/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2348046-MS1)					Source: E311157-03		Prepared: 11/28/23 Analyzed: 11/29/23		
Chloride	920	20.0	250	632	115	80-120			
Matrix Spike Dup (2348046-MSD1)					Source: E311157-03		Prepared: 11/28/23 Analyzed: 11/29/23		
Chloride	892	20.0	250	632	104	80-120	3.12	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/23 16:07

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Chain of Custody

Client: <u>MOCK Energy</u> Project: <u>West Mount #1A</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>E 311209</u> Job Number <u>200416-0001</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/ORD by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX						
	11/22/23	S	1	SP 5 - 8'	1							X							
	S	S	S	SP 6 - 6'	2							}							
				SP 7 - 8'	3														
				SP 8 - 8'	4														
				SP 9 - 6'	5														
				SP 10 - 6'	6														
				SP 11 - 6'	7														
	11/22/23	S	1	SP 12 - 16'	8							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: John 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)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only	
Tuan Solis		11/22/23		Michelle Cayle		11-27-23	1315	Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N	
Michelle Cayle		11-27-23	1630	Andrew Mello		11-27-23	1700	T1 _____ T2 _____ T3 _____	
Andrew Mello		11-27-23	2245	Apmentene		11/28/23	7:30	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: 11/28/2023 10:01:12AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	11/28/23 07:30	Work Order ID:	E311209
Phone:	(575) 390-6397	Date Logged In:	11/27/23 14:56	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/29/23 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.

Project manager not listed on COC. Natalie Gladden.

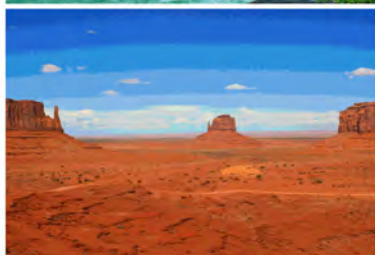
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E311211

Job Number: 20046-0001

Received: 11/28/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/29/23

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: 11/29/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E311211
Date Received: 11/28/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/28/2023 7:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/23 15:53

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 13-6'	E311211-01A	Soil	11/24/23	11/28/23	Glass Jar, 2 oz.
SP 14-6'	E311211-02A	Soil	11/24/23	11/28/23	Glass Jar, 2 oz.
SP 15-8'	E311211-03A	Soil	11/24/23	11/28/23	Glass Jar, 2 oz.
SP 16-8'	E311211-04A	Soil	11/24/23	11/28/23	Glass Jar, 2 oz.
SP 17-8'	E311211-05A	Soil	11/24/23	11/28/23	Glass Jar, 2 oz.
SP 18-6'	E311211-06A	Soil	11/24/23	11/28/23	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 3:53:23PM

SP 13-6'

E311211-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
<i>Surrogate: Bromofluorobenzene</i>	95.9 %	70-130		11/28/23	11/29/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	100 %	70-130		11/28/23	11/29/23	
<i>Surrogate: Toluene-d8</i>	111 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
<i>Surrogate: Bromofluorobenzene</i>	95.9 %	70-130		11/28/23	11/29/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	100 %	70-130		11/28/23	11/29/23	
<i>Surrogate: Toluene-d8</i>	111 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/29/23	
<i>Surrogate: n-Nonane</i>	88.5 %	50-200		11/28/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348047
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 3:53:23PM

SP 14-6'

E311211-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	112 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	112 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/29/23	
Surrogate: n-Nonane	86.6 %	50-200		11/28/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348047
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 3:53:23PM

SP 15-8'

E311211-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	97.8 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	111 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	97.8 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	111 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/29/23	
Surrogate: n-Nonane	85.2 %	50-200		11/28/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348047
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 3:53:23PM

SP 16-8'

E311211-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	96.4 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	111 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	96.4 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	111 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/29/23	
Surrogate: n-Nonane	88.1 %	50-200		11/28/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348047
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 3:53:23PM

SP 17-8'

E311211-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	98.1 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	110 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	98.1 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	110 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/29/23	
Surrogate: n-Nonane	87.5 %	50-200		11/28/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348047
Chloride	ND	200	10	11/28/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/29/2023 3:53:23PM

SP 18-6'

E311211-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Benzene	ND	0.0250	1	11/28/23	11/29/23	
Ethylbenzene	ND	0.0250	1	11/28/23	11/29/23	
Toluene	ND	0.0250	1	11/28/23	11/29/23	
o-Xylene	ND	0.0250	1	11/28/23	11/29/23	
p,m-Xylene	ND	0.0500	1	11/28/23	11/29/23	
Total Xylenes	ND	0.0250	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	96.6 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	112 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2348039
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/28/23	11/29/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		11/28/23	11/29/23	
Surrogate: 1,2-Dichloroethane-d4	96.6 %	70-130		11/28/23	11/29/23	
Surrogate: Toluene-d8	112 %	70-130		11/28/23	11/29/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348044
Diesel Range Organics (C10-C28)	ND	25.0	1	11/28/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/28/23	11/29/23	
Surrogate: n-Nonane	85.5 %	50-200		11/28/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348047
Chloride	ND	200	10	11/28/23	11/29/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 3:53:23PM

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 (2348039-BLK1)

Prepared: 11/28/23 Analyzed: 11/28/23

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	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.488		0.500		97.6	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			

LCS (2348039-BS1)

Prepared: 11/28/23 Analyzed: 11/28/23

Benzene	2.47	0.0250	2.50		98.7	70-130			
Ethylbenzene	2.44	0.0250	2.50		97.6	70-130			
Toluene	2.55	0.0250	2.50		102	70-130			
o-Xylene	2.35	0.0250	2.50		94.1	70-130			
p,m-Xylene	4.72	0.0500	5.00		94.3	70-130			
Total Xylenes	7.07	0.0250	7.50		94.3	70-130			
Surrogate: Bromofluorobenzene	0.483		0.500		96.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.6	70-130			
Surrogate: Toluene-d8	0.549		0.500		110	70-130			

Matrix Spike (2348039-MS1)

Source: E311210-06

Prepared: 11/28/23 Analyzed: 11/29/23

Benzene	2.47	0.0250	2.50	ND	99.0	48-131			
Ethylbenzene	2.42	0.0250	2.50	ND	96.7	45-135			
Toluene	2.50	0.0250	2.50	ND	99.9	48-130			
o-Xylene	2.35	0.0250	2.50	ND	94.0	43-135			
p,m-Xylene	4.74	0.0500	5.00	ND	94.7	43-135			
Total Xylenes	7.09	0.0250	7.50	ND	94.5	43-135			
Surrogate: Bromofluorobenzene	0.491		0.500		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.482		0.500		96.3	70-130			
Surrogate: Toluene-d8	0.544		0.500		109	70-130			

Matrix Spike Dup (2348039-MSD1)

Source: E311210-06

Prepared: 11/28/23 Analyzed: 11/29/23

Benzene	2.61	0.0250	2.50	ND	104	48-131	5.33	23	
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135	6.33	27	
Toluene	2.70	0.0250	2.50	ND	108	48-130	7.85	24	
o-Xylene	2.47	0.0250	2.50	ND	98.6	43-135	4.80	27	
p,m-Xylene	4.98	0.0500	5.00	ND	99.7	43-135	5.12	27	
Total Xylenes	7.45	0.0250	7.50	ND	99.3	43-135	5.02	27	
Surrogate: Bromofluorobenzene	0.475		0.500		95.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.547		0.500		109	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported: 11/29/2023 3:53:23PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

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 (2348039-BLK1)

Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.488		0.500		97.6	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			

LCS (2348039-BS2)

Prepared: 11/28/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	51.8	20.0	50.0		104	70-130			
Surrogate: Bromofluorobenzene	0.492		0.500		98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.569		0.500		114	70-130			

Matrix Spike (2348039-MS2)

Source: E311210-06

Prepared: 11/28/23 Analyzed: 11/29/23

Gasoline Range Organics (C6-C10)	54.0	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.3	70-130			
Surrogate: Toluene-d8	0.563		0.500		113	70-130			

Matrix Spike Dup (2348039-MSD2)

Source: E311210-06

Prepared: 11/28/23 Analyzed: 11/29/23

Gasoline Range Organics (C6-C10)	51.2	20.0	50.0	ND	102	70-130	5.26	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.2	70-130			
Surrogate: Toluene-d8	0.563		0.500		113	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 3:53:23PM

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 (2348044-BLK1)					Prepared: 11/28/23 Analyzed: 11/28/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.4		50.0		96.9	50-200			

LCS (2348044-BS1)					Prepared: 11/28/23 Analyzed: 11/28/23				
Diesel Range Organics (C10-C28)	247	25.0	250		98.7	38-132			
Surrogate: n-Nonane	49.9		50.0		99.9	50-200			

Matrix Spike (2348044-MS1)					Source: E311208-01		Prepared: 11/28/23 Analyzed: 11/28/23		
Diesel Range Organics (C10-C28)	244	25.0	250	ND	97.6	38-132			
Surrogate: n-Nonane	48.6		50.0		97.2	50-200			

Matrix Spike Dup (2348044-MSD1)					Source: E311208-01		Prepared: 11/28/23 Analyzed: 11/28/23		
Diesel Range Organics (C10-C28)	243	25.0	250	ND	97.4	38-132	0.204	20	
Surrogate: n-Nonane	48.5		50.0		97.0	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/2023 3:53:23PM

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 (2348047-BLK1)					Prepared: 11/28/23 Analyzed: 11/28/23				
Chloride	ND	20.0							
LCS (2348047-BS1)					Prepared: 11/28/23 Analyzed: 11/29/23				
Chloride	250	20.0	250		99.9	90-110			
Matrix Spike (2348047-MS1)					Source: E311210-03		Prepared: 11/28/23 Analyzed: 11/28/23		
Chloride	418	20.0	250	164	102	80-120			
Matrix Spike Dup (2348047-MSD1)					Source: E311210-03		Prepared: 11/28/23 Analyzed: 11/28/23		
Chloride	409	20.0	250	164	98.4	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/29/23 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.



Chain of Custody



Envirotech Analytical Laboratory

Printed: 11/28/2023 10:15:37AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	11/28/23 07:30	Work Order ID:	E311211
Phone:	(575) 390-6397	Date Logged In:	11/27/23 14:57	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/29/23 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? 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 InstructionComments/Resolution

Time sampled not provided on COC per client.

Project manager not on COC per client.
Natalie Gladden

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 #1A

Work Order: E311216

Job Number: 20046-0001

Received: 11/29/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/30/23

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: 11/30/23



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount #1A
Workorder: E311216
Date Received: 11/29/2023 8:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/29/2023 8:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/23 15:31

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 19-6'	E311216-01A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 20-6'	E311216-02A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 21-6'	E311216-03A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 22-6'	E311216-04A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 23-6'	E311216-05A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 24-6'	E311216-06A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 25-6'	E311216-07A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 26-6'	E311216-08A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 27-6'	E311216-09A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.
SP 28-6'	E311216-10A	Soil	11/27/23	11/29/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/30/2023 3:31:13PM
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SP 19-6'

E311216-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2348048	
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.5 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2348048	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.1 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2348064	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/30/23	
<i>Surrogate: n-Nonane</i>	79.1 %	50-200		11/29/23	11/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348054	
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 20-6'

E311216-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.8 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.2 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/29/23	
<i>Surrogate: n-Nonane</i>						
	79.6 %	50-200		11/29/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 21-6'

E311216-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.3 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.1 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/29/23	
<i>Surrogate: n-Nonane</i>						
	81.2 %	50-200		11/29/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 22-6'

E311216-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.9 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.1 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/29/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/29/23	
<i>Surrogate: n-Nonane</i>						
	85.8 %	50-200		11/29/23	11/29/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 23-6'

E311216-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2348048	
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.7 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2348048	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	91.9 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2348064	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/30/23	
<i>Surrogate: n-Nonane</i>	79.1 %	50-200		11/29/23	11/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348054	
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 24-6'

E311216-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.4 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.2 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/30/23	
<i>Surrogate: n-Nonane</i>						
	81.9 %	50-200		11/29/23	11/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 25-6'

E311216-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.7 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/30/23	
<i>Surrogate: n-Nonane</i>						
	80.2 %	50-200		11/29/23	11/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 26-6'

E311216-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.7 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.3 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/30/23	
<i>Surrogate: n-Nonane</i>						
	83.0 %	50-200		11/29/23	11/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 27-6'

E311216-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.0 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.8 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/30/23	
<i>Surrogate: n-Nonane</i>						
	81.3 %	50-200		11/29/23	11/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/30/2023 3:31:13PM

SP 28-6'

E311216-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Benzene	ND	0.0250	1	11/29/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/29/23	11/30/23	
Toluene	ND	0.0250	1	11/29/23	11/30/23	
o-Xylene	ND	0.0250	1	11/29/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/29/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/29/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.5 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348048
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/29/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		11/29/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348064
Diesel Range Organics (C10-C28)	ND	25.0	1	11/29/23	11/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/29/23	11/30/23	
<i>Surrogate: n-Nonane</i>						
	80.8 %	50-200		11/29/23	11/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348054
Chloride	ND	200	10	11/29/23	11/29/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/30/2023 3:31:13PM

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 (2348048-BLK1)Prepared: 11/29/23 Analyzed: 11/30/23

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: 4-Bromochlorobenzene-PID	7.52		8.00		94.0	70-130			

LCS (2348048-BS1)Prepared: 11/29/23 Analyzed: 11/30/23

Benzene	5.41	0.0250	5.00		108	70-130			
Ethylbenzene	5.30	0.0250	5.00		106	70-130			
Toluene	5.37	0.0250	5.00		107	70-130			
o-Xylene	5.30	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	7.44		8.00		93.0	70-130			

Matrix Spike (2348048-MS1)Source: E311216-04Prepared: 11/29/23 Analyzed: 11/30/23

Benzene	5.26	0.0250	5.00	ND	105	54-133			
Ethylbenzene	5.15	0.0250	5.00	ND	103	61-133			
Toluene	5.23	0.0250	5.00	ND	105	61-130			
o-Xylene	5.17	0.0250	5.00	ND	103	63-131			
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131			
Total Xylenes	15.7	0.0250	15.0	ND	104	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.39		8.00		92.4	70-130			

Matrix Spike Dup (2348048-MSD1)Source: E311216-04Prepared: 11/29/23 Analyzed: 11/30/23

Benzene	5.30	0.0250	5.00	ND	106	54-133	0.751	20	
Ethylbenzene	5.20	0.0250	5.00	ND	104	61-133	0.873	20	
Toluene	5.27	0.0250	5.00	ND	105	61-130	0.659	20	
o-Xylene	5.19	0.0250	5.00	ND	104	63-131	0.541	20	
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131	0.546	20	
Total Xylenes	15.7	0.0250	15.0	ND	105	63-131	0.544	20	
Surrogate: 4-Bromochlorobenzene-PID	7.34		8.00		91.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/30/2023 3:31:13PM

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 (2348048-BLK1) Prepared: 11/29/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.2	70-130			

LCS (2348048-BS2) Prepared: 11/29/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	55.0	20.0	50.0		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.51		8.00		93.9	70-130			

Matrix Spike (2348048-MS2) Source: E311216-04 Prepared: 11/29/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	55.9	20.0	50.0	ND	112	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.49		8.00		93.6	70-130			

Matrix Spike Dup (2348048-MSD2) Source: E311216-04 Prepared: 11/29/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	54.5	20.0	50.0	ND	109	70-130	2.47	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.57		8.00		94.6	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/30/2023 3:31:13PM

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 (2348064-BLK1)					Prepared: 11/29/23 Analyzed: 11/29/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	40.9		50.0		81.8	50-200			

LCS (2348064-BS1)					Prepared: 11/29/23 Analyzed: 11/29/23				
Diesel Range Organics (C10-C28)	215	25.0	250		86.1	38-132			
Surrogate: n-Nonane	41.3		50.0		82.7	50-200			

Matrix Spike (2348064-MS1)					Source: E311134-06		Prepared: 11/29/23 Analyzed: 11/29/23		
Diesel Range Organics (C10-C28)	991	125	250	823	67.2	38-132			
Surrogate: n-Nonane	42.4		50.0		84.7	50-200			

Matrix Spike Dup (2348064-MSD1)					Source: E311134-06		Prepared: 11/29/23 Analyzed: 11/29/23		
Diesel Range Organics (C10-C28)	1040	125	250	823	87.9	38-132	5.10	20	
Surrogate: n-Nonane	44.8		50.0		89.6	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/30/2023 3:31:13PM

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 (2348054-BLK1)					Prepared: 11/29/23 Analyzed: 11/29/23				
Chloride	ND	20.0							
LCS (2348054-BS1)					Prepared: 11/29/23 Analyzed: 11/29/23				
Chloride	245	20.0	250		97.8	90-110			
Matrix Spike (2348054-MS1)					Source: E311216-02		Prepared: 11/29/23 Analyzed: 11/29/23		
Chloride	243	200	250	ND	97.4	80-120			
Matrix Spike Dup (2348054-MSD1)					Source: E311216-02		Prepared: 11/29/23 Analyzed: 11/29/23		
Chloride	248	200	250	ND	99.4	80-120	2.03	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/30/23 15:31

- 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>MACM Energy</u>					Bill To					Lab Use Only					TAT				EPA Program					
Project: <u>West Mount #1A</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E311216</u>					Job Number <u>2004100001</u>				1D	2D	3D	Standard	CWA	SDWA
Project Manager:					Address: <u>2724 NW COUNTY RD</u>					Analysis and Method														
Address:					City, State, Zip <u>HOBBS, NM 88240</u>																		RCRA	
City, State, Zip					Phone: <u>575-393-9048</u>														State					
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>														NM CO UT AZ TX					
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM														Remarks					
Report due by:																								

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8015	VOC by 8260	Metals 6010	Chloride 300.0	BDOC NM	BDOC TX	Remarks
	11/27/23	S	1	SP 19 - 6'	1							X		
				SP 20 - 6'	2									
				SP 21 - 6'	3									
				SP 22 - 6'	4									
				SP 23 - 6'	5									
				SP 24 - 6'	6									
				SP 25 - 6'	7									
				SP 26 - 6'	8									
				SP 27 - 6'	9									
	11/27/23	S	1	SP 28 - 6'	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)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
<u>Juan Solis</u>	11/27/23		<u>Michelle Cough</u>	11-28-23	1345	Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N
<u>Michelle Cough</u>	11-28-23	1700	<u>Andrew Hasso</u>	11-28-23	1730	T1 _____ T2 _____ T3 _____
<u>Andrew Hasso</u>	11-28-23	2345	<u>Andrew Hasso</u>	11-29-23	830	AVG Temp °C <u>4</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: 11/29/2023 1:56:19PM

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:	11/29/23 08:30	Work Order ID:	E311216
Phone:	(575) 390-6397	Date Logged In:	11/28/23 15:38	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	11/30/23 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

Project Manager Natalie Gladden and time sampled is not provided 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

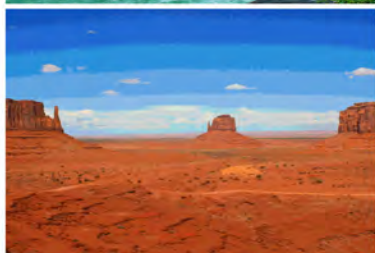
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E311227

Job Number: 20046-0001

Received: 11/30/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/4/23

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: 12/4/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E311227
Date Received: 11/30/2023 7:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/04/23 13:51
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1 -2	E311227-01A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW2 -2	E311227-02A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW3 -2	E311227-03A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW4 -2	E311227-04A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW5 -2	E311227-05A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW6 -2	E311227-06A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW7 -2	E311227-07A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW8 -2	E311227-08A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW9 -2	E311227-09A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW10 -2	E311227-10A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW11 -2	E311227-11A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW12 -2	E311227-12A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW13 -2	E311227-13A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW14 -2	E311227-14A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.
SW15 -2	E311227-15A	Soil	11/28/23	11/30/23	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW1 -2

E311227-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
Surrogate: 4-Bromochlorobenzene-PID	95.2 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.5 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
Surrogate: n-Nonane	91.2 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	139	20.0	1	11/30/23	11/30/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 12/4/2023 1:51:16PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW2 -2

E311227-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2348075	
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	<i>96.7 %</i>	<i>70-130</i>		<i>11/30/23</i>	<i>11/30/23</i>	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2348075	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	<i>90.9 %</i>	<i>70-130</i>		<i>11/30/23</i>	<i>11/30/23</i>	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2348083	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>	<i>92.7 %</i>	<i>50-200</i>		<i>11/30/23</i>	<i>12/01/23</i>	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348082	
Chloride	22.9	20.0	1	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW3 -2

E311227-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.5 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.1 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	89.8 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	143	40.0	2	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW4 -2

E311227-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.9 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.4 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	80.6 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	150	40.0	2	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW5 -2

E311227-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	77.6 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	143	20.0	1	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW6 -2

E311227-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.5 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	73.3 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	221	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW7 -2

E311227-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.5 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	86.4 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	214	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW8 -2

E311227-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	87.9 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	221	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW9 -2

E311227-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.8 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	86.1 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	224	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW10 -2

E311227-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	94.1 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	ND	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW11 -2

E311227-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.2 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.7 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	93.8 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	ND	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW12 -2

E311227-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	93.7 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	ND	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 12/4/2023 1:51:16PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW13 -2

E311227-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2348075	
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	<i>96.8 %</i>	<i>70-130</i>		<i>11/30/23</i>	<i>11/30/23</i>	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2348075	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	<i>93.1 %</i>	<i>70-130</i>		<i>11/30/23</i>	<i>11/30/23</i>	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2348083	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>	<i>80.3 %</i>	<i>50-200</i>		<i>11/30/23</i>	<i>12/01/23</i>	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348082	
Chloride	ND	20.0	1	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW14 -2

E311227-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.7 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	80.0 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	ND	200	10	11/30/23	11/30/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 1:51:16PM

SW15 -2

E311227-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Benzene	ND	0.0250	1	11/30/23	11/30/23	
Ethylbenzene	ND	0.0250	1	11/30/23	11/30/23	
Toluene	ND	0.0250	1	11/30/23	11/30/23	
o-Xylene	ND	0.0250	1	11/30/23	11/30/23	
p,m-Xylene	ND	0.0500	1	11/30/23	11/30/23	
Total Xylenes	ND	0.0250	1	11/30/23	11/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348075
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/30/23	11/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %	70-130		11/30/23	11/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2348083
Diesel Range Organics (C10-C28)	ND	25.0	1	11/30/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/30/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	77.8 %	50-200		11/30/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348082
Chloride	ND	200	10	11/30/23	11/30/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 1:51:16PM

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 (2348075-BLK1)

Prepared: 11/30/23 Analyzed: 11/30/23

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: 4-Bromochlorobenzene-PID	7.61		8.00		95.1	70-130			

LCS (2348075-BS1)

Prepared: 11/30/23 Analyzed: 11/30/23

Benzene	5.34	0.0250	5.00		107	70-130			
Ethylbenzene	5.25	0.0250	5.00		105	70-130			
Toluene	5.31	0.0250	5.00		106	70-130			
o-Xylene	5.28	0.0250	5.00		105	70-130			
p,m-Xylene	10.7	0.0500	10.0		107	70-130			
Total Xylenes	16.0	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.71		8.00		96.4	70-130			

Matrix Spike (2348075-MS1)

Source: E311227-09

Prepared: 11/30/23 Analyzed: 11/30/23

Benzene	5.37	0.0250	5.00	ND	107	54-133			
Ethylbenzene	5.31	0.0250	5.00	ND	106	61-133			
Toluene	5.35	0.0250	5.00	ND	107	61-130			
o-Xylene	5.34	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131			
Total Xylenes	16.1	0.0250	15.0	ND	108	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			

Matrix Spike Dup (2348075-MSD1)

Source: E311227-09

Prepared: 11/30/23 Analyzed: 11/30/23

Benzene	5.35	0.0250	5.00	ND	107	54-133	0.481	20	
Ethylbenzene	5.29	0.0250	5.00	ND	106	61-133	0.447	20	
Toluene	5.34	0.0250	5.00	ND	107	61-130	0.229	20	
o-Xylene	5.31	0.0250	5.00	ND	106	63-131	0.516	20	
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131	0.345	20	
Total Xylenes	16.1	0.0250	15.0	ND	107	63-131	0.402	20	
Surrogate: 4-Bromochlorobenzene-PID	7.64		8.00		95.4	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 1:51:16PM

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 (2348075-BLK1) Prepared: 11/30/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.2	70-130			

LCS (2348075-BS2) Prepared: 11/30/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	51.8	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.52		8.00		94.0	70-130			

Matrix Spike (2348075-MS2) Source: E311227-09 Prepared: 11/30/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	48.7	20.0	50.0	ND	97.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.23		8.00		90.3	70-130			

Matrix Spike Dup (2348075-MSD2) Source: E311227-09 Prepared: 11/30/23 Analyzed: 11/30/23

Gasoline Range Organics (C6-C10)	49.1	20.0	50.0	ND	98.2	70-130	0.782	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.32		8.00		91.6	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 1:51:16PM

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 (2348083-BLK1)					Prepared: 11/30/23 Analyzed: 12/02/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.6		50.0		97.2	50-200			

LCS (2348083-BS1)					Prepared: 11/30/23 Analyzed: 12/02/23				
Diesel Range Organics (C10-C28)	263	25.0	250		105	38-132			
Surrogate: n-Nonane	47.2		50.0		94.4	50-200			

Matrix Spike (2348083-MS1)					Source: E311227-03		Prepared: 11/30/23 Analyzed: 12/02/23		
Diesel Range Organics (C10-C28)	281	25.0	250	ND	112	38-132			
Surrogate: n-Nonane	51.2		50.0		102	50-200			

Matrix Spike Dup (2348083-MSD1)					Source: E311227-03		Prepared: 11/30/23 Analyzed: 12/02/23		
Diesel Range Organics (C10-C28)	280	25.0	250	ND	112	38-132	0.369	20	
Surrogate: n-Nonane	50.3		50.0		101	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 1:51:16PM

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 (2348082-BLK1)					Prepared: 11/30/23 Analyzed: 11/30/23				
Chloride	ND	20.0							
LCS (2348082-BS1)					Prepared: 11/30/23 Analyzed: 11/30/23				
Chloride	247	20.0	250		98.8	90-110			
Matrix Spike (2348082-MS1)					Source: E311227-03		Prepared: 11/30/23 Analyzed: 11/30/23		
Chloride	393	40.0	250	143	99.7	80-120			
Matrix Spike Dup (2348082-MSD1)					Source: E311227-03		Prepared: 11/30/23 Analyzed: 11/30/23		
Chloride	387	40.0	250	143	97.3	80-120	1.54	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/04/23 13:51

- 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 2

Client: <u>WACC Energy</u>					Bill To					Lab Use Only				TAT				EPA Program			
Project: <u>WESTMOUNT A</u>					Attention: ENERGY STAFFING SERVICES					Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA		
Project Manager:					Address: 2724 NW COUNTY RD					<u>E311227</u>		<u>20046-000</u>			<input checked="" type="checkbox"/>						
Address:					City, State, Zip HOBBS, NM 88240					Analysis and Method											RCRA
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																
Report due by:																					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number														Remarks		
	11/28/23	S	1	SW1-2	1																
				SW2-2	2																
				SW3-2	3																
				SW4-2	4																
				SW5-2	5																
				SW6-2	6																
				SW7-2	7																
				SW8-2	8																
				SW9-2	9																
	11/28/23	S	1	SW10-2	10																
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.										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 Taruga</u>					Received by: (Signature) <u>Michelle Gault</u>					Lab Use Only											
Date: <u>11/28/23</u>					Date: <u>11-29-23</u>					Received on ice: <u>0</u> N											
Time: <u>1645</u>					Time: <u>1700</u>					T1 _____ T2 _____ T3 _____											
Relinquished by: (Signature) <u>Michelle Gault</u>					Received by: (Signature) <u>Andrew Messo</u>																
Date: <u>11-29-23</u>					Date: <u>11/30/23</u>																
Time: <u>2300</u>					Time: <u>7:30</u>					AVG Temp °C <u>4</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: 11/30/2023 7:47:31AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	11/30/23 07:30	Work Order ID:	E311227
Phone:	(575) 390-6397	Date Logged In:	11/30/23 07:43	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	12/01/23 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.

Project manager not listed on COC. Natalie Gladden.

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 #1A

Work Order: E311241

Job Number: 20046-0001

Received: 12/1/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/4/23

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: 12/4/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E311241
Date Received: 12/1/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/1/2023 7:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/04/23 15:03
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 16 -3'	E311241-01A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 17 -3'	E311241-02A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 18 -2'	E311241-03A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 19 -2'	E311241-04A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 20 -2'	E311241-05A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 21 -2'	E311241-06A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 22 -2'	E311241-07A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 23 -4'	E311241-08A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 24 -2'	E311241-09A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 25 -3'	E311241-10A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 26 -3'	E311241-11A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 27 -3'	E311241-12A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.
SW 28 -4'	E311241-13A	Soil	11/29/23	12/01/23	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 16 -3'

E311241-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
Surrogate: 4-Bromochlorobenzene-PID	91.4 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.2 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
Surrogate: n-Nonane	90.3 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	200	10	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 17 -3'

E311241-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.6 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.2 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	90.3 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	200	10	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 18 -2'

E311241-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.0 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.4 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	92.2 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	20.0	1	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 19 -2'

E311241-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.2 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.1 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	90.9 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	20.0	1	12/01/23	12/02/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 3:03:00PM

SW 20 -2'

E311241-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2348094	
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	91.5 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2348094	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	98.2 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2348098	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>	90.5 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348106	
Chloride	ND	20.0	1	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 21 -2'

E311241-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.5 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.0 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	91.9 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	20.0	1	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 22 -2'

E311241-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.4 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.8 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	92.9 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	20.0	1	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 23 -4'

E311241-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.4 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	101 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	91.0 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	200	10	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 24 -2'

E311241-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.1 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.7 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	87.4 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	200	10	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 25 -3'

E311241-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.9 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.5 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	88.6 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	200	10	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 26 -3'

E311241-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.9 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.1 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	91.2 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	200	10	12/01/23	12/02/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/4/2023 3:03:00PM

SW 27 -3'

E311241-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.2 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2348094
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.1 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2348098
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>						
	88.1 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2348106
Chloride	ND	200	10	12/01/23	12/02/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 3:03:00PM

SW 28 -4'

E311241-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2348094	
Benzene	ND	0.0250	1	12/01/23	12/03/23	
Ethylbenzene	ND	0.0250	1	12/01/23	12/03/23	
Toluene	ND	0.0250	1	12/01/23	12/03/23	
o-Xylene	ND	0.0250	1	12/01/23	12/03/23	
p,m-Xylene	ND	0.0500	1	12/01/23	12/03/23	
Total Xylenes	ND	0.0250	1	12/01/23	12/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.5 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2348094	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/01/23	12/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	96.6 %	70-130		12/01/23	12/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2348098	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/01/23	12/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/01/23	12/01/23	
<i>Surrogate: n-Nonane</i>	88.5 %	50-200		12/01/23	12/01/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2348106	
Chloride	ND	200	10	12/01/23	12/02/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 3:03:00PM

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 (2348094-BLK1)

Prepared: 12/01/23 Analyzed: 12/03/23

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: 4-Bromochlorobenzene-PID	7.45		8.00		93.1	70-130			

LCS (2348094-BS1)

Prepared: 12/01/23 Analyzed: 12/03/23

Benzene	5.08	0.0250	5.00		102	70-130			
Ethylbenzene	4.98	0.0250	5.00		99.6	70-130			
Toluene	5.05	0.0250	5.00		101	70-130			
o-Xylene	4.99	0.0250	5.00		99.7	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.28		8.00		91.0	70-130			

Matrix Spike (2348094-MS1)

Source: E311241-03

Prepared: 12/01/23 Analyzed: 12/03/23

Benzene	5.09	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.99	0.0250	5.00	ND	99.7	61-133			
Toluene	5.06	0.0250	5.00	ND	101	61-130			
o-Xylene	4.99	0.0250	5.00	ND	99.9	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	7.26		8.00		90.7	70-130			

Matrix Spike Dup (2348094-MSD1)

Source: E311241-03

Prepared: 12/01/23 Analyzed: 12/03/23

Benzene	5.01	0.0250	5.00	ND	100	54-133	1.42	20	
Ethylbenzene	4.92	0.0250	5.00	ND	98.5	61-133	1.28	20	
Toluene	4.99	0.0250	5.00	ND	99.8	61-130	1.34	20	
o-Xylene	4.92	0.0250	5.00	ND	98.4	63-131	1.52	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	1.11	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.5	63-131	1.25	20	
Surrogate: 4-Bromochlorobenzene-PID	7.42		8.00		92.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 3:03:00PM

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 (2348094-BLK1) Prepared: 12/01/23 Analyzed: 12/03/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.89		8.00		98.6	70-130			

LCS (2348094-BS2) Prepared: 12/01/23 Analyzed: 12/03/23

Gasoline Range Organics (C6-C10)	52.6	20.0	50.0		105	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.95		8.00		99.4	70-130			

Matrix Spike (2348094-MS2) Source: E311241-03 Prepared: 12/01/23 Analyzed: 12/03/23

Gasoline Range Organics (C6-C10)	54.4	20.0	50.0	ND	109	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.90		8.00		98.7	70-130			

Matrix Spike Dup (2348094-MSD2) Source: E311241-03 Prepared: 12/01/23 Analyzed: 12/03/23

Gasoline Range Organics (C6-C10)	52.6	20.0	50.0	ND	105	70-130	3.31	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.02		8.00		100	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 3:03:00PM

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 (2348098-BLK1)					Prepared: 12/01/23 Analyzed: 12/01/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.5		50.0		93.1	50-200			

LCS (2348098-BS1)					Prepared: 12/01/23 Analyzed: 12/01/23				
Diesel Range Organics (C10-C28)	277	25.0	250		111	38-132			
Surrogate: n-Nonane	53.2		50.0		106	50-200			

Matrix Spike (2348098-MS1)					Source: E311240-03		Prepared: 12/01/23 Analyzed: 12/01/23		
Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132			
Surrogate: n-Nonane	49.1		50.0		98.2	50-200			

Matrix Spike Dup (2348098-MSD1)					Source: E311240-03		Prepared: 12/01/23 Analyzed: 12/01/23		
Diesel Range Organics (C10-C28)	258	25.0	250	ND	103	38-132	1.13	20	
Surrogate: n-Nonane	48.4		50.0		96.7	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/4/2023 3:03:00PM

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 (2348106-BLK1)					Prepared: 12/01/23 Analyzed: 12/01/23				
Chloride	ND	20.0							
LCS (2348106-BS1)					Prepared: 12/01/23 Analyzed: 12/01/23				
Chloride	249	20.0	250		99.7	90-110			
Matrix Spike (2348106-MS1)					Source: E311240-01		Prepared: 12/01/23 Analyzed: 12/01/23		
Chloride	345	20.0	250	90.7	102	80-120			
Matrix Spike Dup (2348106-MSD1)					Source: E311240-01		Prepared: 12/01/23 Analyzed: 12/02/23		
Chloride	338	20.0	250	90.7	98.7	80-120	2.14	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/04/23 15:03

- 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 2

Client: <u>MOCK Energy</u>					Bill To					Lab Use Only					TAT				EPA Program					
Project: <u>West Mount #1A</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E-311241</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>																			
City, State, Zip					Phone: <u>575-393-9048</u>					DRO/DRO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 3000					BGDOC NM BGDOC TX				State					
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>														NM			CO	UT	AZ
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM														Remarks					
Report due by:																								
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number																			
	11/29/23	S	1	Sw 16 - 3'	1																			
				Sw 17 - 3'	2																			
				Sw 18 - 2'	3																			
				Sw 19 - 2'	4																			
				Sw 20 - 2'	5																			
				Sw 21 - 2'	6																			
				Sw 22 - 2'	7																			
				Sw 23 - 4'	8																			
				Sw 24 - 2'	9																			
	11/29/23	S	1	Sw 25 - 3'	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

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
<u>Juan Solis</u>	11/29/23	1300	<u>Carrie De La Cruz</u>	11/30/23	1300	Received on ice: <u>Y</u> / N
<u>Carrie De La Cruz</u>	11/30/23	1730	<u>Andrew Hulse</u>	11/30/23	1800	T1 _____ T2 _____ T3 _____
<u>Andrew Hulse</u>	11/30/23	2400	<u>Green the</u>	12/1/23	7:30	AVG Temp °C <u>4</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

[illegible]

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.

Sample by: John 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) Joan Solis	Date 11/29/23	Time 1300	Received by: (Signature) Camelton Parker	Date 11-30-2023	Time 1300	Lab Use Only Y / N
Relinquished by: (Signature) Camelton Parker	Date 11-30-2023	Time 1730	Received by: (Signature) Andrew Moss	Date 11-30-23	Time 1800	T1 _____ T2 _____ T3 _____
Relinquished by: (Signature) Andrew Moss	Date 11-30-23	Time 2400	Received by: (Signature) Omonteno	Date 12/1/23	Time 7:30	AVG Temp °C 4
Sample Matrix: S - Soil, Sd - Solid, Sl - 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: 12/1/2023 8:55:38AM

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: 12/01/23 07:30	Work Order ID: E311241
Phone: (575) 390-6397	Date Logged In: 11/30/23 14:16	Logged In By: Jordan Montano
Email: Natalie@energystaffingllc.com	Due Date: 12/04/23 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.

Project manager not listed on COC. Natalie Gladden.

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 #1A

Work Order: E312002

Job Number: 20046-0001

Received: 12/4/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/5/23

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: 12/5/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E312002
Date Received: 12/4/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/4/2023 7:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/05/23 13:21
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW29-2'	E312002-01A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW30-2'	E312002-02A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW31-2'	E312002-03A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW32-4'	E312002-04A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW33-2'	E312002-05A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW34-2'	E312002-06A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW35-2'	E312002-07A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW36-2'	E312002-08A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW37-2'	E312002-09A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW38-2'	E312002-10A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW39-2'	E312002-11A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.
SW40-2'	E312002-12A	Soil	11/30/23	12/04/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/5/2023 1:21:12PM
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SW29-2'

E312002-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2349004	
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	97.5 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2349004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.7 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2349007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>	93.4 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2349008	
Chloride	ND	20.0	1	12/04/23	12/04/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW30-2'

E312002-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.7 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	92.0 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	199	20.0	1	12/04/23	12/04/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW31-2'

E312002-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	91.3 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/04/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW32-4'

E312002-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.8 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	88.6 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/04/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW33-2'

E312002-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.6 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	86.8 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/04/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW34-2'

E312002-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.3 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	89.1 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/04/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW35-2'

E312002-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.5 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	90.6 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/05/23	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 12/5/2023 1:21:12PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW36-2'

E312002-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2349004	
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	97.1 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2349004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.3 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2349007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>	91.8 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2349008	
Chloride	ND	20.0	1	12/04/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW37-2'

E312002-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.6 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.3 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	94.0 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW38-2'

E312002-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.4 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	93.6 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW39-2'

E312002-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2349004	
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	94.6 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2349004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.5 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2349007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>	93.0 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2349008	
Chloride	ND	20.0	1	12/04/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/5/2023 1:21:12PM

SW40-2'

E312002-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Benzene	ND	0.0250	1	12/04/23	12/04/23	
Ethylbenzene	ND	0.0250	1	12/04/23	12/04/23	
Toluene	ND	0.0250	1	12/04/23	12/04/23	
o-Xylene	ND	0.0250	1	12/04/23	12/04/23	
p,m-Xylene	ND	0.0500	1	12/04/23	12/04/23	
Total Xylenes	ND	0.0250	1	12/04/23	12/04/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.1 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349004
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/04/23	12/04/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		12/04/23	12/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2349007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/04/23	12/04/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/04/23	12/04/23	
<i>Surrogate: n-Nonane</i>						
	93.1 %	50-200		12/04/23	12/04/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349008
Chloride	ND	20.0	1	12/04/23	12/05/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/5/2023 1:21:12PM

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 (2349004-BLK1)

Prepared: 12/04/23 Analyzed: 12/04/23

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: 4-Bromochlorobenzene-PID	7.69		8.00		96.1	70-130			

LCS (2349004-BS1)

Prepared: 12/04/23 Analyzed: 12/04/23

Benzene	4.88	0.0250	5.00		97.6	70-130			
Ethylbenzene	4.81	0.0250	5.00		96.2	70-130			
Toluene	4.88	0.0250	5.00		97.6	70-130			
o-Xylene	4.84	0.0250	5.00		96.7	70-130			
p,m-Xylene	9.79	0.0500	10.0		97.9	70-130			
Total Xylenes	14.6	0.0250	15.0		97.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.76		8.00		97.0	70-130			

Matrix Spike (2349004-MS1)

Source: E312002-08

Prepared: 12/04/23 Analyzed: 12/04/23

Benzene	4.96	0.0250	5.00	ND	99.2	54-133			
Ethylbenzene	4.90	0.0250	5.00	ND	98.0	61-133			
Toluene	4.95	0.0250	5.00	ND	99.1	61-130			
o-Xylene	4.91	0.0250	5.00	ND	98.2	63-131			
p,m-Xylene	9.94	0.0500	10.0	ND	99.4	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.75		8.00		96.9	70-130			

Matrix Spike Dup (2349004-MSD1)

Source: E312002-08

Prepared: 12/04/23 Analyzed: 12/04/23

Benzene	5.20	0.0250	5.00	ND	104	54-133	4.81	20	
Ethylbenzene	5.15	0.0250	5.00	ND	103	61-133	4.99	20	
Toluene	5.20	0.0250	5.00	ND	104	61-130	4.79	20	
o-Xylene	5.16	0.0250	5.00	ND	103	63-131	4.91	20	
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131	5.34	20	
Total Xylenes	15.6	0.0250	15.0	ND	104	63-131	5.20	20	
Surrogate: 4-Bromochlorobenzene-PID	7.71		8.00		96.4	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/5/2023 1:21:12PM

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 (2349004-BLK1) Prepared: 12/04/23 Analyzed: 12/04/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.75		8.00		96.8	70-130			

LCS (2349004-BS2) Prepared: 12/04/23 Analyzed: 12/04/23

Gasoline Range Organics (C6-C10)	50.7	20.0	50.0		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.69		8.00		96.1	70-130			

Matrix Spike (2349004-MS2) Source: E312002-08 Prepared: 12/04/23 Analyzed: 12/04/23

Gasoline Range Organics (C6-C10)	51.7	20.0	50.0	ND	103	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.3	70-130			

Matrix Spike Dup (2349004-MSD2) Source: E312002-08 Prepared: 12/04/23 Analyzed: 12/04/23

Gasoline Range Organics (C6-C10)	49.2	20.0	50.0	ND	98.4	70-130	4.90	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.3	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/5/2023 1:21:12PM

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 (2349007-BLK1)					Prepared: 12/04/23 Analyzed: 12/04/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.9		50.0		93.8	50-200			

LCS (2349007-BS1)					Prepared: 12/04/23 Analyzed: 12/04/23				
Diesel Range Organics (C10-C28)	245	25.0	250		97.8	38-132			
Surrogate: n-Nonane	45.2		50.0		90.3	50-200			

Matrix Spike (2349007-MS1)					Source: E312001-03		Prepared: 12/04/23 Analyzed: 12/04/23		
Diesel Range Organics (C10-C28)	264	25.0	250	ND	105	38-132			
Surrogate: n-Nonane	48.7		50.0		97.4	50-200			

Matrix Spike Dup (2349007-MSD1)					Source: E312001-03		Prepared: 12/04/23 Analyzed: 12/04/23		
Diesel Range Organics (C10-C28)	271	25.0	250	ND	109	38-132	2.90	20	
Surrogate: n-Nonane	49.9		50.0		99.8	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/5/2023 1:21:12PM

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 (2349008-BLK1)					Prepared: 12/04/23 Analyzed: 12/04/23				
Chloride	ND	20.0							
LCS (2349008-BS1)					Prepared: 12/04/23 Analyzed: 12/04/23				
Chloride	246	20.0	250		98.2	90-110			
Matrix Spike (2349008-MS1)					Source: E312002-01		Prepared: 12/04/23 Analyzed: 12/04/23		
Chloride	251	20.0	250	ND	100	80-120			
Matrix Spike Dup (2349008-MSD1)					Source: E312002-01		Prepared: 12/04/23 Analyzed: 12/04/23		
Chloride	252	20.0	250	ND	101	80-120	0.472	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/05/23 13:21

- 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 2

Client: <u>Mercy Energy</u>					Bill To					Lab Use Only					TAT				EPA Program					
Project: <u>Westman 1A</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E 312002</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>																			
City, State, Zip					Phone: <u>575-393-9048</u>																			
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>																			
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM																			
Report due by:																								
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	State					Remarks					
	11/30/23	S	1	SW29-2	1							X		NM CO UT AZ TX										
				SW30-2	2																			
				SW31-2	3																			
				SW32-4	4																			
				SW33-2	5																			
				SW34-2	6																			
				SW35-2	7																			
				SW36-2	8																			
				SW37-2	9																			
	11/30/23	S	1	SW38-2	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 Toruaga</u>					Date <u>11/30/23</u> Time <u>1300</u>					Received by: (Signature) <u>Carla Jimenez</u>					Date <u>12-1-2023</u> Time <u>1300</u>					Lab Use Only				
Relinquished by: (Signature) <u>Carla Jimenez</u>					Date <u>12-1-23</u> Time <u>1630</u>					Received by: (Signature) <u>Andrew Wells</u>					Date <u>12-2-23</u> Time <u>1500</u>					Received on ice: <u>Y/N</u>				
Relinquished by: (Signature) <u>Andrew Wells</u>					Date <u>12-2-23</u> Time <u>2200</u>					Received by: (Signature) <u>Jimenez</u>					Date <u>12/4/23</u> Time <u>7:30</u>					T1 _____ T2 _____ T3 _____				
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA										AVG Temp °C <u>4</u>				
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+ech

Chain of Custody

[illegible]

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 Torga

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>Andri Torjaga</i>	Date 11/30/23	Time 1300	Received by: (Signature) <i>Carrie Ann Parker</i>	Date 12.1.2023	Time 1300	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N
Relinquished by: (Signature) <i>Carrie Ann Parker</i>	Date 12.1.23	Time 1630	Received by: (Signature) <i>Andrew Russo</i>	Date 12.2.23	Time 1500	
Relinquished by: (Signature) <i>Andrew Russo</i>	Date 12.2.23	Time 2200	Received by: (Signature) <i>Martino</i>	Date 12/4/23	Time 7:30	T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
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: 12/4/2023 8:11:29AM

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:	12/04/23 07:30	Work Order ID:	E312002
Phone:	(575) 390-6397	Date Logged In:	12/04/23 07:45	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	12/05/23 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: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

Time sampled not provided on COC per client.

Project Manager not listed on COC.
Natalie Gladden.

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 #1A

Work Order: E312018

Job Number: 20046-0001

Received: 12/5/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/6/23

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: 12/6/23



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount #1A
Workorder: E312018
Date Received: 12/5/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/5/2023 7:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/06/23 16:36
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW41-2'	E312018-01A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW42-2'	E312018-02A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW43-3'	E312018-03A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW44-2'	E312018-04A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW45-2'	E312018-05A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW46-3'	E312018-06A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW47-3'	E312018-07A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW48-3'	E312018-08A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW49-4'	E312018-09A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.
SW50-4'	E312018-10A	Soil	12/01/23	12/05/23	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW41-2'

E312018-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>	99.8 %	70-130		12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	101 %	70-130		12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>	93.7 %	70-130		12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>	99.8 %	70-130		12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	101 %	70-130		12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>	93.7 %	70-130		12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>	92.9 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	20.0	1	12/05/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW42-2'

E312018-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		12/05/23	12/05/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		12/05/23	12/05/23	
Surrogate: Toluene-d8	94.1 %	70-130		12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		12/05/23	12/05/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		12/05/23	12/05/23	
Surrogate: Toluene-d8	94.1 %	70-130		12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	89.0 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	20.0	1	12/05/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW43-3'

E312018-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.9 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.8 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.9 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.9 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.8 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.9 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	90.4 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	20.0	1	12/05/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW44-2'

E312018-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.6 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.1 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.6 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.1 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	91.5 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	20.0	1	12/05/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW45-2'

E312018-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	98.6 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.3 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	98.6 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.3 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	91.8 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	20.0	1	12/05/23	12/05/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW46-3'

E312018-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.3 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.2 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.3 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.2 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	92.3 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	200	10	12/05/23	12/06/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW47-3'

E312018-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	98.9 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.7 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.9 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	98.9 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.7 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.9 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	91.4 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	200	10	12/05/23	12/06/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW48-3'

E312018-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.0 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.1 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.0 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.1 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	91.8 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	200	10	12/05/23	12/06/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW49-4'

E312018-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.9 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	94.9 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	92.1 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	200	10	12/05/23	12/06/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
12/6/2023 4:36:16PM

SW50-4'

E312018-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Benzene	ND	0.0250	1	12/05/23	12/06/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/06/23	
Toluene	ND	0.0250	1	12/05/23	12/06/23	
o-Xylene	ND	0.0250	1	12/05/23	12/06/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/06/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.5 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.1 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349032
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/06/23	
Surrogate: Bromofluorobenzene	99.5 %	70-130		12/05/23	12/06/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		12/05/23	12/06/23	
Surrogate: Toluene-d8	95.1 %	70-130		12/05/23	12/06/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349042
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
Surrogate: n-Nonane	90.4 %	50-200		12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349050
Chloride	ND	200	10	12/05/23	12/06/23	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/6/2023 4:36:16PM

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 (2349032-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

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	0.492		0.500		98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.470		0.500		94.0	70-130			

LCS (2349032-BS1)

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.60	0.0250	2.50		104	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.2	70-130			
Toluene	2.46	0.0250	2.50		98.2	70-130			
o-Xylene	2.52	0.0250	2.50		101	70-130			
p,m-Xylene	4.91	0.0500	5.00		98.2	70-130			
Total Xylenes	7.43	0.0250	7.50		99.1	70-130			
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.518		0.500		104	70-130			
Surrogate: Toluene-d8	0.473		0.500		94.5	70-130			

Matrix Spike (2349032-MS1)

Source: E312018-01

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.56	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.42	0.0250	2.50	ND	96.6	45-135			
Toluene	2.39	0.0250	2.50	ND	95.6	48-130			
o-Xylene	2.51	0.0250	2.50	ND	100	43-135			
p,m-Xylene	4.89	0.0500	5.00	ND	97.7	43-135			
Total Xylenes	7.40	0.0250	7.50	ND	98.6	43-135			
Surrogate: Bromofluorobenzene	0.508		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.506		0.500		101	70-130			
Surrogate: Toluene-d8	0.472		0.500		94.4	70-130			

Matrix Spike Dup (2349032-MSD1)

Source: E312018-01

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.55	0.0250	2.50	ND	102	48-131	0.274	23	
Ethylbenzene	2.43	0.0250	2.50	ND	97.1	45-135	0.516	27	
Toluene	2.40	0.0250	2.50	ND	95.8	48-130	0.251	24	
o-Xylene	2.45	0.0250	2.50	ND	98.1	43-135	2.32	27	
p,m-Xylene	4.76	0.0500	5.00	ND	95.3	43-135	2.51	27	
Total Xylenes	7.22	0.0250	7.50	ND	96.2	43-135	2.44	27	
Surrogate: Bromofluorobenzene	0.494		0.500		98.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.469		0.500		93.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/6/2023 4:36:16PM

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 (2349032-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.492		0.500		98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.470		0.500		94.0	70-130			

LCS (2349032-BS2)

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	41.7	20.0	50.0		83.5	70-130			
Surrogate: Bromofluorobenzene	0.494		0.500		98.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.507		0.500		101	70-130			
Surrogate: Toluene-d8	0.473		0.500		94.6	70-130			

Matrix Spike (2349032-MS2)

Source: E312018-01

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	41.5	20.0	50.0	ND	83.0	70-130			
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.479		0.500		95.7	70-130			

Matrix Spike Dup (2349032-MSD2)

Source: E312018-01

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	41.7	20.0	50.0	ND	83.5	70-130	0.605	20	
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.511		0.500		102	70-130			
Surrogate: Toluene-d8	0.475		0.500		94.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/6/2023 4:36:16PM

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 (2349042-BLK1)					Prepared: 12/05/23 Analyzed: 12/06/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.4		50.0		101	50-200			

LCS (2349042-BS1)					Prepared: 12/05/23 Analyzed: 12/06/23				
Diesel Range Organics (C10-C28)	228	25.0	250		91.2	38-132			
Surrogate: n-Nonane	46.8		50.0		93.6	50-200			

Matrix Spike (2349042-MS1)					Source: E312016-04		Prepared: 12/05/23 Analyzed: 12/06/23		
Diesel Range Organics (C10-C28)	254	25.0	250	ND	102	38-132			
Surrogate: n-Nonane	48.3		50.0		96.5	50-200			

Matrix Spike Dup (2349042-MSD1)					Source: E312016-04		Prepared: 12/05/23 Analyzed: 12/06/23		
Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132	0.695	20	
Surrogate: n-Nonane	49.7		50.0		99.4	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/6/2023 4:36:16PM

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 (2349050-BLK1)					Prepared: 12/05/23 Analyzed: 12/05/23				
Chloride	ND	20.0							
LCS (2349050-BS1)					Prepared: 12/05/23 Analyzed: 12/05/23				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2349050-MS1)					Source: E312016-01		Prepared: 12/05/23 Analyzed: 12/05/23		
Chloride	275	20.0	250	ND	110	80-120			
Matrix Spike Dup (2349050-MSD1)					Source: E312016-01		Prepared: 12/05/23 Analyzed: 12/05/23		
Chloride	282	20.0	250	ND	113	80-120	2.35	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/06/23 16:36

- 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>MOCK Energy</u>					Bill To					Lab Use Only					TAT				EPA Program					
Project: <u>West Mount #1A</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E 312018</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>HOBBBS, NM 88240</u>																			
City, State, Zip					Phone: <u>575-393-9048</u>																			
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>																			
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	BGDOC TX	State				Remarks						
	12/01/23	S	1	Sw 41 - 2'	1									NM										
				Sw 42 - 2'	2									CO										
				Sw 43 - 3'	3									UT										
				Sw 44 - 2'	4									AZ										
				Sw 45 - 2'	5									TX										
				Sw 46 - 3'	6																			
				Sw 47 - 3'	7																			
				Sw 48 - 3'	8																			
				Sw 49 - 4'	9																			
	12/01/23	S	1	Sw 50 - 4'	10																			
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.										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>Juan Solis</u>					Received by: (Signature) <u>Nichelle Gayle</u>					Lab Use Only					Received on ice: <u>Y</u> / N									
Date <u>12/01/23</u>					Date <u>12-4-23</u>					Time <u>1315</u>					T1 _____ T2 _____ T3 _____									
Relinquished by: (Signature) <u>Nichelle Gayle</u>					Received by: (Signature) <u>Andrew Hesse</u>					Date <u>12-4-23</u>					Time <u>1630</u>									
Date <u>12-4-23</u>					Date <u>12-4-23</u>					Time <u>2245</u>					Time <u>7:30</u>									
Relinquished by: (Signature) <u>Andrew Hesse</u>					Received by: (Signature) <u>Montero</u>					Date <u>12-4-23</u>					Time <u>2245</u>									
Date <u>12-4-23</u>					Date <u>12-4-23</u>					Time <u>2245</u>					Time <u>2245</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: 12/5/2023 9:38:13AM

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:	12/05/23 07:30	Work Order ID:	E312018
Phone:	(575) 390-6397	Date Logged In:	12/04/23 15:17	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	12/06/23 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: CourierComments/Resolution

Project manager and time sampled are not documented 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 #1A
INITIAL AND DELINEATION SITE PHOTOS

















































FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 359106

From Natalie Gladden <natalie@energystaffingllc.com>

Date Thu 1/30/2025 11:30 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



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

Sent: Thursday, June 27, 2024 8:45 AM

To: Natalie Gladden <natalie@energystaffingllc.com>

Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 359106

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#) nAPP2327753701.

The sampling event is expected to take place:

When: 06/29/2024 @ 07:00

Where: D-36-15S-28E 0 FNL 0 FEL (32.97852,-104.09253)

Additional Information: CONTACT NATALIE GLADDEN 5753906397

Additional Instructions: 32.978520 -104.092530

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 Name: WEST MOUNT #1A**

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
COMP1	4	240	L	ND	ND	ND	ND	ND	ND
COMP2	6	240	L	ND	ND	ND	ND	ND	ND
COMP3	8	160	L	ND	ND	ND	ND	ND	ND
COMP4	8	240	L	ND	ND	ND	ND	ND	ND
COMP5	10	240	L	ND	ND	ND	ND	ND	ND
COMP6	4	320	L	ND	ND	ND	ND	ND	ND
COMP7	8	80	L	ND	ND	ND	ND	ND	29.8
COMP8	8	80	L	ND	ND	ND	ND	ND	32.6
COMP9	10	240	L	ND	ND	ND	ND	ND	101
COMP10	10	320	L	ND	ND	ND	ND	ND	241
COMP11	10	400	L	ND	ND	ND	ND	ND	ND
COMP12	10	320	L	ND	ND	ND	ND	ND	ND
COMP13	10	480	L	ND	ND	ND	ND	ND	332
COMP14	10	320	L	ND	ND	ND	ND	ND	ND
COMP15	6	320	L	ND	ND	ND	ND	ND	ND
COMP16	4	400	L	ND	ND	ND	ND	ND	250
COMP17	4	240	L	ND	ND	ND	ND	ND	ND
COMP18	4	320	L	ND	ND	ND	ND	ND	ND
COMP19	4	400	L	ND	ND	ND	ND	ND	437
COMP20	4	240	L	ND	ND	ND	ND	ND	ND
COMP21	8	80	L	ND	ND	ND	ND	ND	58
COMP22	4	400	L	ND	ND	ND	ND	ND	364

COMP23	4	320	L	ND	ND	ND	ND	ND	ND
COMP24	10	240	L	ND	ND	ND	ND	ND	ND
COMP25	10	160	L	ND	ND	ND	ND	ND	ND
COMP26	10	160	L	ND	ND	ND	ND	ND	ND
COMP27	8	240	L	ND	ND	ND	ND	ND	ND
COMP28	6	240	L	ND	ND	ND	ND	ND	ND
COMP29	6	240	L	ND	ND	ND	ND	ND	ND
COMP30	6	320	L	ND	ND	ND	ND	ND	ND
COMP31	4	400	L	ND	ND	ND	ND	ND	211
COMP32	4	320	L	ND	ND	ND	ND	ND	ND
COMP33	4	240	L	ND	ND	ND	ND	ND	ND
COMP34	4	320	L	ND	ND	ND	ND	ND	ND
COMP35	8	240	L	ND	ND	ND	ND	ND	ND
COMP36	8	400	L	ND	ND	ND	ND	ND	277
COMP37	8	160	L	ND	ND	ND	ND	ND	ND
COMP38	8	160	L	ND	ND	ND	ND	ND	ND
COMP39	8	160	L	ND	ND	ND	ND	ND	ND
COMP40	8	240	L	ND	ND	ND	ND	ND	ND
COMP41	4	160	L	ND	ND	ND	ND	ND	ND
COMP42	4	160	L	ND	ND	ND	ND	ND	ND
COMP43	4	240	L	ND	ND	ND	ND	ND	ND
COMP44	4	160	L	ND	ND	ND	ND	ND	ND
COMP45	4	160	L	ND	ND	ND	ND	ND	ND

COMP46	4	160	L	ND	ND	ND	ND	ND	ND
COMP47	4	240	L	ND	ND	ND	ND	ND	ND
COMP48	4	160	L	ND	ND	ND	ND	ND	ND
COMP49	4	160	L	ND	ND	ND	ND	ND	ND
COMP50	4	160	L	ND	ND	ND	ND	ND	ND
COMP51	4	160	L	ND	ND	ND	ND	ND	ND
COMP52	4	160	L	ND	ND	ND	ND	ND	ND
COMP53	4	160	L	ND	ND	ND	ND	ND	ND
COMP54	4	160	L	ND	ND	ND	ND	ND	ND
COMP55	4	80	L	ND	ND	ND	ND	ND	ND
COMP56	4	160	L	ND	ND	ND	ND	ND	ND
COMP57	4	160	L	ND	ND	ND	ND	ND	ND
COMP58	4	160	L	ND	ND	ND	ND	ND	ND
COMP59	4	240	L	ND	ND	ND	ND	ND	ND
COMP60	4	160	L	ND	ND	ND	ND	ND	ND
COMP61	4	80	L	ND	ND	ND	ND	ND	ND
COMP62	4	160	L	ND	ND	ND	ND	ND	ND
COMP63	4	80	L	ND	ND	ND	ND	ND	ND
COMP64	4	160	L	ND	ND	ND	ND	ND	ND
COMP65	4	160	L	ND	ND	ND	ND	ND	ND
COMP66	4	240	L	ND	ND	ND	ND	ND	157
COMP67	4	160	L	ND	ND	ND	ND	ND	ND
COMP68	4	160	L	ND	ND	ND	ND	ND	25.7
COMP69	4	160	L	ND	ND	ND	ND	ND	ND

COMP70	4	320	L	ND	ND	ND	ND	ND	193
COMP71	4	240	L	ND	ND	ND	ND	ND	ND
COMP72	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP1	8	160	L	ND	ND	ND	ND	ND	ND
SWCOMP2	8	320	L	ND	ND	ND	ND	ND	ND
SWCOMP3	8	320	L	ND	ND	ND	ND	ND	131
SWCOMP4	10	240	L	ND	ND	ND	ND	ND	ND
SWCOMP5	6	240	L	ND	ND	ND	ND	ND	ND
SWCOMP6	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP7	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP8	8	240	L	ND	ND	ND	ND	ND	ND
SWCOMP9	6	240	L	ND	ND	ND	ND	ND	ND
SWCOMP10	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP11	4	160	L	ND	ND	ND	ND	ND	23
SWCOMP12	4	320	L	ND	ND	ND	ND	ND	182
SWCOMP13	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP14	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP15	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP16	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP17	4	320	L	ND	ND	ND	ND	ND	202
SWCOMP18	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP19	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP20	4	160	L	ND	ND	ND	ND	ND	ND

SWCOMP21	4	320	L	ND	ND	ND	ND	ND	174
SWCOMP22	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP23	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP24	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP25	4	320	L	ND	ND	ND	ND	ND	198
SWCOMP26	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP27	4	320	L	ND	ND	ND	ND	ND	166
SWCOMP28	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP29	4	240	L	ND	ND	ND	ND	ND	ND
SWCOMP30	4	160	L	ND	ND	ND	ND	ND	26.4
SWCOMP31	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP32	4	320	L	ND	ND	ND	ND	ND	173
SWCOMP33	4	320	L	ND	ND	ND	ND	ND	174
SWCOMP34	4	160	L	ND	ND	ND	ND	ND	25.9
SWCOMP35	4	160	L	ND	ND	ND	ND	ND	ND
SWCOMP36	4	240	L	ND	ND	ND	ND	ND	ND

Legend

○

COMPOSITES

●

SIDEWALL COMPOSITES

▭

WEST MOUNT #1A



MACK ENERGY

WEST MOUNT #1A
COMPOSITE MAP

Legend

 COMPOSITES

 SIDEWALL COMPOSITES

 WEST MOUNT #1A



MACK ENERGY

WEST MOUNT #1A
COMPOSITE MAP

Legend

COMPOSITES

SIDEWALL COMPOSITES


WEST MOUNT #1A




MACK ENERGY


WEST MOUNT #1A
COMPOSITE MAP

Legend

 COMPOSITES



 SIDEWALL COMPOSITES



 WEST MOUNT #1A



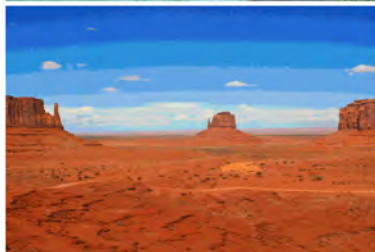
COMPANY: MACK ENERGY**LOCATION: WEST MOUNT #1A**

POINT	LATITUDE	LONGITUDE
C1	32.977514°	-104.094282°
C2	32.977551°	-104.094284°
C3	32.977581°	-104.094278°
C4	32.977610°	-104.094271°
C5	32.977637°	-104.094257°
C6	32.977664°	-104.094242°
C7	32.977698°	-104.094225°
C8	32.977730°	-104.094212°
C9	32.977757°	-104.094198°
C10	-104.094198°	-104.094179°
C11	32.977808°	-104.094160°
C12	32.977833°	-104.094135°
C13	32.977858°	-104.094101°
C14	32.977880°	-104.094072°
C15	32.977898°	-104.094041°
C16	32.977917°	-104.094014°
C17	32.977945°	-104.094001°
C18	32.977943°	-104.093964°
C19	32.977976°	-104.093948°
C20	32.977996°	-104.093923°
C21	32.978029°	-104.093930°
C22	32.978026°	-104.093890°
C23	32.978025°	-104.093851°
C24	32.978025°	-104.093814°
C25	32.978054°	-104.093801°
C26	32.978059°	-104.093858°
C27	32.978068°	-104.093906°
C28	32.978104°	-104.093882°
C29	32.978099°	-104.093850°
C30	32.978099°	-104.093820°
C31	32.978097°	-104.093790°
C32	32.978095°	-104.093762°
C33	32.978145°	-104.093772°
C34	32.978148°	-104.093812°
C35	32.978156°	-104.093846°
C36	32.978185°	-104.093803°
C37	32.978185°	-104.093760°
C38	32.978229°	-104.093819°
C39	32.978223°	-104.093776°
C40	32.978227°	-104.093738°
C41	32.978239°	-104.093701°

C42	32.978300°	-104.093638°
C43	32.978382°	-104.093574°
C44	32.978469°	-104.093560°
C45	32.978521°	-104.093527°
C46	32.978592°	-104.093479°
C47	32.978643°	-104.093451°
C48	32.978687°	-104.093402°
C49	32.978712°	-104.093350°
C50	32.978732°	-104.093312°
C51	32.978554°	-104.093493°
C52	32.978520°	-104.093481°
C53	32.978547°	-104.093449°
C54	32.978519°	-104.093411°
C55	32.978543°	-104.093390°
C56	32.978543°	-104.093344°
C57	32.978543°	-104.093304°
C58	32.978541°	-104.093262°
C59	32.978541°	-104.093222°
C60	32.978538°	-104.093179°
C61	32.978537°	-104.093131°
C62	32.978536°	-104.093083°
C63	32.978534°	-104.093041°
C64	32.978536°	-104.093007°
C65	32.978537°	-104.092975°
C66	32.978537°	-104.092942°
C67	32.978534°	-104.092894°
C68	32.978527°	-104.092836°
C69	32.978527°	-104.092789°
C70	32.978525°	-104.092741°
C71	32.978528°	-104.092697°
C72	32.978531°	-104.092650°
SWC1	32.978538°	-104.092619°
SWC2	32.978510°	-104.092838°
SWC3	32.978505°	-104.093005°
SWC4	32.978516°	-104.093197°
SWC5	32.978512°	-104.093398°
SWC6	32.978478°	-104.093545°
SWC7	32.978375°	-104.093549°
SWC8	32.978289°	-104.093641°
SWC9	32.978214°	-104.093719°
SWC10	32.978156°	-104.093749°
SWC11	32.978071°	-104.093752°
SWC12	32.978008°	-104.093802°
SWC13	32.977963°	-104.093918°

SWC14	32.977888°	-104.094020°
SWC15	32.977816°	-104.094119°
SWC16	32.977680°	-104.094207°
SWC17	32.977576°	-104.094249°
SWC18	32.977491°	-104.094283°
SWC19	32.977586°	-104.094310°
SWC20	32.977682°	-104.094259°
SWC21	32.977814°	-104.094188°
SWC22	32.977894°	-104.094098°
SWC23	32.977980°	-104.093991°
SWC24	32.978083°	-104.093914°
SWC25	32.978173°	-104.093853°
SWC26	32.978256°	-104.093839°
SWC27	32.978265°	-104.093722°
SWC28	32.978334°	-104.093608°
SWC29	32.978486°	-104.093572°
SWC30	32.978605°	-104.093495°
SWC31	32.978709°	-104.093400°
SWC32	32.978752°	-104.093292°
SWC33	32.978571°	-104.093455°
SWC34	32.978561°	-104.093200°
SWC35	32.978571°	-104.092988°
SWC36	32.978541°	-104.092778°

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E407034

Job Number: 20046-0001

Received: 7/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/10/24

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: 7/10/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407034
Date Received: 7/9/2024 11:20:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/9/2024 11:20:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 07/10/24 13:17
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
Comp 1-4'	E407034-01A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 2-6'	E407034-02A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 3-4'	E407034-03A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 4-8'	E407034-04A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 5-4'	E407034-05A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 6-4'	E407034-06A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 7-8'	E407034-07A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 8-8'	E407034-08A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 9-8'	E407034-09A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 10-8'	E407034-10A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 11-6'	E407034-11A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 12-4'	E407034-12A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 13-4'	E407034-13A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 14-4'	E407034-14A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 15-8'	E407034-15A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 16-4'	E407034-16A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 17-4'	E407034-17A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 18-4'	E407034-18A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 19-4'	E407034-19A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 20-4'	E407034-20A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 1-4'

E407034-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		86.5 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.0 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
		111 %	50-200	07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 2-6'

E407034-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.2 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.4 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 3-4'

E407034-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.6 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	83.6 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 4-8'

E407034-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.9 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 5-4'
E407034-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 6-4'

E407034-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.2 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.7 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 7-8'
E407034-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: 4-Bromochlorobenzene-PID	89.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.4 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
Surrogate: n-Nonane	110 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	29.8	20.0	1	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 8-8'

E407034-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.3 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.6 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	117 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	32.6	20.0	1	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 9-8'
E407034-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.5 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.6 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	101	100	5	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 10-8'
E407034-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.2 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	241	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 11-6'
E407034-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.9 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 12-4'

E407034-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.4 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.4 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 13-4'
E407034-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.7 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	332	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 14-4'
E407034-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.9 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.5 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 15-8'

E407034-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 16-4'

E407034-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	250	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 17-4'

E407034-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.6 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.6 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 18-4'

E407034-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.4 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 19-4'
E407034-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: 4-Bromochlorobenzene-PID	91.7 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.5 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2428019	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane	106 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428022	
Chloride	437	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 1:17:01PM

Comp 20-4'

E407034-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428030
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428019
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428022
Chloride	ND	200	10	07/09/24	07/09/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 1:17:01PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

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 (2428030-BLK1)

Prepared: 07/08/24 Analyzed: 07/08/24

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	7.04		8.00		88.1	70-130			

LCS (2428030-BS1)

Prepared: 07/08/24 Analyzed: 07/08/24

Benzene	5.37	0.0250	5.00		107	70-130			
Ethylbenzene	5.15	0.0250	5.00		103	70-130			
Toluene	5.28	0.0250	5.00		106	70-130			
o-Xylene	5.11	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		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.13		8.00		89.2	70-130			

LCS Dup (2428030-BSD1)

Prepared: 07/08/24 Analyzed: 07/08/24

Benzene	5.21	0.0250	5.00		104	70-130	3.06	20	
Ethylbenzene	5.00	0.0250	5.00		100	70-130	2.93	20	
Toluene	5.12	0.0250	5.00		102	70-130	3.06	20	
o-Xylene	4.95	0.0250	5.00		98.9	70-130	3.16	20	
p,m-Xylene	10.1	0.0500	10.0		101	70-130	2.96	20	
Total Xylenes	15.1	0.0250	15.0		101	70-130	3.03	20	
Surrogate: 4-Bromochlorobenzene-PID	7.17		8.00		89.6	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 1:17:01PM

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 (2428030-BLK1) Prepared: 07/08/24 Analyzed: 07/08/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.52		8.00		94.0	70-130			

LCS (2428030-BS2) Prepared: 07/08/24 Analyzed: 07/08/24

Gasoline Range Organics (C6-C10)	47.9	20.0	50.0		95.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61		8.00		95.2	70-130			

LCS Dup (2428030-BSD2) Prepared: 07/08/24 Analyzed: 07/08/24

Gasoline Range Organics (C6-C10)	45.7	20.0	50.0		91.4	70-130	4.71	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61		8.00		95.1	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 1:17:01PM

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 (2428019-BLK1) Prepared: 07/08/24 Analyzed: 07/08/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.2		50.0		112	50-200			

LCS (2428019-BS1) Prepared: 07/08/24 Analyzed: 07/08/24

Diesel Range Organics (C10-C28)	288	25.0	250		115	38-132			
Surrogate: n-Nonane	57.6		50.0		115	50-200			

LCS Dup (2428019-BSD1) Prepared: 07/08/24 Analyzed: 07/09/24

Diesel Range Organics (C10-C28)	284	25.0	250		114	38-132	1.56	20	
Surrogate: n-Nonane	60.9		50.0		122	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 1:17:01PM

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 (2428022-BLK1)					Prepared: 07/08/24 Analyzed: 07/08/24				
Chloride	ND	20.0							
LCS (2428022-BS1)					Prepared: 07/08/24 Analyzed: 07/08/24				
Chloride	256	20.0	250		102	90-110			
LCS Dup (2428022-BSD1)					Prepared: 07/08/24 Analyzed: 07/08/24				
Chloride	254	20.0	250		102	90-110	0.455	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/10/24 13:17

- 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 6

Project Information

Chain of Custody

Client: <u>Mack</u>				Bill To				Lab Use Only				TAT				EPA Program			
Project: <u>Westmount 1A</u>				Attention: ENERGY STAFFING SERVICES				Lab WO# <u>E407034</u>				Job Number <u>20046-0001</u>				1D 2D 3D Standard			
Project Manager: <u>N. Gladden</u>				Address: 2724 NW COUNTY RD				Analysis and Method								CWA			
Address:				City, State, Zip <u>HOBBS, NM 88240</u>												RCRA			
City, State, Zip				Phone: 575-393-9048												State			
Phone:				Email: NATALIE@ENERGYSTAFFINGLLC.COM												NM CO UT AZ TX			
Email:				BRITTNEY@ENERGYSTAFFINGLLC.COM												Remarks			
Report due by:																			
Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/DRO by 801S	GRO/DRO by 801S	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC LX						
	7/5	Soil	1	Comp 1 - 4'	1														
				Comp 2 - 4'	2														
				Comp 3 - 4'	3														
				Comp 4 - 8'	4														
				Comp 5 - 4'	5														
				Comp 6 - 4'	6														
				Comp 7 - 8'	7														
				Comp 8 - 8'	8														
				Comp 9 - 8'	9														
				Comp 10 - 8'	10														
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.												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>N. Gladden</u>				Date <u>7/8/24</u>		Time <u>1:30</u>		Received by: (Signature) <u>Michelle Gonzales</u>				Date <u>7-8-24</u>		Time <u>1330</u>		Lab Use Only			
Relinquished by: (Signature) <u>Michelle Gonzales</u>				Date <u>7-8-24</u>		Time <u>1755</u>		Received by: (Signature) <u>A.H.</u>				Date <u>7-8-24</u>		Time <u>1755</u>		Received on ice: <u>Y/N</u>			
Relinquished by: (Signature) <u>A.H.</u>				Date <u>7-8-24</u>		Time <u>2400</u>		Received by: (Signature) <u>S.H.</u>				Date <u>7-9-24</u>		Time <u>1120</u>		T1 _____ T2 _____ T3 _____			
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other												AVG Temp °C <u>4</u>							
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

Client: <u>Mack</u>		Bill To		Lab Use Only		TAT		EPA Program					
Project: <u>Westmount LA</u>		Attention: ENERGY STAFFING SERVICES		Lab WO# <u>E407034</u>		Job Number <u>20046-0001</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: <u>N. Gladden</u>		Address: 2724 NW COUNTY RD		E		V							
Address:		City, State, Zip <u>HOBBS, NM 88240</u>		Analysis and Method								RCRA	
City, State, Zip		Phone: 575-393-9048										State	
Phone:		Email: NATALIE@ENERGYSTAFFINGLLC.COM										NM CO UT AZ TX	
Email:		BRITTNEY@ENERGYSTAFFINGLLC.COM										V	
Report due by:												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 6010	Chloride 300.0	BGOC NM	BGOC IX	
	7/5	soil	1	Comp 11-6'	11									
				Comp 12-4'	12									
				Comp 13-4'	13									
				Comp 14-4'	14									
				Comp 15-8'	15									
				Comp 16-4'	16									
				Comp 17-4'	17									
				Comp 18-4'	18									
				Comp 19-4'	19									
				Comp 20-4'	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.

Relinquished by: (Signature) <u>N. Gladden</u>		Date <u>7-8-24</u>	Time <u>1:30</u>	Received by: (Signature) <u>Michelle Gonzales</u>		Date <u>7-8-24</u>	Time <u>1330</u>	Lab Use Only	
Relinquished by: (Signature) <u>Michelle Gonzales</u>		Date <u>7-8-24</u>	Time <u>1755</u>	Received by: (Signature) <u>C.H.</u>		Date <u>7-8-24</u>	Time <u>1755</u>	Received on ice: <u>Y</u> / N	
Relinquished by: (Signature) <u>C.H.</u>		Date <u>7-8-24</u>	Time <u>2400</u>	Received by: (Signature) <u>[Signature]</u>		Date <u>7-9-24</u>	Time <u>1120</u>	T1 _____ T2 _____ T3 _____	
								AVG Temp °C <u>4</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.

Envirotech Analytical Laboratory

Printed: 7/9/2024 3:01:00PM

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:	07/09/24 11:20	Work Order ID:	E407034
Phone:	(575) 390-6397	Date Logged In:	07/08/24 16:32	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	07/10/24 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****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 #1A

Work Order: E407035

Job Number: 20046-0001

Received: 7/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/10/24

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: 7/10/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407035
Date Received: 7/9/2024 11:20:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/9/2024 11:20:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 07/10/24 14:42
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
Comp 21-8'	E407035-01A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 22-4'	E407035-02A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 23-4'	E407035-03A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 24-10'	E407035-04A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 25-10'	E407035-05A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 26-10'	E407035-06A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 27-8'	E407035-07A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 28-6'	E407035-08A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 29-6'	E407035-09A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 30-6'	E407035-10A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 31-4'	E407035-11A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 32-4'	E407035-12A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 33-4'	E407035-13A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 34-4'	E407035-14A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 35-8'	E407035-15A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 36-8'	E407035-16A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 37-8'	E407035-17A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 38-8'	E407035-18A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 39-8'	E407035-19A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 40-8'	E407035-20A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 21-8'

E407035-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	88.2 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	106 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>	110 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	58.0	20.0	1	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 22-4'

E407035-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.8 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	364	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 23-4'

E407035-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	108 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 24-10'

E407035-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		87.7 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		106 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
		107 %	50-200	07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 25-10'

E407035-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.3 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 26-10'

E407035-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.0 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 27-8'

E407035-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.1 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	108 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 28-6'

E407035-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.7 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	108 %	70-130		07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/09/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		07/09/24	07/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 2:42:57PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 29-6'
E407035-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: 4-Bromochlorobenzene-PID	88.5 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	108 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane	108 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 30-6'

E407035-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.7 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 31-4'

E407035-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.1 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	119 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	211	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 32-4'

E407035-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.4 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 33-4'

E407035-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.4 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		107 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>		119 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 34-4'

E407035-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 35-8'

E407035-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.7 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	108 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 36-8'

E407035-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.7 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	110 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	119 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	277	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 37-8'

E407035-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 38-8'

E407035-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.9 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428032
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	106 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428024
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 39-8'

E407035-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.1 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	107 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	114 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 2:42:57PM

Comp 40-8'

E407035-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	108 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428026	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2428024	
Chloride	ND	200	10	07/09/24	07/09/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 2:42:57PM

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 (2428032-BLK1) Prepared: 07/09/24 Analyzed: 07/09/24

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	6.98		8.00		87.2	70-130			

LCS (2428032-BS1) Prepared: 07/09/24 Analyzed: 07/09/24

Benzene	4.84	0.0250	5.00		96.8	70-130			
Ethylbenzene	4.56	0.0250	5.00		91.2	70-130			
Toluene	4.76	0.0250	5.00		95.3	70-130			
o-Xylene	4.64	0.0250	5.00		92.8	70-130			
p,m-Xylene	9.38	0.0500	10.0		93.8	70-130			
Total Xylenes	14.0	0.0250	15.0		93.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.04		8.00		88.0	70-130			

Matrix Spike (2428032-MS1) Source: E407035-06 Prepared: 07/09/24 Analyzed: 07/09/24

Benzene	4.68	0.0250	5.00	ND	93.7	54-133			
Ethylbenzene	4.40	0.0250	5.00	ND	88.0	61-133			
Toluene	4.61	0.0250	5.00	ND	92.2	61-130			
o-Xylene	4.52	0.0250	5.00	ND	90.3	63-131			
p,m-Xylene	9.07	0.0500	10.0	ND	90.7	63-131			
Total Xylenes	13.6	0.0250	15.0	ND	90.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.11		8.00		88.8	70-130			

Matrix Spike Dup (2428032-MSD1) Source: E407035-06 Prepared: 07/09/24 Analyzed: 07/09/24

Benzene	4.52	0.0250	5.00	ND	90.4	54-133	3.59	20	
Ethylbenzene	4.25	0.0250	5.00	ND	85.0	61-133	3.50	20	
Toluene	4.45	0.0250	5.00	ND	89.0	61-130	3.58	20	
o-Xylene	4.38	0.0250	5.00	ND	87.5	63-131	3.14	20	
p,m-Xylene	8.77	0.0500	10.0	ND	87.7	63-131	3.35	20	
Total Xylenes	13.1	0.0250	15.0	ND	87.7	63-131	3.28	20	
Surrogate: 4-Bromochlorobenzene-PID	7.11		8.00		88.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 2:42:57PM

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 (2428032-BLK1) Prepared: 07/09/24 Analyzed: 07/09/24

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

LCS (2428032-BS2) Prepared: 07/09/24 Analyzed: 07/09/24

Gasoline Range Organics (C6-C10)	45.6	20.0	50.0		91.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.64		8.00		108	70-130			

Matrix Spike (2428032-MS2) Source: E407035-06 Prepared: 07/09/24 Analyzed: 07/09/24

Gasoline Range Organics (C6-C10)	44.4	20.0	50.0	ND	88.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.64		8.00		108	70-130			

Matrix Spike Dup (2428032-MSD2) Source: E407035-06 Prepared: 07/09/24 Analyzed: 07/09/24

Gasoline Range Organics (C6-C10)	47.9	20.0	50.0	ND	95.9	70-130	7.65	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.72		8.00		109	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 2:42:57PM

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 (2428026-BLK1) Prepared: 07/09/24 Analyzed: 07/09/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.2		50.0		110	50-200			

LCS (2428026-BS1) Prepared: 07/09/24 Analyzed: 07/09/24

Diesel Range Organics (C10-C28)	310	25.0	250		124	38-132			
Surrogate: n-Nonane	53.1		50.0		106	50-200			

LCS Dup (2428026-BSD1) Prepared: 07/09/24 Analyzed: 07/09/24

Diesel Range Organics (C10-C28)	291	25.0	250		116	38-132	6.25	20	
Surrogate: n-Nonane	52.8		50.0		106	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 2:42:57PM

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 (2428024-BLK1)					Prepared: 07/08/24 Analyzed: 07/09/24				
Chloride	ND	20.0							
LCS (2428024-BS1)					Prepared: 07/08/24 Analyzed: 07/09/24				
Chloride	251	20.0	250		100	90-110			
LCS Dup (2428024-BSD1)					Prepared: 07/08/24 Analyzed: 07/09/24				
Chloride	252	20.0	250		101	90-110	0.609	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/10/24 14:42

- 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 3 of 4

Project Information

Chain of Custody

Client: <u>Mack</u>					Bill To					Lab Use Only					TAT				EPA Program										
Project: <u>Westmont 1A</u>					Attention: ENERGY STAFFING SERVICES					Lab WO# <u>E 407035</u>					Job Number <u>20046-0001</u>				1D	2D	3D	Standard	CWA	SDWA					
Project Manager: <u>H. 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 8018					BGOOC NM				State										
Phone:					Email: NATALIE@ENERGYSTAFFINGLLC.COM					GRO/DRO by 8015					BGOOC IX				NM		CO	UT	AZ	TX					
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM					BTEX by 8021									Remarks										
Report due by:										VOC by 8260																			
Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number																								
	7/5	soil	1	Comp 21 - 8'	1																								
				Comp 22 - 4'	2																								
				Comp 23 - 4'	3																								
				Comp 24 - 10'	4																								
				Comp 25 - 10'	5																								
				Comp 26 - 10'	6																								
				Comp 27 - 8'	7																								
				Comp 28 - 6'	8																								
				Comp 29 - 6'	9																								
				Comp 30 - 6'	10																								
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: <u>Sandra Perez</u>																													
Relinquished by: (Signature) <u>Natalie Gladden</u>					Date <u>7/8/24</u>					Time <u>1:30</u>					Received by: (Signature) <u>Michelle Gonzales</u>					Date <u>7-8-24</u>					Time <u>1330</u>				
Relinquished by: (Signature) <u>Michelle Gonzales</u>					Date <u>7-8-24</u>					Time <u>1755</u>					Received by: (Signature) <u>J. H.</u>					Date <u>7.8.24</u>					Time <u>1755</u>				
Relinquished by: (Signature) <u>J. H.</u>					Date <u>7.8.24</u>					Time <u>2400</u>					Received by: (Signature) <u>Sta</u>					Date <u>7-9-24</u>					Time <u>1120</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.																													

Page 4 of 4

Project Information

Chain of Custody

Client: <u>Mack</u> Project: <u>Westmount 1A</u> Project Manager: <u>N. Gladden</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>E407035</u> Job Number <u>20046-0001</u> Analysis and Method DRO/DRO by 801S GRO/DRO by 801S BTEX by 8021 VOC by 8260 Metals 6010 Chloride 100.0 8600C NM 15600C 1x				TAT 1D 2D 3D Standard EPA Program CWA SDWA RCRA State NM CO UT AZ TX Remarks			
Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number										
	7/5	soil	1	Comp 31 - 4'	11										
				32 - 4'	12										
				33 - 4'	13										
				34 - 4'	14										
				35 - 8'	15										
				36 - 8'	16										
				37 - 8'	17										
				38 - 8'	18										
				39 - 8'	19										
				40 - 8'	20										
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>N. Gladden</u> Date <u>7/8/24</u> Time <u>1:30</u>															
Relinquished by: (Signature) <u>Michelle Gonzales</u> Date <u>7-8-24</u> Time <u>1755</u>															
Relinquished by: (Signature) <u>C. M.</u> Date <u>7.8.24</u> Time <u>2400</u>															
Relinquished by: (Signature) <u>Sandra Perez</u> Date <u>7-8-24</u> Time <u>1330</u>															
Relinquished by: (Signature) <u>C. M.</u> Date <u>7-8-24</u> Time <u>1755</u>															
Relinquished by: (Signature) <u>C. M.</u> Date <u>7-8-24</u> Time <u>1120</u>															
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days															
Lab Use Only Received on ice: <u>Y/N</u> T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</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: 7/9/2024 3:01:08PM

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:	07/09/24 11:20	Work Order ID:	E407035
Phone:	(575) 390-6397	Date Logged In:	07/08/24 16:33	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	07/10/24 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**

Time sampled is not documented on the COC by client. West Mount 1A has been separated into multiple WO due to high sample volume. WO are as follows: E407034, E407035 and E407036.

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

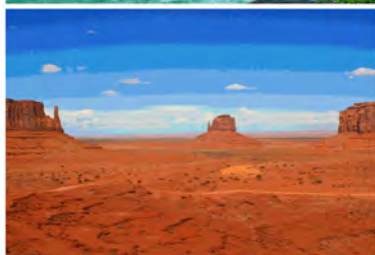
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E407036

Job Number: 20046-0001

Received: 7/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/10/24

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: 7/10/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407036
Date Received: 7/9/2024 11:20:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/9/2024 11:20:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 07/10/24 15:12
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
Comp 41-4'	E407036-01A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 42-4'	E407036-02A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 43-4'	E407036-03A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 44-4'	E407036-04A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 45-4'	E407036-05A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 46-4'	E407036-06A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 47-4'	E407036-07A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 48-4'	E407036-08A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 49-4'	E407036-09A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 50-4'	E407036-10A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 51-4'	E407036-11A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 52-4'	E407036-12A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 53-4'	E407036-13A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 54-4'	E407036-14A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 55-4'	E407036-15A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 56-4'	E407036-16A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 57-4'	E407036-17A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.
Comp 58-4'	E407036-18A	Soil	07/05/24	07/09/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 41-4' E407036-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
<i>Surrogate: Bromofluorobenzene</i>		103 %	70-130	07/09/24	07/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.5 %	70-130	07/09/24	07/09/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
<i>Surrogate: Bromofluorobenzene</i>		103 %	70-130	07/09/24	07/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.5 %	70-130	07/09/24	07/09/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 42-4'

E407036-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		102 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.8 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		102 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.8 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		99.3 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 43-4'

E407036-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		101 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.3 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		101 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.3 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		117 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/09/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 44-4'

E407036-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		117 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 45-4'

E407036-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		113 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 46-4'

E407036-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.4 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.4 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		111 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/10/2024 3:12:48PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Comp 47-4'
E407036-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS		Batch: 2428034	
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		89.4 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2428034	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		89.4 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2428027	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		121 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428025	
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 48-4'

E407036-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/09/24	
Toluene	ND	0.0250	1	07/09/24	07/09/24	
o-Xylene	ND	0.0250	1	07/09/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		105 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.4 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/09/24	
Surrogate: Bromofluorobenzene		105 %	70-130	07/09/24	07/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.4 %	70-130	07/09/24	07/09/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		121 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 49-4'

E407036-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		101 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		101 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		121 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 50-4'

E407036-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		121 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 51-4'

E407036-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		93.9 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		104 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		93.9 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		104 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		128 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 52-4'

E407036-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.2 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.2 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		125 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 53-4'

E407036-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.8 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.8 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		124 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 54-4'

E407036-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		101 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		90.1 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		101 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		90.1 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		103 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		104 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 55-4'

E407036-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.5 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.5 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		90.5 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 56-4'

E407036-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		104 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		103 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		104 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		75.5 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 57-4'

E407036-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		105 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		104 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		105 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		104 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		80.6 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/10/2024 3:12:48PM

Comp 58-4'

E407036-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Benzene	ND	0.0250	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	07/09/24	07/10/24	
o-Xylene	ND	0.0250	1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		102 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2428034
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		102 %	70-130	07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	07/09/24	07/10/24	
Surrogate: Toluene-d8		102 %	70-130	07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/09/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/09/24	07/10/24	
Surrogate: n-Nonane		74.6 %	50-200	07/09/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428025
Chloride	ND	200	10	07/09/24	07/10/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 3:12:48PM

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 (2428034-BLK1) Prepared: 07/09/24 Analyzed: 07/09/24

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	0.522		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.467		0.500		93.3	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS (2428034-BS1) Prepared: 07/09/24 Analyzed: 07/09/24

Benzene	2.23	0.0250	2.50		89.2	70-130			
Ethylbenzene	2.35	0.0250	2.50		94.0	70-130			
Toluene	2.35	0.0250	2.50		94.1	70-130			
o-Xylene	2.45	0.0250	2.50		97.9	70-130			
p,m-Xylene	4.90	0.0500	5.00		98.0	70-130			
Total Xylenes	7.35	0.0250	7.50		98.0	70-130			
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.463		0.500		92.5	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			

Matrix Spike (2428034-MS1) Source: E407036-06 Prepared: 07/09/24 Analyzed: 07/09/24

Benzene	2.31	0.0250	2.50	ND	92.4	48-131			
Ethylbenzene	2.43	0.0250	2.50	ND	97.0	45-135			
Toluene	2.46	0.0250	2.50	ND	98.4	48-130			
o-Xylene	2.52	0.0250	2.50	ND	101	43-135			
p,m-Xylene	5.07	0.0500	5.00	ND	101	43-135			
Total Xylenes	7.59	0.0250	7.50	ND	101	43-135			
Surrogate: Bromofluorobenzene	0.525		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.459		0.500		91.7	70-130			
Surrogate: Toluene-d8	0.516		0.500		103	70-130			

Matrix Spike Dup (2428034-MSD1) Source: E407036-06 Prepared: 07/09/24 Analyzed: 07/09/24

Benzene	2.37	0.0250	2.50	ND	94.7	48-131	2.46	23	
Ethylbenzene	2.45	0.0250	2.50	ND	98.0	45-135	0.964	27	
Toluene	2.47	0.0250	2.50	ND	98.6	48-130	0.284	24	
o-Xylene	2.60	0.0250	2.50	ND	104	43-135	3.01	27	
p,m-Xylene	5.19	0.0500	5.00	ND	104	43-135	2.38	27	
Total Xylenes	7.79	0.0250	7.50	ND	104	43-135	2.59	27	
Surrogate: Bromofluorobenzene	0.532		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.467		0.500		93.3	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 3:12:48PM

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 (2428034-BLK1)

Prepared: 07/09/24 Analyzed: 07/09/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.522		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.467		0.500		93.3	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS (2428034-BS2)

Prepared: 07/09/24 Analyzed: 07/09/24

Gasoline Range Organics (C6-C10)	55.0	20.0	50.0		110	70-130			
Surrogate: Bromofluorobenzene	0.527		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.520		0.500		104	70-130			

Matrix Spike (2428034-MS2)

Source: E407036-06

Prepared: 07/09/24 Analyzed: 07/09/24

Gasoline Range Organics (C6-C10)	53.8	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.467		0.500		93.3	70-130			
Surrogate: Toluene-d8	0.524		0.500		105	70-130			

Matrix Spike Dup (2428034-MSD2)

Source: E407036-06

Prepared: 07/09/24 Analyzed: 07/09/24

Gasoline Range Organics (C6-C10)	55.2	20.0	50.0	ND	110	70-130	2.51	20	
Surrogate: Bromofluorobenzene	0.520		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 3:12:48PM

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 (2428027-BLK1)					Prepared: 07/09/24 Analyzed: 07/10/24				
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 (2428027-BS1)					Prepared: 07/09/24 Analyzed: 07/10/24				
Diesel Range Organics (C10-C28)	266	25.0	250		107	38-132			
Surrogate: n-Nonane	56.7		50.0		113	50-200			

LCS Dup (2428027-BSD1)					Prepared: 07/09/24 Analyzed: 07/10/24				
Diesel Range Organics (C10-C28)	268	25.0	250		107	38-132	0.786	20	
Surrogate: n-Nonane	57.5		50.0		115	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/10/2024 3:12:48PM

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 (2428025-BLK1)					Prepared: 07/08/24 Analyzed: 07/08/24				
Chloride	ND	20.0							
LCS (2428025-BS1)					Prepared: 07/08/24 Analyzed: 07/08/24				
Chloride	254	20.0	250		102	90-110			
LCS Dup (2428025-BSD1)					Prepared: 07/08/24 Analyzed: 07/08/24				
Chloride	255	20.0	250		102	90-110	0.500	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/10/24 15:12

- 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>Mack</u> Project: <u>Westmont</u> Project Manager: <u>Gladden</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>E 407036</u> Job Number <u>20046-0001</u> Analysis and Method DRO/DRO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGOOC NM BGOOC 1X				TAT 1D <u>1</u> 2D <u>1</u> 3D <u>1</u> Standard _____ EPA Program CWA _____ SDWA _____ RCRA _____ State NM <u>1</u> CO _____ UT _____ AZ _____ TX _____ 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 6010	Chloride 300.0	BGOOC NM	BGOOC 1X	Remarks
	7/5	soil	1	Comp 41-4'	1									
				" 42-4'	2									
				" 43-4'	3									
				" 44-4'	4									
				" 45-4'	5									
				" 46-4'	6									
				" 47-4'	7									
				" 48-4'	8									
				" 49-4'	9									
				" 50-4'	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: <u>Sandra Perez</u>														
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days														
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only						
<u>Gladden</u>		7/8/24	1:30	<u>Michelle Gonzales</u>		7-8-24	1330	Received on ice: <u>Y</u> N						
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 _____ T2 _____ T3 _____						
<u>Michelle Gonzales</u>		7-8-24	1755	<u>J. M.</u>		7-8-24	1755							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C <u>4</u>						
<u>J. M.</u>		7-8-24	2400	<u>Sandra</u>		7-9-24	1120							
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.														

Chain of Custody

Project Information

Client: <u>Mead</u> Project: <u>West Mount IA</u> Project Manager: <u>H. Gladden</u> Address: City, State, Zip Phone: Email: Report due by:		Bill To Attention: ENERGY STAFFING SERVICES Address: 2724 NW COUNTY RD City, State, Zip FIOBBS, NM 88240 Phone: 575-393-9048 Email: NATALIE@ENERGYSTAFFINGLLC.COM BRITTNEY@ENERGYSTAFFINGLLC.COM		Lab Use Only		TAT			EPA Program			
				Lab WO# E 407036	Job Number 20046-0001	1D	2D	3D	Standard	CWA	SDWA	
				Analysis and Method								
				DRO/DKO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8160	Metals 6010	Chloride 300.0			
										BGDOC NM	BGDOC IX	
											State	
							NM	CO	UT	AZ	TX	
							Remarks					

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/DKO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8160	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC IX	Remarks
	7/5	Soil	1	Comp 51-4'	11									
				" 52-4'	12									
				" 53-4'	13									
				" 54-4'	14									
				" 55-4'	15									
				" 56-4'	16									
				" 57-4'	17									
				" 58-4'	18									

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: Sandra Perez

Relinquished by: (Signature) <u>[Signature]</u>		Date <u>7-8-24</u>	Time <u>1:30</u>	Received by: (Signature) <u>Michelle Gonzales</u>		Date <u>7-8-24</u>	Time <u>1330</u>	Lab Use Only	
Relinquished by: (Signature) <u>Michelle Gonzales</u>		Date <u>7-8-24</u>	Time <u>1755</u>	Received by: (Signature) <u>J.H.</u>		Date <u>7-8-24</u>	Time <u>1755</u>	Received on ice: <u>O/N</u>	
Relinquished by: (Signature) <u>J.H.</u>		Date <u>7-8-24</u>	Time <u>2400</u>	Received by: (Signature) <u>[Signature]</u>		Date <u>7-9-24</u>	Time <u>1120</u>	T1 _____ T2 _____ T3 _____	
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____						AVG Temp °C <u>4</u>			

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: 7/9/2024 3:01:15PM

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:	07/09/24 11:20	Work Order ID:	E407036
Phone:	(575) 390-6397	Date Logged In:	07/08/24 16:35	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	07/10/24 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: CouierSample 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 InstructionComments/Resolution

Time sampled is not documented on the COC by client. West Mount 1A has been separated into multiple WO due to high sample volume. WO are as follows: E407034, E407035 and E407036.

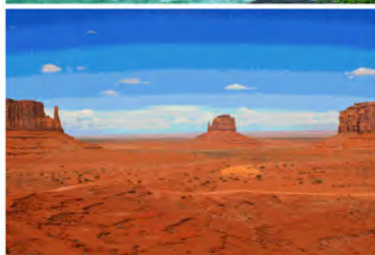
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E407051

Job Number: 20046-0001

Received: 7/10/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/11/24

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: 7/11/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407051
Date Received: 7/10/2024 8:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/10/2024 8:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount #1A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 07/11/24 14:16
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP. Comp 59-4'	E407051-01A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 60-4'	E407051-02A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 61-4'	E407051-03A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 62-4'	E407051-04A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 63-4'	E407051-05A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 64-4'	E407051-06A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 65-4'	E407051-07A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 66-4'	E407051-08A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 67-4'	E407051-09A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 68-4'	E407051-10A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SP. Comp 69-4'	E407051-11A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SW. Comp 1-8'	E407051-12A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.
SW. Comp 2-8'	E407051-13A	Soil	07/08/24	07/10/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 59-4'

E407051-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	88.2 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.5 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2428045	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
<i>Surrogate: n-Nonane</i>	118 %	50-200		07/10/24	07/10/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2428048	
Chloride	ND	200	10	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 60-4'

E407051-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		88.5 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		98.0 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KM		Batch: 2428045
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
<i>Surrogate: n-Nonane</i>		104 %	50-200	07/10/24	07/10/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: WF		Batch: 2428048
Chloride	ND	100	5	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 61-4'

E407051-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.5 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.1 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428045	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		07/10/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2428048	
Chloride	ND	100	5	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 62-4'

E407051-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428043
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.3 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428043
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428045
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		07/10/24	07/10/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: WF		Batch: 2428048
Chloride	ND	40.0	2	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 63-4'

E407051-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		87.7 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.8 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KM		Batch: 2428045
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>		112 %	50-200	07/10/24	07/11/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: WF		Batch: 2428048
Chloride	ND	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/11/2024 2:16:19PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP. Comp 64-4'
E407051-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: 4-Bromochlorobenzene-PID	88.4 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.0 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2428045	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane	95.7 %	50-200		07/10/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2428048	
Chloride	ND	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 65-4'

E407051-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.2 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.0 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428045	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		07/10/24	07/11/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2428048	
Chloride	ND	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 66-4'

E407051-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.3 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.8 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428045	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		07/10/24	07/11/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2428048	
Chloride	157	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 67-4'

E407051-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.6 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.7 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2428045	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>						
	90.5 %	50-200		07/10/24	07/11/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2428048	
Chloride	ND	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 68-4'

E407051-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428043
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.7 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428043
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.7 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428045
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		07/10/24	07/11/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: WF		Batch: 2428048
Chloride	25.7	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SP. Comp 69-4'

E407051-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428043
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.1 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428043
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.5 %	70-130		07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2428045
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		07/10/24	07/11/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: WF		Batch: 2428048
Chloride	ND	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SW. Comp 1-8'

E407051-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.4 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		97.8 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KM		Batch: 2428045
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>		106 %	50-200	07/10/24	07/11/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: WF		Batch: 2428048
Chloride	ND	20.0	1	07/10/24	07/10/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/11/2024 2:16:19PM

SW. Comp 2-8'

E407051-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.5 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: BA		Batch: 2428043
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		97.5 %	70-130	07/10/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KM		Batch: 2428045
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
<i>Surrogate: n-Nonane</i>		101 %	50-200	07/10/24	07/11/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: WF		Batch: 2428048
Chloride	ND	20.0	1	07/10/24	07/10/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/11/2024 2:16:19PM

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 (2428043-BLK1) Prepared: 07/10/24 Analyzed: 07/10/24

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 7.15 8.00 89.4 70-130

LCS (2428043-BS1) Prepared: 07/10/24 Analyzed: 07/10/24

Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.81	0.0250	5.00		96.3	70-130			
Toluene	4.95	0.0250	5.00		99.0	70-130			
o-Xylene	4.78	0.0250	5.00		95.6	70-130			
p,m-Xylene	9.77	0.0500	10.0		97.7	70-130			
Total Xylenes	14.6	0.0250	15.0		97.0	70-130			

Surrogate: 4-Bromochlorobenzene-PID 7.08 8.00 88.5 70-130

LCS Dup (2428043-BSD1) Prepared: 07/10/24 Analyzed: 07/10/24

Benzene	5.00	0.0250	5.00		100	70-130	0.611	20	
Ethylbenzene	4.81	0.0250	5.00		96.2	70-130	0.109	20	
Toluene	4.92	0.0250	5.00		98.5	70-130	0.504	20	
o-Xylene	4.78	0.0250	5.00		95.5	70-130	0.0272	20	
p,m-Xylene	9.77	0.0500	10.0		97.7	70-130	0.0737	20	
Total Xylenes	14.5	0.0250	15.0		97.0	70-130	0.0584	20	

Surrogate: 4-Bromochlorobenzene-PID 7.09 8.00 88.6 70-130



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/11/2024 2:16:19PM

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 (2428043-BLK1) Prepared: 07/10/24 Analyzed: 07/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		8.00		94.8	70-130			

LCS (2428043-BS2) Prepared: 07/10/24 Analyzed: 07/10/24

Gasoline Range Organics (C6-C10)	48.8	20.0	50.0		97.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.74		8.00		96.7	70-130			

LCS Dup (2428043-BSD2) Prepared: 07/10/24 Analyzed: 07/10/24

Gasoline Range Organics (C6-C10)	48.8	20.0	50.0		97.5	70-130	0.123	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.69		8.00		96.1	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/11/2024 2:16:19PM

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 (2428045-BLK1)					Prepared: 07/10/24 Analyzed: 07/10/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	61.0		50.0		122	50-200			

LCS (2428045-BS1)					Prepared: 07/10/24 Analyzed: 07/10/24				
Diesel Range Organics (C10-C28)	286	25.0	250		114	38-132			
Surrogate: n-Nonane	61.2		50.0		122	50-200			

Matrix Spike (2428045-MS1)					Source: E407047-03		Prepared: 07/10/24 Analyzed: 07/10/24		
Diesel Range Organics (C10-C28)	299	25.0	250	ND	119	38-132			
Surrogate: n-Nonane	59.1		50.0		118	50-200			

Matrix Spike Dup (2428045-MSD1)					Source: E407047-03		Prepared: 07/10/24 Analyzed: 07/10/24		
Diesel Range Organics (C10-C28)	297	25.0	250	ND	119	38-132	0.640	20	
Surrogate: n-Nonane	60.2		50.0		120	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/11/2024 2:16:19PM

Anions by EPA 300.0/9056A

Analyst: WF

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

Blank (2428048-BLK1)					Prepared: 07/10/24 Analyzed: 07/10/24				
Chloride	ND	20.0							
LCS (2428048-BS1)					Prepared: 07/10/24 Analyzed: 07/10/24				
Chloride	249	20.0	250		99.5	90-110			
Matrix Spike (2428048-MS1)					Source: E407047-02		Prepared: 07/10/24 Analyzed: 07/10/24		
Chloride	268	20.0	250	23.6	97.6	80-120			
Matrix Spike Dup (2428048-MSD1)					Source: E407047-02		Prepared: 07/10/24 Analyzed: 07/10/24		
Chloride	268	20.0	250	23.6	97.8	80-120	0.198	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/11/24 14:16

- 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 2

Client: <u>Mack Energy</u> Project: <u>WEST MOUNT 1A</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>E407051</u> Job Number <u>20046-0001</u> Analysis and Method DRO/DRO by 8015 _____ GRO/DRO by 8015 _____ BTEX by 8021 _____ VOC by 8260 _____ Metals 6010 _____ Chloride 300.0 _____ BGOOC NM _____ BGOOC 1x _____					TAT 1D _____ 2D <input checked="" type="checkbox"/> 3D _____ Standard _____			EPA Program CWA _____ SDWA _____ RCRA _____ State NM <input checked="" type="checkbox"/> 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	BGOOC NM	BGOOC 1x	Remarks					
	07/08	S	1	SP. Comp. 59-4'	1							<input checked="" type="checkbox"/>							
	07/08	S	1	SP. Comp. 60-4'	2							<input checked="" type="checkbox"/>							
	07/08	S	1	SP. Comp. 61-4'	3							<input checked="" type="checkbox"/>							
	07/08	S	1	SP. Comp. 62-4'	4							<input checked="" type="checkbox"/>							
	07/08	S	1	Sp. Comp. 63-4'	5							<input checked="" type="checkbox"/>							
	07/08	S	1	Sp. Comp. 64-4'	6							<input checked="" type="checkbox"/>							
	07/08	S	1	SP. Comp. 65-4'	7							<input checked="" type="checkbox"/>							
	07/08	S	1	Sp. Comp. 66-4'	8							<input checked="" type="checkbox"/>							
	07/08	S	1	SP. Comp. 67-4'	9							<input checked="" type="checkbox"/>							
	07/08	S	1	SP. Comp. 68-4'	10							<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.																			
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>S. Perez</u> Date <u>07/08/24</u> Time _____					Received by: (Signature) <u>Michelle Gonzales</u> Date <u>7-9-24</u> Time <u>1437</u>					Lab Use Only Received on ice: <u>Y/N</u>									
Relinquished by: (Signature) <u>Michelle Gonzales</u> Date <u>7-9-24</u> Time <u>1725</u>					Received by: (Signature) <u>L.H.</u> Date <u>7-9-24</u> Time <u>1725</u>					T1 _____ T2 _____ T3 _____									
Relinquished by: (Signature) <u>L.H.</u> Date <u>7-9-24</u> Time <u>2345</u>					Received by: (Signature) <u>[Signature]</u> Date <u>7-10-24</u> Time <u>0830</u>					AVG Temp °C <u>4</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.																			

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.					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.	
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by: (Signature) <u>S. Perez</u></p> <p>Date <u>07/08/24</u></p> <p>Time _____</p> </div> <div> <p>Received by: (Signature) <u>Michelle Gonzales</u></p> <p>Date <u>7-9-24</u></p> <p>Time <u>1437</u></p> </div> <div> <p>Lab Use Only</p> <p>Received on ice: <u>D / N</u></p> </div> </div>						
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by: (Signature) <u>Michelle Gonzales</u></p> <p>Date <u>7-9-24</u></p> <p>Time <u>1725</u></p> </div> <div> <p>Received by: (Signature) <u>J. M.</u></p> <p>Date <u>7-9-24</u></p> <p>Time <u>1725</u></p> </div> <div> <p>T1 _____ T2 _____ T3 _____</p> </div> </div>						
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by: (Signature) <u>J. M.</u></p> <p>Date <u>7-9-24</u></p> <p>Time <u>2345</u></p> </div> <div> <p>Received by: (Signature) <u>St</u></p> <p>Date <u>7-10-24</u></p> <p>Time <u>0830</u></p> </div> <div> <p>AVG Temp °C <u>4</u></p> </div> </div>						
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____					Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA	
<p>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.</p>						

Envirotech Analytical Laboratory

Printed: 7/10/2024 2:24:09PM

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:	07/10/24 08:30	Work Order ID:	E407051
Phone:	(575) 390-6397	Date Logged In:	07/09/24 17:28	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	07/11/24 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 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? 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 #1A

Work Order: E407062

Job Number: 20046-0001

Received: 7/11/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/12/24

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: 7/12/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407062
Date Received: 7/11/2024 10:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/11/2024 10:30:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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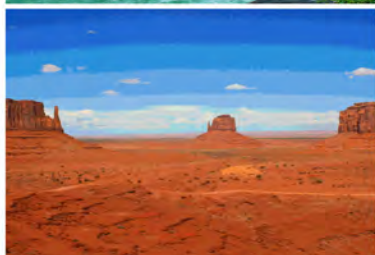
Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 07/12/24 14:38
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
SW. Comp. 3-8'	E407062-01A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.
SW. Comp. 4-10'	E407062-02A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.
SW. Comp. 5-6'	E407062-03A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.
SW. Comp. 6-4'	E407062-04A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.
SW. Comp. 7-4'	E407062-05A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.
SW. Comp. 8-8'	E407062-06A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.
SW. Comp. 9-6'	E407062-07A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.
SW. Comp. 10-4'	E407062-08A	Soil	07/09/24	07/11/24	Glass Jar, 2 oz.



Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E407082

Job Number: 20046-0001

Received: 7/12/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/15/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 7/15/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407082
Date Received: 7/12/2024 9:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/12/2024 9:00:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

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Cell: 505-320-4759
ljjarboe@envirotech-inc.com

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mgonzales@envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 07/15/24 15:06
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
Sp. Comp. 70-4'	E407082-01A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sp. Comp. 71-4'	E407082-02A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sp. Comp. 72-4'	E407082-03A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sw. Comp. 11-4'	E407082-04A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sw. Comp. 12-4'	E407082-05A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sw. Comp. 13-4'	E407082-06A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sw. Comp. 14-4'	E407082-07A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sw. Comp. 15-4'	E407082-08A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sw. Comp. 16-4'	E407082-09A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.
Sw. Comp. 17-4'	E407082-10A	Soil	07/10/24	07/12/24	Glass Jar, 4 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sp. Comp. 70-4'

E407082-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.0 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	97.0 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2428093	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/12/24	
<i>Surrogate: n-Nonane</i>	96.8 %	50-200		07/12/24	07/12/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428092	
Chloride	193	20.0	1	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sp. Comp. 71-4'

E407082-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.1 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.2 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2428093	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>						
	87.6 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428092	
Chloride	ND	100	5	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sp. Comp. 72-4'

E407082-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2428088
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.4 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2428088
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.3 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2428093
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428092
Chloride	ND	100	5	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sw. Comp. 11-4'

E407082-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.7 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.9 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2428093	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428092	
Chloride	23.0	20.0	1	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sw. Comp. 12-4'

E407082-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	89.3 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2428088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	98.3 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2428093	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>	100 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428092	
Chloride	182	20.0	1	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sw. Comp. 13-4'

E407082-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428088	
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	93.0 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	107 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2428093	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>	102 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428092	
Chloride	ND	100	5	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sw. Comp. 14-4'

E407082-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428088
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.9 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428088
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	106 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2428093
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>						
	90.3 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428092
Chloride	ND	100	5	07/12/24	07/12/24	



Sample Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/15/2024 3:06:35PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sw. Comp. 15-4'
E407082-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2428088	
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
Surrogate: 4-Bromochlorobenzene-PID	93.0 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2428088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	108 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2428093	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
Surrogate: n-Nonane	97.0 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428092	
Chloride	ND	40.0	2	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sw. Comp. 16-4'

E407082-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428088	
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.4 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2428088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	106 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2428093	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>						
	97.5 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428092	
Chloride	ND	100	5	07/12/24	07/12/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/15/2024 3:06:35PM

Sw. Comp. 17-4'

E407082-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428088
Benzene	ND	0.0250	1	07/12/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/12/24	07/15/24	
Toluene	ND	0.0250	1	07/12/24	07/15/24	
o-Xylene	ND	0.0250	1	07/12/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/12/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/12/24	07/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.1 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2428088
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/12/24	07/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	108 %	70-130		07/12/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2428093
Diesel Range Organics (C10-C28)	ND	25.0	1	07/12/24	07/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/12/24	07/13/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		07/12/24	07/13/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428092
Chloride	202	20.0	1	07/12/24	07/12/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/15/2024 3:06:35PM

Volatile Organics by EPA 8021B

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 (2428088-BLK1) Prepared: 07/12/24 Analyzed: 07/15/24

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	7.35		8.00		91.8	70-130			

LCS (2428088-BS1) Prepared: 07/12/24 Analyzed: 07/15/24

Benzene	4.55	0.0250	5.00		91.0	70-130			
Ethylbenzene	4.39	0.0250	5.00		87.8	70-130			
Toluene	4.49	0.0250	5.00		89.9	70-130			
o-Xylene	4.37	0.0250	5.00		87.4	70-130			
p,m-Xylene	8.92	0.0500	10.0		89.2	70-130			
Total Xylenes	13.3	0.0250	15.0		88.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.31		8.00		91.4	70-130			

LCS Dup (2428088-BSD1) Prepared: 07/12/24 Analyzed: 07/15/24

Benzene	4.70	0.0250	5.00		94.0	70-130	3.24	20	
Ethylbenzene	4.54	0.0250	5.00		90.7	70-130	3.29	20	
Toluene	4.64	0.0250	5.00		92.7	70-130	3.10	20	
o-Xylene	4.51	0.0250	5.00		90.2	70-130	3.25	20	
p,m-Xylene	9.20	0.0500	10.0		92.0	70-130	3.10	20	
Total Xylenes	13.7	0.0250	15.0		91.4	70-130	3.15	20	
Surrogate: 4-Bromochlorobenzene-PID	7.34		8.00		91.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/15/2024 3:06:35PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2428088-BLK1) Prepared: 07/12/24 Analyzed: 07/15/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.76		8.00		96.9	70-130			

LCS (2428088-BS2) Prepared: 07/12/24 Analyzed: 07/15/24

Gasoline Range Organics (C6-C10)	48.8	20.0	50.0		97.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.87		8.00		98.3	70-130			

LCS Dup (2428088-BSD2) Prepared: 07/12/24 Analyzed: 07/15/24

Gasoline Range Organics (C6-C10)	50.4	20.0	50.0		101	70-130	3.24	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.86		8.00		98.3	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/15/2024 3:06:35PM

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 (2428093-BLK1) Prepared: 07/12/24 Analyzed: 07/12/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	63.4		50.0		127	50-200			

LCS (2428093-BS1) Prepared: 07/12/24 Analyzed: 07/12/24

Diesel Range Organics (C10-C28)	318	25.0	250		127	38-132			
Surrogate: n-Nonane	65.4		50.0		131	50-200			

Matrix Spike (2428093-MS1) Source: E407078-02 Prepared: 07/12/24 Analyzed: 07/12/24

Diesel Range Organics (C10-C28)	318	25.0	250	ND	127	38-132			
Surrogate: n-Nonane	64.3		50.0		129	50-200			

Matrix Spike Dup (2428093-MSD1) Source: E407078-02 Prepared: 07/12/24 Analyzed: 07/12/24

Diesel Range Organics (C10-C28)	321	25.0	250	ND	128	38-132	0.900	20	
Surrogate: n-Nonane	65.8		50.0		132	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/15/2024 3:06:35PM

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 (2428092-BLK1)					Prepared: 07/12/24 Analyzed: 07/12/24				
Chloride	ND	20.0							
LCS (2428092-BS1)					Prepared: 07/12/24 Analyzed: 07/12/24				
Chloride	254	20.0	250		101	90-110			
Matrix Spike (2428092-MS1)					Source: E407077-02		Prepared: 07/12/24 Analyzed: 07/12/24		
Chloride	362	20.0	250	105	103	80-120			
Matrix Spike Dup (2428092-MSD1)					Source: E407077-02		Prepared: 07/12/24 Analyzed: 07/12/24		
Chloride	353	20.0	250	105	99.3	80-120	2.34	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/15/24 15:06

- 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>Mack Energy</u> Project: <u>West Mount 1A</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>E 407082</u> Job Number <u>20046-0001</u> Analysis and Method					TAT 1D 2D 3D Standard			EPA Program CWA SDWA RCRA	
										State NM CO UT AZ TX									
										Remarks									
Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGOC NM	BGOC 1X						
	07/10	S	1	SP. Comp. 70 - 4'	1							✓							
	07/10	S	1	SP. Comp. 71 - 4'	2							✓							
	07/10	S	1	SP. Comp. 72 - 4'	3							✓							
	07/10	S	1	SW. Comp. 11 - 4'	4							✓							
	07/10	S	1	SW. Comp. 12 - 4'	5							✓							
	07/10	S	1	SW. Comp. 13 - 4'	6							✓							
	07/10	S	1	SW. Comp. 14 - 4'	7							✓							
	07/10	S	1	SW. Comp. 15 - 4'	8							✓							
	07/10	S	1	SW. Comp. 16 - 4'	9							✓							
	07/10	S	1	SW. Comp. 17 - 4'	10							✓							
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.												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>S. Perez</u> Date <u>07/10/24</u> Time _____ Received by: (Signature) <u>Sandra Perez</u> Date <u>7-11-24</u> Time <u>1350</u>																			
Relinquished by: (Signature) <u>Michelle Gonzales</u> Date <u>7-11-24</u> Time <u>1640</u> Received by: (Signature) <u>Andrew Hobbs</u> Date <u>7-11-24</u> Time <u>1700</u>																			
Relinquished by: (Signature) <u>Andrew Hobbs</u> Date <u>7-11-24</u> Time <u>2330</u> Received by: (Signature) <u>[Signature]</u> Date <u>7/12/24</u> Time <u>0900</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.																			

Envirotech Analytical Laboratory

Printed: 7/15/2024 2:25:50PM

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:	07/12/24 09:00	Work Order ID:	E407082
Phone:	(575) 390-6397	Date Logged In:	07/12/24 00:00	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	07/15/24 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 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.

Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 3-8'

E407062-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		87.7 %	70-130	07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.4 %	70-130	07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2428077	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>		126 %	50-200	07/11/24	07/12/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2428078	
Chloride	131	100	5	07/11/24	07/11/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 4-10'

E407062-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.4 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.1 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2428077	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>						
	123 %	50-200		07/11/24	07/12/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428078	
Chloride	ND	200	10	07/11/24	07/11/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 5-6'

E407062-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: IY		Batch: 2428073
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		87.6 %	70-130	07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: IY		Batch: 2428073
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		98.3 %	70-130	07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: NV		Batch: 2428077
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>		129 %	50-200	07/11/24	07/12/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: DT		Batch: 2428078
Chloride	ND	200	10	07/11/24	07/11/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 6-4'

E407062-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.8 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.1 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2428077	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>						
	126 %	50-200		07/11/24	07/12/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428078	
Chloride	ND	200	10	07/11/24	07/11/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 7-4'

E407062-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: IY		Batch: 2428073
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		90.4 %	70-130	07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: IY		Batch: 2428073
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		97.2 %	70-130	07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: NV		Batch: 2428077
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>		125 %	50-200	07/11/24	07/12/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: DT		Batch: 2428078
Chloride	ND	200	10	07/11/24	07/11/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 8-8'

E407062-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.9 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.6 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2428077	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>						
	119 %	50-200		07/11/24	07/12/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428078	
Chloride	ND	200	10	07/11/24	07/11/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 9-6'

E407062-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2428073
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.3 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2428073
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.3 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2428077
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		07/11/24	07/12/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2428078
Chloride	ND	40.0	2	07/11/24	07/11/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/12/2024 2:38:49PM

SW. Comp. 10-4'

E407062-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Benzene	ND	0.0250	1	07/11/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/11/24	07/11/24	
Toluene	ND	0.0250	1	07/11/24	07/11/24	
o-Xylene	ND	0.0250	1	07/11/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/11/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/11/24	07/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.2 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2428073	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/11/24	07/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.9 %	70-130		07/11/24	07/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2428077	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/11/24	07/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/11/24	07/12/24	
<i>Surrogate: n-Nonane</i>						
	123 %	50-200		07/11/24	07/12/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2428078	
Chloride	ND	100	5	07/11/24	07/11/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/12/2024 2:38:49PM

Volatile Organics by EPA 8021B

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 (2428073-BLK1) Prepared: 07/11/24 Analyzed: 07/11/24

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	6.97		8.00		87.1	70-130			

LCS (2428073-BS1) Prepared: 07/11/24 Analyzed: 07/11/24

Benzene	4.86	0.0250	5.00		97.1	70-130			
Ethylbenzene	4.69	0.0250	5.00		93.8	70-130			
Toluene	4.79	0.0250	5.00		95.9	70-130			
o-Xylene	4.65	0.0250	5.00		93.0	70-130			
p,m-Xylene	9.53	0.0500	10.0		95.3	70-130			
Total Xylenes	14.2	0.0250	15.0		94.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.20		8.00		90.0	70-130			

Matrix Spike (2428073-MS1) Source: E407062-05 Prepared: 07/11/24 Analyzed: 07/11/24

Benzene	5.11	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.93	0.0250	5.00	ND	98.7	61-133			
Toluene	5.04	0.0250	5.00	ND	101	61-130			
o-Xylene	4.91	0.0250	5.00	ND	98.3	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.18		8.00		89.8	70-130			

Matrix Spike Dup (2428073-MSD1) Source: E407062-05 Prepared: 07/11/24 Analyzed: 07/11/24

Benzene	4.72	0.0250	5.00	ND	94.3	54-133	8.04	20	
Ethylbenzene	4.57	0.0250	5.00	ND	91.3	61-133	7.76	20	
Toluene	4.66	0.0250	5.00	ND	93.2	61-130	7.90	20	
o-Xylene	4.54	0.0250	5.00	ND	90.8	63-131	7.87	20	
p,m-Xylene	9.30	0.0500	10.0	ND	93.0	63-131	7.53	20	
Total Xylenes	13.8	0.0250	15.0	ND	92.3	63-131	7.64	20	
Surrogate: 4-Bromochlorobenzene-PID	7.18		8.00		89.8	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/12/2024 2:38:49PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2428073-BLK1) Prepared: 07/11/24 Analyzed: 07/11/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.83		8.00		97.9	70-130			

LCS (2428073-BS2) Prepared: 07/11/24 Analyzed: 07/11/24

Gasoline Range Organics (C6-C10)	51.7	20.0	50.0		103	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.90		8.00		98.7	70-130			

Matrix Spike (2428073-MS2) Source: E407062-05 Prepared: 07/11/24 Analyzed: 07/11/24

Gasoline Range Organics (C6-C10)	49.7	20.0	50.0	ND	99.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.81		8.00		97.6	70-130			

Matrix Spike Dup (2428073-MSD2) Source: E407062-05 Prepared: 07/11/24 Analyzed: 07/11/24

Gasoline Range Organics (C6-C10)	49.9	20.0	50.0	ND	99.7	70-130	0.404	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.92		8.00		99.0	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/12/2024 2:38:49PM

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 (2428077-BLK1)					Prepared: 07/11/24 Analyzed: 07/11/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	64.5		50.0		129	50-200			

LCS (2428077-BS1)					Prepared: 07/11/24 Analyzed: 07/11/24				
Diesel Range Organics (C10-C28)	302	25.0	250		121	38-132			
Surrogate: n-Nonane	61.3		50.0		123	50-200			

Matrix Spike (2428077-MS1)					Source: E407062-04		Prepared: 07/11/24 Analyzed: 07/11/24		
Diesel Range Organics (C10-C28)	306	25.0	250	ND	123	38-132			
Surrogate: n-Nonane	63.6		50.0		127	50-200			

Matrix Spike Dup (2428077-MSD1)					Source: E407062-04		Prepared: 07/11/24 Analyzed: 07/11/24		
Diesel Range Organics (C10-C28)	315	25.0	250	ND	126	38-132	2.84	20	
Surrogate: n-Nonane	63.3		50.0		127	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/12/2024 2:38:49PM

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 (2428078-BLK1)					Prepared: 07/11/24 Analyzed: 07/11/24				
Chloride	ND	20.0							
LCS (2428078-BS1)					Prepared: 07/11/24 Analyzed: 07/11/24				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2428078-MS1)					Source: E407061-01		Prepared: 07/11/24 Analyzed: 07/11/24		
Chloride	320	20.0	250	61.9	103	80-120			
Matrix Spike Dup (2428078-MSD1)					Source: E407061-01		Prepared: 07/11/24 Analyzed: 07/11/24		
Chloride	319	20.0	250	61.9	103	80-120	0.264	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/12/24 14:38

- 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>Mack Energy</u> Project: <u>West Mount 1A</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>E 407002</u> Job Number <u>200460001</u> Analysis and Method					TAT 1D 2D 3D			EPA Program CWA SDWA RCRA	
										State NM CO UT AZ TX <input checked="" 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 6010	Chloride 300.0	BGDOC NM	BGDOC IX						
	07/09	S	1	SW. Comp. 3 - 8'	1							✓							
	07/09	S	1	SW. Comp. 4 - 10'	2							✓							
	07/09	S	1	SW. Comp. 5 - 6'	3							✓							
	07/09	S	1	SW. Comp. 6 - 4'	4							✓							
	07/09	S	1	SW. Comp. 7 - 4'	5							✓							
	07/09	S	1	SW. Comp. 8 - 8'	6							✓							
	07/09	S	1	SW. Comp. 9 - 6'	7							✓							
	07/09	S	1	SW. Comp. 10 - 4'	8							✓							
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.																			
Relinquished by: (Signature) <u>S. Percz</u> Date <u>07/09/24</u> Time <u>1405</u> Received by: (Signature) <u>Michelle Gonzales</u> Date <u>7-10-24</u> Time <u>1805</u>																			
Relinquished by: (Signature) <u>Michelle Gonzales</u> Date <u>7-10-24</u> Time <u>1630</u> Received by: (Signature) <u>[Signature]</u> Date <u>7-10-24</u> Time <u>1805</u>																			
Relinquished by: (Signature) <u>[Signature]</u> Date <u>7-10-24</u> Time <u>2400</u> Received by: (Signature) <u>Alexa Michaels</u> Date <u>7/11/24</u> Time <u>1030</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.																			

Envirotech Analytical Laboratory

Printed: 7/11/2024 3:03:38PM

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:	07/11/24 10:30	Work Order ID:	E407062
Phone:	(575) 390-6397	Date Logged In:	07/10/24 15:48	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	07/12/24 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 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

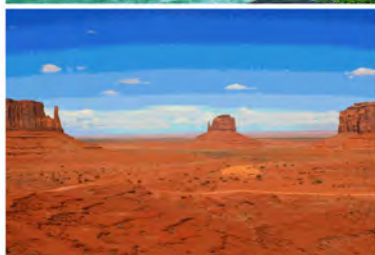
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount #1A

Work Order: E407104

Job Number: 20046-0001

Received: 7/15/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/16/24

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: 7/16/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407104
Date Received: 7/15/2024 9:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/15/2024 9:00:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 07/16/24 14:11
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
SW. Comp 18 - 4'	E407104-01A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 19 - 4'	E407104-02A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 20 - 4'	E407104-03A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 21 - 4'	E407104-04A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 22 - 4'	E407104-05A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 23 - 4'	E407104-06A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 24 - 4'	E407104-07A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 25 - 4'	E407104-08A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 26 - 4'	E407104-09A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 27 - 4'	E407104-10A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.
SW. Comp 28 - 4'	E407104-11A	Soil	07/11/24	07/15/24	Glass Jar, 2 oz.

Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 18 - 4'

E407104-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	07/15/24	07/15/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.6 %	70-130	07/15/24	07/15/24	
<i>Surrogate: Toluene-d8</i>		103 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	07/15/24	07/15/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.6 %	70-130	07/15/24	07/15/24	
<i>Surrogate: Toluene-d8</i>		103 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
<i>Surrogate: n-Nonane</i>		90.6 %	50-200	07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	ND	100	5	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 19 - 4'

E407104-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		91.7 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		103 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		91.7 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		103 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane		81.0 %	50-200	07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	ND	20.0	1	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 20 - 4'

E407104-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		92.5 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		101 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		92.5 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		101 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane		82.1 %	50-200	07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	ND	100	5	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 21 - 4'

E407104-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		91.0 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		104 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		91.0 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		104 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane		90.3 %	50-200	07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	174	20.0	1	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 22 - 4'

E407104-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		102 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		102 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane		91.5 %	50-200	07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	ND	20.0	1	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 23 - 4'

E407104-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	93.4 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	95.4 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	93.4 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	95.4 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane	73.6 %	50-200		07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	ND	100	5	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 24 - 4'

E407104-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	92.3 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	97.3 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	96.2 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	92.3 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	97.3 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	96.2 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane	86.3 %	50-200		07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	ND	100	5	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 25 - 4'

E407104-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	91.9 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	94.8 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	91.9 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	94.8 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane	85.1 %	50-200		07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	198	20.0	1	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 26 - 4'

E407104-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	93.9 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	97.8 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	94.6 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene	93.9 %	70-130		07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4	97.8 %	70-130		07/15/24	07/15/24	
Surrogate: Toluene-d8	94.6 %	70-130		07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane	92.1 %	50-200		07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	ND	100	5	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 27 - 4'

E407104-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		108 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		103 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		108 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		103 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2429008
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane		86.0 %	50-200	07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429007
Chloride	166	20.0	1	07/15/24	07/15/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/16/2024 2:11:42PM

SW. Comp 28 - 4'

E407104-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2429001	
Benzene	ND	0.0250	1	07/15/24	07/15/24	
Ethylbenzene	ND	0.0250	1	07/15/24	07/15/24	
Toluene	ND	0.0250	1	07/15/24	07/15/24	
o-Xylene	ND	0.0250	1	07/15/24	07/15/24	
p,m-Xylene	ND	0.0500	1	07/15/24	07/15/24	
Total Xylenes	ND	0.0250	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		90.7 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		102 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2429001	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/15/24	07/15/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/15/24	07/15/24	
Surrogate: 1,2-Dichloroethane-d4		90.7 %	70-130	07/15/24	07/15/24	
Surrogate: Toluene-d8		102 %	70-130	07/15/24	07/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2429008	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/15/24	07/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/15/24	07/15/24	
Surrogate: n-Nonane		90.2 %	50-200	07/15/24	07/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2429007	
Chloride	ND	20.0	1	07/15/24	07/15/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/16/2024 2:11:42PM

Volatile Organic Compounds by EPA 8260B

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 (2429001-BLK1)

Prepared: 07/15/24 Analyzed: 07/15/24

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	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.442		0.500		88.4	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			

LCS (2429001-BS1)

Prepared: 07/15/24 Analyzed: 07/15/24

Benzene	2.35	0.0250	2.50		93.8	70-130			
Ethylbenzene	2.43	0.0250	2.50		97.4	70-130			
Toluene	2.44	0.0250	2.50		97.5	70-130			
o-Xylene	2.51	0.0250	2.50		100	70-130			
p,m-Xylene	5.01	0.0500	5.00		100	70-130			
Total Xylenes	7.52	0.0250	7.50		100	70-130			
Surrogate: Bromofluorobenzene	0.540		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.450		0.500		90.0	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			

LCS Dup (2429001-BSD1)

Prepared: 07/15/24 Analyzed: 07/15/24

Benzene	2.15	0.0250	2.50		86.1	70-130	8.63	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.31	27	
Toluene	2.28	0.0250	2.50		91.1	70-130	6.83	24	
o-Xylene	2.39	0.0250	2.50		95.5	70-130	5.08	27	
p,m-Xylene	4.77	0.0500	5.00		95.4	70-130	4.88	27	
Total Xylenes	7.16	0.0250	7.50		95.4	70-130	4.95	27	
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/16/2024 2:11:42PM

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 (2429001-BLK1) Prepared: 07/15/24 Analyzed: 07/15/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.442		0.500		88.4	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			

LCS (2429001-BS2) Prepared: 07/15/24 Analyzed: 07/15/24

Gasoline Range Organics (C6-C10)	53.9	20.0	50.0		108	70-130			
Surrogate: Bromofluorobenzene	0.544		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.456		0.500		91.2	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			

LCS Dup (2429001-BSD2) Prepared: 07/15/24 Analyzed: 07/15/24

Gasoline Range Organics (C6-C10)	54.1	20.0	50.0		108	70-130	0.296	20	
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.457		0.500		91.4	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/16/2024 2:11:42PM

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 (2429008-BLK1) Prepared: 07/15/24 Analyzed: 07/15/24

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 (2429008-BS1) Prepared: 07/15/24 Analyzed: 07/15/24

Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	60.0		50.0		120	50-200			

Matrix Spike (2429008-MS1) Source: E407099-01 Prepared: 07/15/24 Analyzed: 07/15/24

Diesel Range Organics (C10-C28)	234	25.0	250	ND	93.4	38-132			
Surrogate: n-Nonane	46.0		50.0		92.1	50-200			

Matrix Spike Dup (2429008-MSD1) Source: E407099-01 Prepared: 07/15/24 Analyzed: 07/15/24

Diesel Range Organics (C10-C28)	232	25.0	250	ND	92.9	38-132	0.506	20	
Surrogate: n-Nonane	50.8		50.0		102	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/16/2024 2:11:42PM

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 (2429007-BLK1)					Prepared: 07/15/24 Analyzed: 07/15/24				
Chloride	ND	20.0							
LCS (2429007-BS1)					Prepared: 07/15/24 Analyzed: 07/15/24				
Chloride	245	20.0	250		98.0	90-110			
Matrix Spike (2429007-MS1)					Source: E407093-03		Prepared: 07/15/24 Analyzed: 07/15/24		
Chloride	374	20.0	250	123	101	80-120			
Matrix Spike Dup (2429007-MSD1)					Source: E407093-03		Prepared: 07/15/24 Analyzed: 07/15/24		
Chloride	375	20.0	250	123	101	80-120	0.237	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/16/24 14:11

- 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.





enviro+tech

Envirotech Analytical Laboratory

Printed: 7/15/2024 11:04:44AM

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:	07/15/24 00:00	Work Order ID:	E407104
Phone:	(575) 390-6397	Date Logged In:	07/12/24 16:00	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	07/16/24 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 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 #1A

Work Order: E407113

Job Number: 20046-0001

Received: 7/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/17/24

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: 7/17/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount #1A
Workorder: E407113
Date Received: 7/16/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/16/2024 6:00:00AM, under the Project Name: West Mount #1A.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount #1A	Reported: 07/17/24 13:16
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
SW. Comp. 29 - 4'	E407113-01A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SW. Comp. 30 - 4'	E407113-02A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SW. Comp. 31 - 4'	E407113-03A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SW. Comp. 32 - 4'	E407113-04A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SW. Comp. 33 - 4'	E407113-05A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SW. Comp. 34 - 4'	E407113-06A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SW. Comp. 35 - 4'	E407113-07A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SW. Comp. 36 - 4'	E407113-08A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.

Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 29 - 4'

E407113-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90.3 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90.3 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
<i>Surrogate: n-Nonane</i>		98.3 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	ND	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 30 - 4'

E407113-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		94.3 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		94.3 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
Surrogate: n-Nonane		103 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	26.4	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 31 - 4'

E407113-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		105 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		105 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
Surrogate: n-Nonane		98.4 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	ND	100	5	07/16/24	07/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 32 - 4'

E407113-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		104 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
Surrogate: n-Nonane		99.5 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	173	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 33 - 4'

E407113-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		106 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		106 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		100 %	50-200	07/16/24	07/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	174	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 34 - 4'

E407113-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		94.9 %	50-200	07/16/24	07/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	25.9	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 35 - 4'

E407113-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		90.2 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		106 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		90.2 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		97.3 %	50-200	07/16/24	07/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	ND	100	5	07/16/24	07/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: West Mount #1A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
7/17/2024 1:16:37PM

SW. Comp. 36 - 4'

E407113-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
Surrogate: Bromofluorobenzene		107 %	70-130	07/16/24	07/16/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	07/16/24	07/16/24	
Surrogate: Toluene-d8		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		89.7 %	50-200	07/16/24	07/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	ND	200	10	07/16/24	07/16/24	



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/17/2024 1:16:37PM

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 (2429028-BLK1) Prepared: 07/16/24 Analyzed: 07/16/24

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	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.6	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			

LCS (2429028-BS1) Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.22	0.0250	2.50		88.8	70-130			
Ethylbenzene	2.32	0.0250	2.50		92.6	70-130			
Toluene	2.32	0.0250	2.50		92.6	70-130			
o-Xylene	2.45	0.0250	2.50		98.2	70-130			
p,m-Xylene	4.90	0.0500	5.00		98.0	70-130			
Total Xylenes	7.35	0.0250	7.50		98.0	70-130			
Surrogate: Bromofluorobenzene	0.560		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.467		0.500		93.3	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike (2429028-MS1) Source: E407113-07 Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.26	0.0250	2.50	ND	90.3	48-131			
Ethylbenzene	2.38	0.0250	2.50	ND	95.2	45-135			
Toluene	2.37	0.0250	2.50	ND	94.7	48-130			
o-Xylene	2.51	0.0250	2.50	ND	100	43-135			
p,m-Xylene	5.03	0.0500	5.00	ND	101	43-135			
Total Xylenes	7.54	0.0250	7.50	ND	101	43-135			
Surrogate: Bromofluorobenzene	0.555		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			

Matrix Spike Dup (2429028-MSD1) Source: E407113-07 Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.33	0.0250	2.50	ND	93.1	48-131	3.05	23	
Ethylbenzene	2.44	0.0250	2.50	ND	97.8	45-135	2.65	27	
Toluene	2.43	0.0250	2.50	ND	97.1	48-130	2.50	24	
o-Xylene	2.56	0.0250	2.50	ND	102	43-135	1.95	27	
p,m-Xylene	5.11	0.0500	5.00	ND	102	43-135	1.57	27	
Total Xylenes	7.67	0.0250	7.50	ND	102	43-135	1.70	27	
Surrogate: Bromofluorobenzene	0.547		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		92.9	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported: 7/17/2024 1:16:37PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Nonhalogenated Organics by EPA 8015D - GRO

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 (2429028-BLK1) Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.6	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			

LCS (2429028-BS2) Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	55.1	20.0	50.0		110	70-130			
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.456		0.500		91.1	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			

Matrix Spike (2429028-MS2) Source: E407113-07 Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130			
Surrogate: Bromofluorobenzene	0.541		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.457		0.500		91.4	70-130			
Surrogate: Toluene-d8	0.524		0.500		105	70-130			

Matrix Spike Dup (2429028-MSD2) Source: E407113-07 Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130	1.49	20	
Surrogate: Bromofluorobenzene	0.544		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.455		0.500		90.9	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/17/2024 1:16:37PM

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 (2429026-BLK1) Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.6		50.0		109	50-200			

LCS (2429026-BS1) Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	295	25.0	250		118	38-132			
Surrogate: n-Nonane	52.6		50.0		105	50-200			

Matrix Spike (2429026-MS1) Source: E407113-02 Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	294	25.0	250	ND	118	38-132			
Surrogate: n-Nonane	49.7		50.0		99.3	50-200			

Matrix Spike Dup (2429026-MSD1) Source: E407113-02 Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	280	25.0	250	ND	112	38-132	4.77	20	
Surrogate: n-Nonane	50.8		50.0		102	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount #1A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/17/2024 1:16:37PM

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 (2429030-BLK1)					Prepared: 07/16/24 Analyzed: 07/16/24				
Chloride	ND	20.0							
LCS (2429030-BS1)					Prepared: 07/16/24 Analyzed: 07/16/24				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2429030-MS1)					Source: E407112-02		Prepared: 07/16/24 Analyzed: 07/16/24		
Chloride	292	20.0	250	35.7	103	80-120			
Matrix Spike Dup (2429030-MSD1)					Source: E407112-02		Prepared: 07/16/24 Analyzed: 07/16/24		
Chloride	292	20.0	250	35.7	103	80-120	0.0818	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 #1A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/17/24 13:16

- 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 1A</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA	
Project Manager:					Address: <u>2724 NW COUNTY RD</u>					<u>E 407113</u>		<u>20046-0001</u>		<input checked="" type="checkbox"/>						
Address:					City, State, Zip <u>HOBBS, NM 88240</u>					Analysis and Method									RCRA	
City, State, Zip					Phone: <u>575-393-9048</u>					BRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BDOC NM SDOC IX									State	
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>														NM	CO
Email:					Email: <u>BRITTNEY@ENERGYSTAFFINGLLC.COM</u>														Remarks	
Report due by:																				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number															
	07/12	S	1	SW. Comp. 29-4'	1															
	07/12	S	1	SW. Comp 30-4'	2															
	07/12	S	1	SW. Comp. 31-4'	3															
	07/12	S	1	SW. Comp. 32-4'	4															
	07/12	S	1	SW. Comp. 33-4'	5															
	07/12	S	1	SW. Comp 34-4'	6															
	07/12	S	1	SW. Comp. 35-4'	7															
	07/12	S	1	SW. Comp 36-4'	8															
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: <u>Sandra Perez</u>																				
Relinquished by: (Signature) <u>S. Perez</u>					Date <u>07/12/24</u>		Time		Received by: (Signature) <u>Michelle Gonzales</u>					Date <u>7-15-24</u>		Time <u>1320</u>		Lab Use Only		
Relinquished by: (Signature) <u>Michelle Gonzales</u>					Date <u>7-15-24</u>		Time <u>1600</u>		Received by: (Signature) <u>Andrea</u>					Date <u>7-15-24</u>		Time <u>1715</u>		Received on ice: <u>Y</u> / N		
Relinquished by: (Signature) <u>Andrea</u>					Date <u>7-15-24</u>		Time <u>2330</u>		Received by: (Signature) <u>Kyle K Heel</u>					Date <u>7-16-24</u>		Time <u>0600</u>		T1 _____ T2 _____ T3 _____		
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: 7/16/2024 1:08:56PM

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:	07/16/24 06:00	Work Order ID:	E407113
Phone:	(575) 390-6397	Date Logged In:	07/15/24 16:32	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	07/17/24 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 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

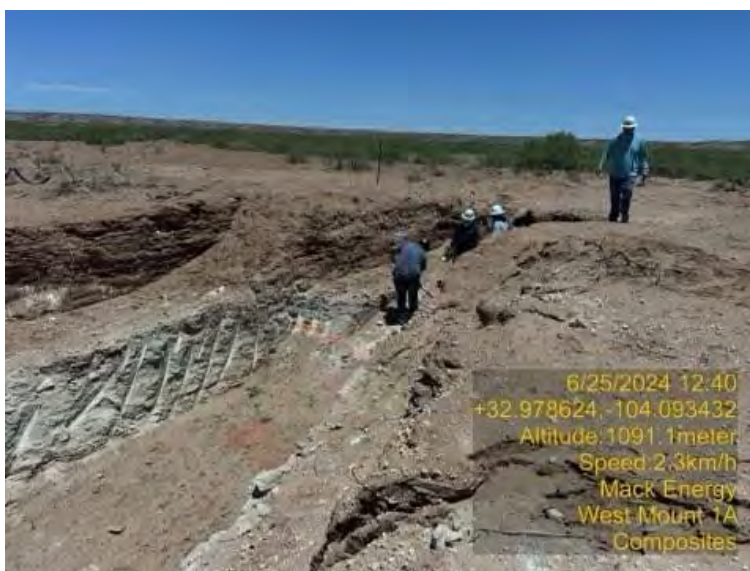


envirotech Inc.

MACK ENERGY: WEST MOUNT #1A
REMEDIATION AND FINAL PHOTOS











Jun 26, 2024 at 11:48:15 AM
+32.9786,-104.0932
Mack Energy
West Mount
Frack spill 1A

































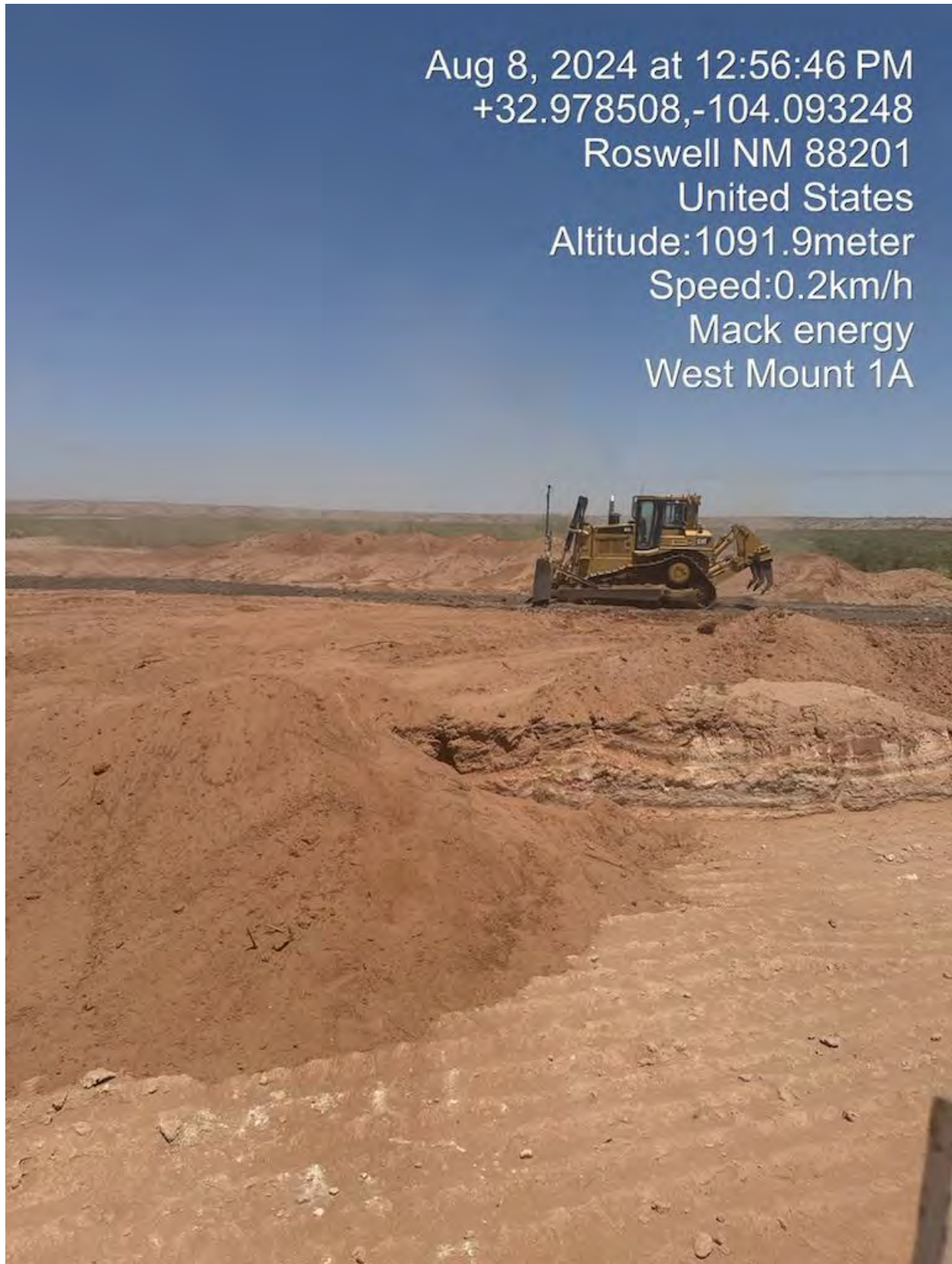




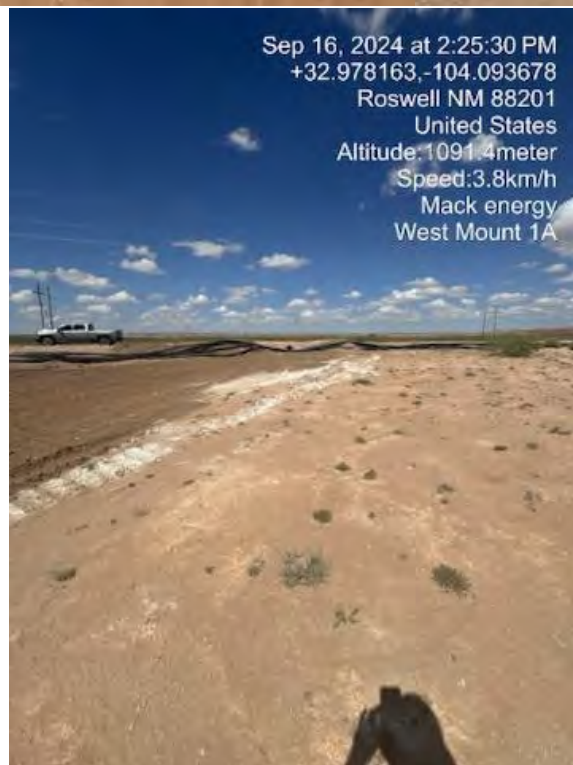


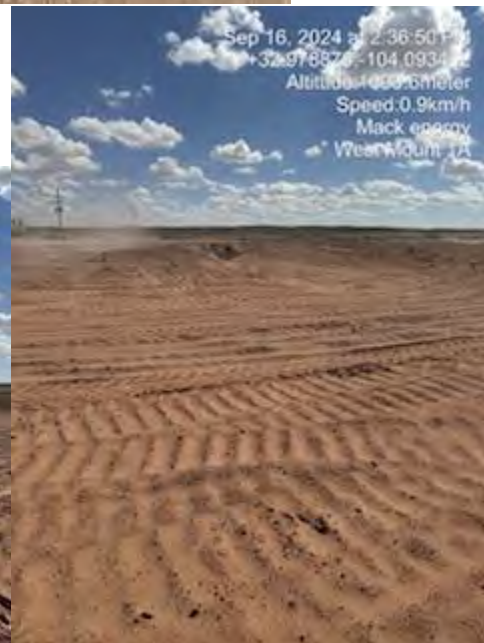
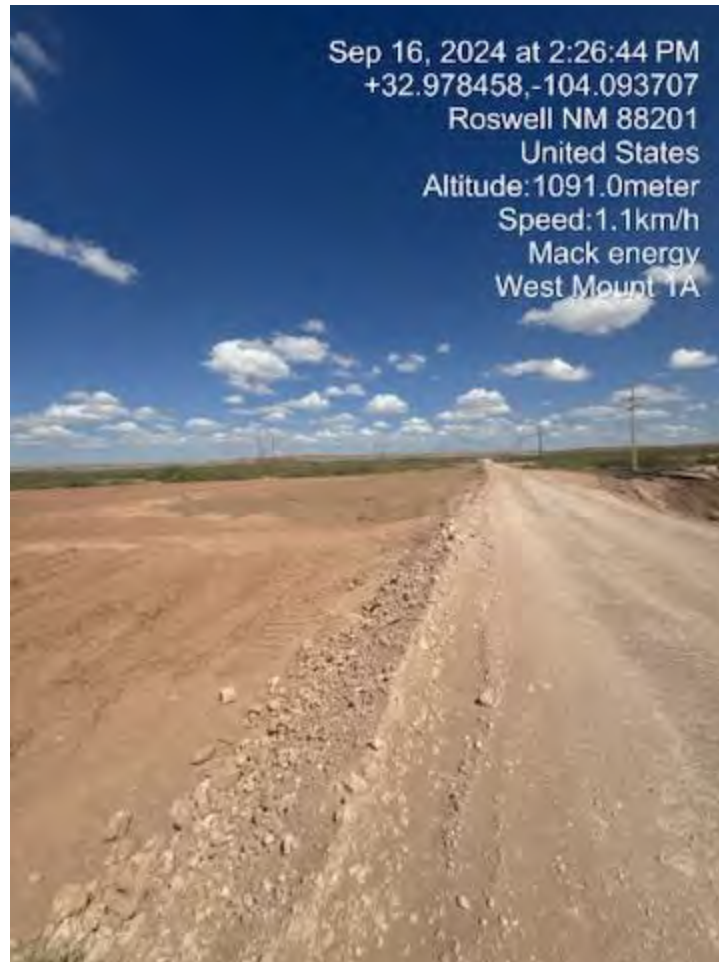
Aug 8, 2024 at 12:54:50 PM
+32.978427,-104.093323
Roswell NM 88201
United States
Altitude:1073.7meter
Speed:0.0km/h
Mack energy
West Mount 1A



























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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 463700

QUESTIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327753701
Incident Name	NAPP2327753701 WEST MOUNT FEDERAL 1A @ 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 FEDERAL 1A
Date Release Discovered	09/08/2023
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: 156 BBL Recovered: 0 BBL Lost: 156 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 463700

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	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: 05/15/2025
--	---

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QUESTIONS, Page 3

Action 463700

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Site Characterization	
<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
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (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	Between 1000 (ft.) and ½ (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	None
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<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
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	35600
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	264
GRO+DRO (EPA SW-846 Method 8015M)	264
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	02/23/2024
On what date will (or did) the final sampling or liner inspection occur	07/08/2024
On what date will (or was) the remediation complete(d)	12/27/2024
What is the estimated surface area (in square feet) that will be reclaimed	13652
What is the estimated volume (in cubic yards) that will be reclaimed	4318
What is the estimated surface area (in square feet) that will be remediated	13652
What is the estimated volume (in cubic yards) that will be remediated	4318
<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 463700

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
<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>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	GANDY MARLEY LANDFARM/LANDFILL [FEEM0112338393]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site 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: natalie@energystaffingllc.com Date: 05/15/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 463700

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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QUESTIONS, Page 6

Action 463700

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	359106
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/29/2024
What was the (estimated) number of samples that were to be gathered	69
What was the sampling surface area in square feet	13652

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	13652
What was the total volume (cubic yards) remediated	4318
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	13652
What was the total volume (in cubic yards) reclaimed	4318
Summarize any additional remediation activities not included by answers (above)	N/A

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: natalie@energystaffingllc.com Date: 05/15/2025
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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

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

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Action 463700

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Reclamation Report	
<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	13652
What was the total volume of replacement material (in cubic yards) for this site	5708
<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)	12/27/2024
Summarize any additional reclamation activities not included by answers (above)	SEEDED WITH NMSLO LOAMY SEED MIX
<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: natalie@energystaffingllc.com Date: 05/15/2025

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Action 463700

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
<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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Santa Fe, NM 87505

CONDITIONS

Action 463700

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 463700
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Reclamation Report for Incident #NAPP2327753701 WEST MOUNT FEDERAL 1A, thank you. This Reclamation Report is approved.	6/13/2025