



**WEST MOUNT SPILL A
CLOSURE REQUEST**

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

**DATE OF RELEASE: 09/20/2023
INCIDENT NO. NAPP2327756575**

**03/19/2025
Prepared by:**



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

March 19, 2025

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

Mack Energy Corporation
11344 Lovington Hwy
Artesia, NM 88210

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

API No. 30-005-64381

Incident No. NAPP2327756575

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

Chaves County, New Mexico

To Whom it May Concern:

Mack Energy engaged Energy Staffing Services, LLC (ESS) to conduct a spill assessment for the produced water release that occurred on September 20, 2023, at the West Mount Spill A site (hereafter referred to as "Spill A"). On September 22, 2023, at 4:12 p.m., ESS promptly notified the *New Mexico Oil Conservation Division (NMOCD), District I Office*, via email regarding the release (see notification attached). On behalf of Mack Energy, ESS also submitted the initial C141 Release Notification, and the spill calculator used to determine the release volume on October 4, 2023 (attachments provided). The NMOCD accepted the C141 as official on October 5, 2023, at 4:26 p.m. The incident was assigned to the number NAPP2327756575 (notification of correspondence is also attached).

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

Incident Description

On September 20, 2023, Well Spring, a water transfer company, identified a failure in their lay flat line, resulting in the release of produced water into the pasture area of Spill A. Upon discovering the release, ESS was notified and promptly dispatched crews to the site to perform a comprehensive environmental site assessment. Based on the measured impact area, it was determined that approximately 341.08bbls of produced water was released, with no recoverable fluid, onto the pad and into the pasture area of Spill A. Initial site photos and measurements of the impacted area were taken. Please refer to the attached initial site photos for further details.

Site Characterization

The release at Spill A occurred on State Land, located at latitude 33.000002 and longitude -104.070796, approximately 19.6 miles southeast of Hagerman, New Mexico. The site is legally described as Unit Letter M, Section 27, Township 15S, and Range 28E in Chaves County, New Mexico. A schematic of the site is attached.

Spill A includes production lines and is situated near production facilities and well pads. The release occurred in the pasture area of the site, which lies at an elevation of 3,751 feet. The area is historically dominated by alkali sacaton, black grama, coldenia, blue grama, and other perennial grasses and forbs. Rangeland and vegetation classification details are attached for your reference.

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

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

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

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

- RA12428, drilled in 2016, with a well depth of 170 feet and a groundwater depth of 125 feet, located 6,258 meters from the site.
- RA09248, drilled in 1996, with a well depth of 150 feet and a groundwater depth of 45 feet, located 8,190 meters from the site.

- RA10280, drilled in 2002, with a well depth of 70 feet and a groundwater depth of 40 feet, located 8,364 meters from the site.
- RA12429 POD1, drilled in 2016, with a well depth of 62 feet and a groundwater depth of 27 feet, located 8,375 meters from the site.
- RA09059, drilled in 1995, with a well depth of 110 feet and a groundwater depth of 35 feet, located 8,787 meters from the site.

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

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

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

Closure Criteria Determination

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

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

Soil Remediation Action Levels

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

Soil Sampling Procedures

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

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

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

Volatile Organics by EPA 8021B

- Benzene, Toluene, Ethylbenzene, p.m. Xylene, o-Xylene and Total Xylenes

Nonhalogenated Organics by EPA 8015D – GRO

- Gasoline Range Organics (C6-C10)

Nonhalogenated Organics by EPA 8015D – DRO/ORO

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

Anions by EPA 300.0/9056A

- Chloride

Release Investigation Data

On November 14, 2023, ESS arrived at the Spill A site to establish delineation sample points, which were GPS-located. The crews began collecting surface samples, which were field-tested, logged, and submitted to Envirotech Laboratory for confirmation. A total of 20 vertical sample points and 17 horizontal sample points were established. Samples were collected using a backhoe in 1-foot and 2-foot intervals. Bottom hole samples were then sent to the laboratory for further analysis and confirmation.

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

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
SP1	SURF	1120	L	ND	ND	ND	ND	ND	1070
	2	1280							
	4	480							
	6	880							
	8	400							
	10	320							
	12	320	L	ND	ND	ND	ND	ND	258
SP2	SURF	3600	L	ND	ND	ND	ND	ND	3240

	2	240							
	4	320							
	6	400							
	8	320	L	ND	ND	ND	ND	ND	240
SP3	SURF	3680	L	ND	ND	ND	ND	ND	4100
	2	400							
	4	320	L	ND	ND	ND	ND	ND	226
SP4	SURF	880	L	ND	ND	31.1	ND	31.1	864
	2	320							
	4	160	L	ND	ND	ND	ND	ND	66.5
SP5	SURF	>4000	L	ND	ND	ND	ND	ND	6630
	2	1440							
	4	1360							
	6	2000							
	8	1520							
	10	400							
	12	160	L	ND	ND	ND	ND	ND	62.9
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	6560
	2	1360							
	4	1280							
	6	1200							
	8	1440							
	10	160							
	12	320							
	14	80							
	16	80							
	18	80							
	20	80	L	ND	ND	ND	ND	ND	ND
SP7	SURF	>4000	L	ND	ND	ND	ND	ND	5650
	2	1600							
	4	880							
	6	480							
	8	400							
	10	400	L	ND	ND	ND	ND	ND	516
SP8	SURF	>4000	L	ND	ND	ND	ND	ND	12000

	2	560							
	4	720							
	6	160							
	8	80	L	ND	ND	ND	ND	ND	44.6
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	24100
	2	80							
	4	560							
	6	160							
	8	160	L	ND	ND	ND	ND	ND	84.9
SP10	SURF	>4000	L	ND	ND	ND	ND	ND	7540
	2	320							
	4	240	L	ND	ND	ND	ND	ND	216
SP11	SURF	>4000	L	ND	ND	ND	ND	ND	3880
	2	240							
	4	240							
	6	80							
	8	80							
	10	80	L	ND	ND	ND	ND	ND	27.5
SP12	SURF	>4000	L	ND	ND	ND	ND	ND	5960
	2	800							
	4	560							
	6	320							
	8	400							
	10	240	L	ND	ND	ND	ND	ND	247
SP13	SURF	>4000	L	ND	ND	28.4	50.4	78.8	11500
	2	960							
	4	1280							
	6	2000							
	8	1760							
	10	1120							
	12	640							
	14	240							
	16	80	L	ND	ND	ND	ND	ND	24
SP14	SURF	>4000	L	ND	ND	ND	ND	ND	10700
	2	320							

	4	480							
	6	480	L	ND	ND	ND	ND	ND	604
	8	480							
	10	480	L	ND	ND	ND	ND	ND	111
SP15	SURF	>4000	L	ND	ND	ND	ND	ND	9240
	2	640							
	4	720							
	6	480							
	8	720							
	10	400							
	12	320	L	ND	ND	ND	ND	ND	329
SP16	SURF	>4000	L	ND	ND	ND	ND	ND	5580
	2	960							
	4	320							
	6	480							
	8	560							
	10	400							
	12	320	L	ND	ND	ND	ND	ND	346
SP17	SURF	480	L	ND	ND	ND	ND	ND	406
	2	720							
	4	720							
	6	400							
	8	400	L	ND	ND	ND	ND	ND	388
SP18	SURF	160	L	ND	ND	ND	ND	ND	56.1
	2	160							
	4	160	L	ND	ND	ND	ND	ND	39.1
SP19	SURF	2880	L	ND	ND	31.7	ND	31.7	3060
	2	960							
	4	1200							
	6	1200							
	8	720							
	10	400							
	12	400	L	ND	ND	ND	ND	ND	428
SP20	SURF	2800	L	ND	ND	ND	ND	ND	2860
	2	640							

	4	1120							
	6	1120							
	8	640							
	10	320							
	12	320							
	14	160							
	16	160	L	ND	ND	ND	ND	ND	101
SW1	SURF	800	L	ND	ND	ND	ND	ND	875
	1	1040							
	2	960							
	3	400							
	4	320	L	ND	ND	ND	ND	ND	331
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	5960
	1	960							
	2	640							
	3	320							
	4	160	L	ND	ND	ND	ND	ND	212
SW3	SURF	480	L	ND	ND	ND	ND	ND	502
	1	400							
	2	320	L	ND	ND	ND	ND	ND	464
SW4	SURF	400	H	ND	ND	6650	ND	6650	208
	1	1360							
	2	1200							
	3	480							
	4	240	L	ND	ND	ND	ND	ND	212
SW5	SURF	>4000	L	ND	ND	26.3	ND	26.3	5190
	1	720							
	2	960							
	3	560							
	4	400	L	ND	ND	ND	ND	ND	413
SW6	SURF	>4000	L	ND	ND	25.6	ND	25.6	4870
	1	2880							
	2	1120							
	3	400							
	4	240	L	ND	ND	ND	ND	ND	212

SW7	SURF	>4000	L	ND	ND	ND	ND	ND	10500
	1	1240							
	2	720							
	3	560							
	4	400	L	ND	ND	ND	ND	ND	537
SW8	SURF	>4000	L	ND	ND	ND	ND	ND	9800
	1	560							
	2	400	L	ND	ND	ND	ND	ND	310
SW9	SURF	>4000	L	ND	ND	ND	ND	ND	10100
	1	560							
	2	320	L	ND	ND	ND	ND	ND	235
SW10	SURF	>4000	L	ND	ND	ND	ND	ND	8840
	1	320							
	2	160	L	ND	ND	ND	ND	ND	137
SW11	SURF	320	L	ND	ND	ND	ND	ND	310
	1	480							
	2	240	L	ND	ND	ND	ND	ND	243
SW12	SURF	>4000	L	ND	ND	ND	ND	ND	5720
	1	560							
	2	480	L	ND	ND	ND	ND	ND	424
SW13	SURF	>4000	H	ND	ND	50.4	57.6	108	15200
	1	160							
	2	160	L	ND	ND	ND	ND	ND	139
SW14	SURF	320	H	ND	ND	57.9	120	177.9	316
	1	160							
	2	160	L	ND	ND	ND	ND	ND	160
SW15	SURF	>4000	L	ND	ND	ND	ND	ND	10800
	1	240							
	2	160	L	ND	ND	ND	ND	ND	54.6
SW16	SURF	640	L	ND	ND	ND	ND	ND	798
	1	400							

	2	160	L	ND	ND	ND	ND	ND	121
SW17	SURF	640	L	ND	ND	ND	ND	ND	753
	1	400							
	2	240	L	ND	ND	ND	ND	ND	279

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

On December 11, 2024, ESS issued the official notification to the NMOCD regarding the composite phase of the release at Spill A. The NMOCD received and acknowledged the notification on the same day (see attached email correspondence).

On December 19, 2024, ESS crews began collecting 200 square foot composite samples from the excavation area at Spill A. In total, 64 bottom hole composite samples were gathered, field-tested, and sent to Envirotech Laboratory for confirmation. Several composites showed elevated TPH levels and were subsequently excavated for further testing. As shown on the sample data sheet below, the elevated composites are marked in red, followed by the deeper composites that were collected. All of these deeper samples passed the site's concentration level requirements. The composite sample data is provided below and is also attached to this report, along with lab confirmation results.

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
COMP1	10	240	L	ND	ND	ND	ND	ND	137
COMP2	2	320	L	ND	ND	ND	ND	ND	287
COMP3	2	320	L	ND	ND	ND	ND	ND	286
COMP4	10	320	L	ND	ND	ND	ND	ND	283
COMP5	8	320	L	ND	ND	ND	ND	ND	279
COMP6	8	400	L	ND	ND	ND	ND	ND	287
COMP7	8	320	L	ND	ND	ND	ND	ND	288
COMP8	6	400	L	ND	ND	ND	ND	ND	1150
COMP8A	8	240	L	ND	ND	ND	ND	ND	487

COMP9	2	240	L	ND	ND	ND	ND	ND	133
COMP10	2	240	L	ND	ND	ND	ND	ND	140
COMP11	12	240	L	ND	ND	ND	ND	ND	75.4
COMP12	10	240	L	ND	ND	ND	ND	ND	71
COMP13	10	240	L	ND	ND	ND	ND	ND	66.6
COMP14	14	320	L	ND	ND	ND	ND	ND	337
COMP15	10	320	L	ND	ND	ND	ND	ND	347
COMP16	10	320	L	ND	ND	ND	ND	ND	333
COMP17	10	320	L	ND	ND	ND	ND	ND	347
COMP18	14	320	L	ND	ND	ND	ND	ND	346
COMP19	12	400	L	ND	ND	ND	ND	ND	374
COMP20	12	400	L	ND	ND	ND	ND	ND	308
COMP21	12	400	L	ND	ND	ND	ND	ND	513
COMP22	6	400	L	ND	ND	ND	ND	ND	382
COMP23	6	160	L	ND	ND	ND	ND	ND	125
COMP24	6	240	L	ND	ND	ND	ND	ND	108
COMP25	6	240	L	ND	ND	ND	ND	ND	230
COMP26	6	240	L	ND	ND	ND	ND	ND	211
COMP27	6	160	L	ND	ND	ND	ND	ND	114
COMP28	6	160	L	ND	ND	ND	ND	ND	111
COMP29	6	320	L	ND	ND	ND	ND	ND	640

COMP29A	8	320	L	ND	ND	ND	ND	ND	275
COMP30	6	320	L	ND	ND	ND	ND	ND	630
COMP30A	8	240	L	ND	ND	ND	ND	ND	274
COMP31	12	240	L	ND	ND	ND	ND	ND	209
COMP32	12	240	L	ND	ND	ND	ND	ND	216
COMP33	6	160	L	ND	ND	ND	ND	ND	107
COMP34	2	240	L	ND	ND	ND	ND	ND	231
COMP35	2	320	L	ND	ND	ND	ND	ND	201
COMP36	2	320	L	ND	ND	ND	ND	ND	187
COMP37	2	240	L	ND	ND	ND	ND	ND	328
COMP38	2	240	L	ND	ND	ND	ND	ND	332
COMP39	2	320	L	ND	ND	ND	ND	ND	195
COMP40	6	320	L	ND	ND	ND	ND	ND	194
COMP41	6	160	L	ND	ND	ND	ND	ND	288
COMP42	6	160	L	ND	ND	ND	ND	ND	264
COMP43	6	160	L	ND	ND	ND	ND	ND	260
COMP44	12	160	L	ND	ND	ND	ND	ND	244
COMP45	12	160	L	ND	ND	ND	ND	ND	247
COMP46	12	160	L	ND	ND	ND	ND	ND	227
COMP47	4	320	L	ND	ND	ND	ND	ND	354
COMP48	4	320	L	ND	ND	ND	ND	ND	323

COMP49	4	240	L	ND	ND	ND	ND	ND	194
COMP50	4	240	L	ND	ND	ND	ND	ND	184
COMP51	4	240	L	ND	ND	ND	ND	ND	233
SWCOMP1	10	160	L	ND	ND	ND	ND	ND	130
SWCOMP2	10	160	L	ND	ND	ND	ND	ND	127
SWCOMP3	4	160	L	ND	ND	ND	ND	ND	128
SWCOMP4	10	160	L	ND	ND	ND	ND	ND	137
SWCOMP5	10	160	L	ND	ND	ND	ND	ND	119
SWCOMP6	14	160	L	ND	ND	ND	ND	ND	122
SWCOMP7	14	160	L	ND	ND	ND	ND	ND	180
SWCOMP8	12	320	L	ND	ND	ND	ND	ND	181
SWCOMP9	12	320	L	ND	ND	ND	ND	ND	184
SWCOMP10	8	320	L	ND	ND	ND	ND	ND	178
SWCOMP11	8	320	L	ND	ND	ND	ND	ND	209
SWCOMP12	8	320	L	ND	ND	ND	ND	ND	209
SWCOMP13	12	320	L	ND	ND	ND	ND	ND	209

Please find the attached remediation photos.

The impacted area at Spill A measured 8,066 square feet. During the remediation phase, a total of 4,480 cubic yards of contaminated soil was excavated and transported to Gandy's Disposal. Additionally, 5,372 cubic yards of fill dirt was hauled from Gandy's Disposal to the site for backfilling, along with 216 cubic yards of topsoil sourced from the landowner's pit. The site was contoured, sloped back to its natural grade, and broad-casted with NMSLO Sandy Loam seed. Backfilling and seeding was completed on February 18, 2025. The final photos are attached to this report.

Closure Request

On behalf of Mack Energy, Energy Staffing Services, LLC formally requests the closure of the incident (NAPP2327756575) related to the produced water release at the West Mount Spill A pad and pasture area. Both Mack Energy and ESS certify that all information contained in this report is accurate and complete. Furthermore, both entities confirm compliance with all applicable closure requirements for this release.

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

Sincerely,



Director of Environmental and Regulatory Services

Energy Staffing Services, LLC.

2724 NW County Road

Hobbs, NM 88240

Cell: 575-390-6397

Office: 575-393-9048

Email: natalie@energystaffingllc.com



Attachments

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


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

From Natalie Gladden <natalie@energystaffingllc.com>

Date Thu 1/30/2025 11:28 AM

To Brittney Corral <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: Tuesday, September 26, 2023 2:39 PM

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

Cc: mattbuckles@mec.com

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

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

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

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

Natalie Gladden

Director of Environmental and Regulatory Services

Energy Staffing Services, LLC.

2724 NW County Road

Hobbs, NM 88240

Cell: 575-390-6397

Office: 575-393-9048

Email: natalie@energystaffingllc.com



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



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	NAPP2327756575
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 **33.000002** Longitude **-104.070796**
(NAD 83 in decimal degrees to 5 decimal places)

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

Unit Letter	Section	Township	Range	County
K	19	15S	29E	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) 85	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

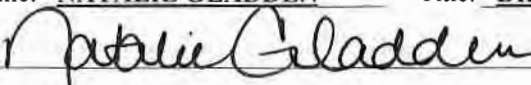
The water transfer company Well Spring found a failure on their lay flat line, releasing the fluid to the pasture area.

Incident ID	NAPP2327756575
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, 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: <u>Shelly Wells</u> Date: <u>10/5/2023</u>

MACK ENERGY - WEST MOUNT SPILL A

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	193.34	118.2	0.083	1896.7814	84.53	Medium Sand
Coarse Sand	0.26	10	10	0.083	8.3	0.38	Coarse Sand
Gravelly Sand	0.26	10	10	0.083	8.3	0.38	Gravelly Sand
Fine Gravel	0.26	10	10	0.083	8.3	0.38	Fine Gravel
Medium Gravel	0.20	10	10	0.083	8.3	0.30	Medium Gravel
Coarse Gravel	0.18	10	10	0.083	8.3	0.27	Coarse Gravel
Sandstone	0.25	10	10	0.083	8.3	0.37	Sandstone
Siltstone	0.18	10	10	0.083	8.3	0.27	Siltstone
Shale	0.05	10	10	0.083	8.3	0.07	Shale
Limestone	0.13	10	10	0.083	8.3	0.19	Limestone
Basalt	0.19	10	10	0.083	8.3	0.28	Basalt
Volcanic Tuff	0.20	10	10	0.083	8.3	0.30	Volcanic Tuff
Standing Liquids	X	10	10	0.083	8.3	1.48	Standing Liquids

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

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

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

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

Cubic Feet = L x W x D

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 272606

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 272606
	Action Type: [C-141] Release Corrective Action (C-141)



CONDITIONS

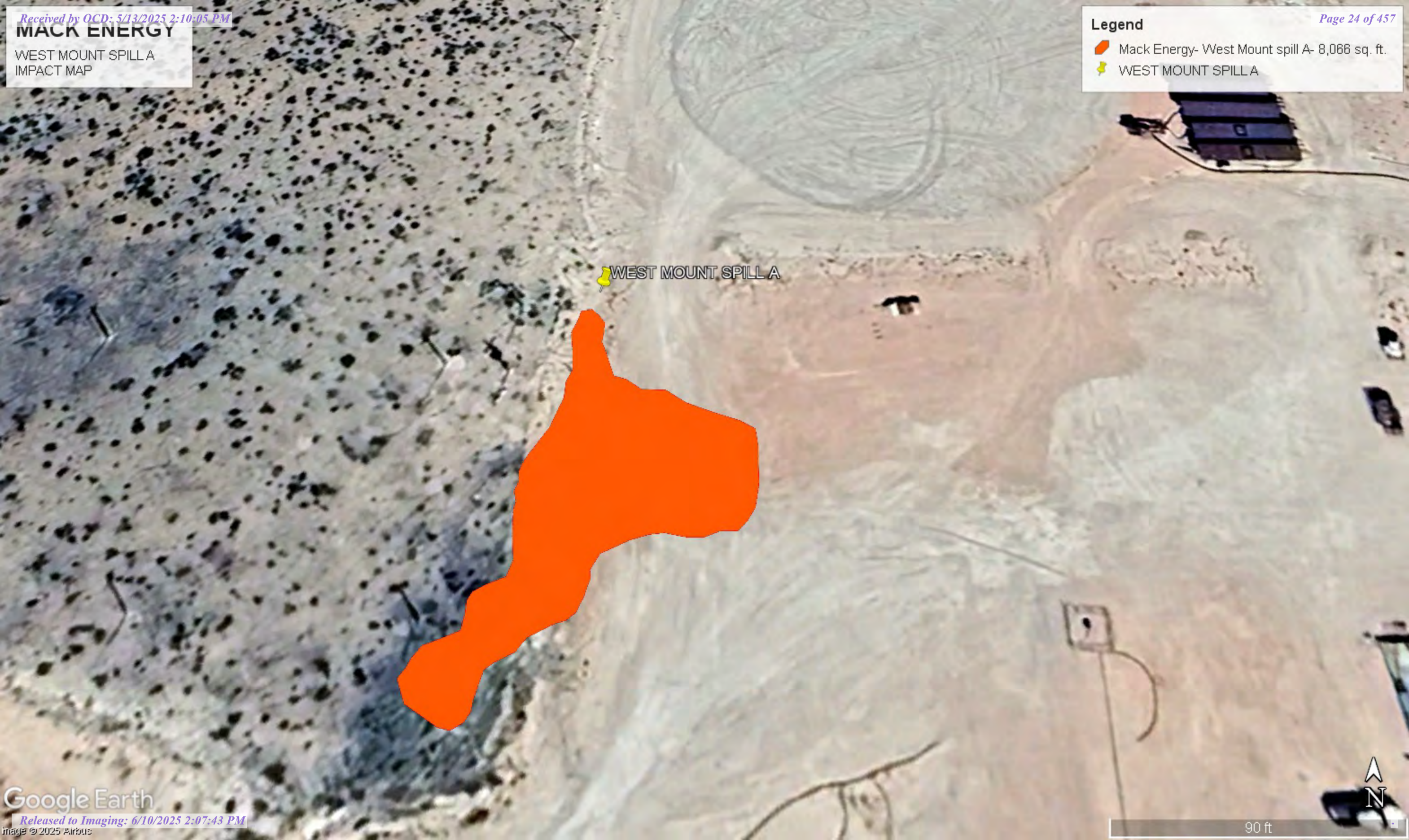
Created By	Condition	Condition Date
scwells	None	10/5/2023

MACK ENERGY

WEST MOUNT SPILL A
IMPACT MAP

Legend

-  Mack Energy- West Mount spill A- 8,066 sq. ft.
-  WEST MOUNT SPILL A



WEST MOUNT SPILL A

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

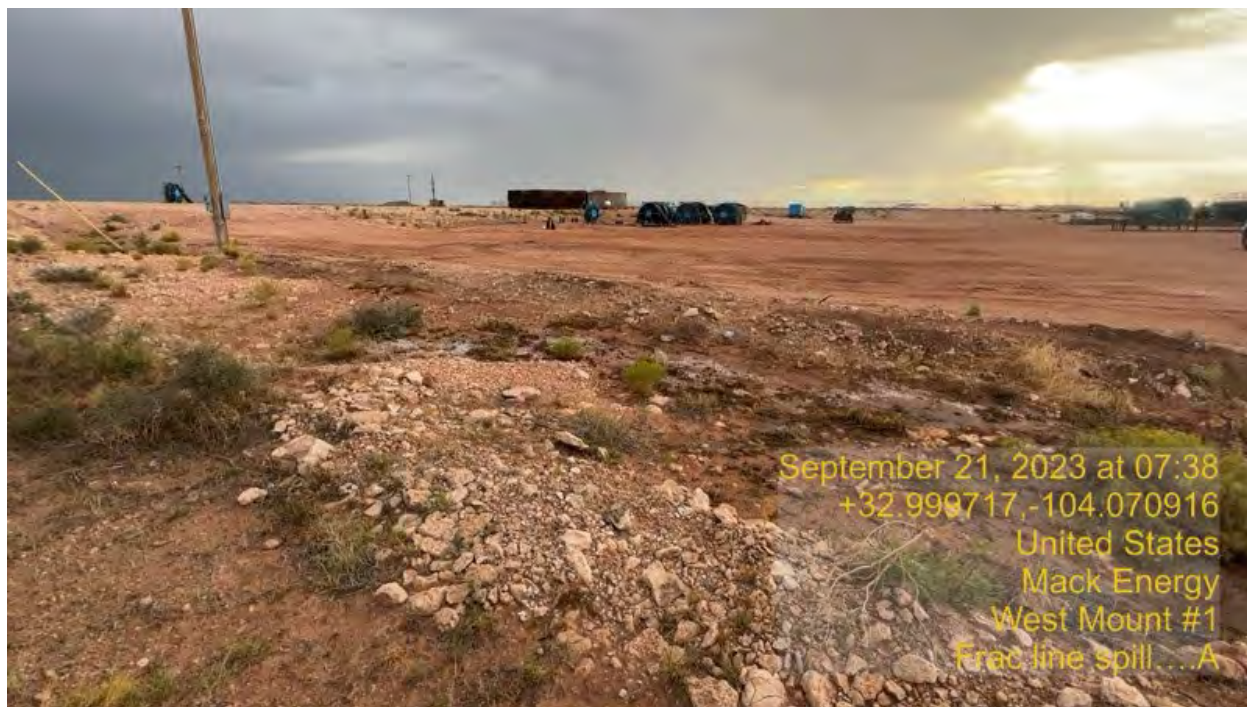












Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition

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

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

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

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

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

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

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

Reference:

United States Department of Agriculture, Natural Resources Conservation Service, [National range and pasture handbook](#).

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

WEST MOUNT SPILL A

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

WEST MOUNT SPILL A

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

Data Source Information

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

Survey Area Data: Version 18, Sep 7, 2023



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

6/4/2024
Page 4 of 4

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



Natural Resources
Conservation Service


Web Soil Survey
National Cooperative Soil Survey

6/4/2024
Page 1 of 3


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

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

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

Survey Area Data: Version 18, Sep 7, 2023

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TS	Tencee-Sotim association	23.3	100.0%
Totals for Area of Interest		23.3	100.0%

National Flood Hazard Layer FIRMette



104°4'34"W 33°0'15"N



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

1:6,000

104°3'56"W 32°59'45"N

Released to Imaging: 6/10/2025 2:07:43 PM

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
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
OTHER FEATURES		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
OTHER FEATURES		Hydrographic Feature
		Digital Data Available
MAP PANELS		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 1:37 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.



Received by OCD: 5/13/2025 2:10:05 PM

MACK

WEST MOUNT SPILL A
KARST MAP

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Legend

- High
- Low
- Medium
- WEST MOUNT SPILL A

Google Earth

Released to Imaging: 6/10/2025 2:07:43 PM

Image © 2024 Airbus



2 mi

MACK ENERGY

WEST MOUNT SPILL A
WETLANDS MAP

Legend

- PEM
- RIVERINE
- WEST MOUNT SPILL A





WEST MOUNT SPILL A



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 586803.92 **Northing (Y):** 3651670.55 **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): 586803.92 **Northing (Y):** 3651670.55 **Radius:** 5000

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

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

POD Number	POD			Source	q q q			X	Y	Distance	Start Date	Log File		Depth Well	Depth Water	Driller	License Number			
	Sub-Code	basin	County		6416	4	Sec					Tws	Rng					Date	Date	
RA 12428	RA	CH	Shallow	4	2	1	21	15S	28E	580579	3652317		6258	07/28/2016	08/04/2016	08/08/2016	170	125	DONALD KUEHN III	1058
RA 09248	RA	CH	Shallow	1	4	3	17	15S	28E	578704	3652884*		8190	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*		8364	06/20/2002	07/15/2002	04/23/2003	70	40	CARREON, FERNANDO	1490
RA 12429 POD1	RA	CH	Shallow	1	1	4	32	15S	28E	579093	3648401		8375	11/17/2016	11/17/2016	11/28/2016	62	27	EADES, ALAN	1044
RA 09059	RA	CH	Shallow	2	4	4	18	15S	28E	578099	3652875*		8787	11/13/1995	01/15/1996	02/08/1997	110	35	RAYMOND ANDERSON	1344
L 14514 POD1	L	LE	Shallow	2	2	1	32	15S	36E	595494	3649622		8927	08/09/2018	08/10/2018	08/17/2018	208	77	JOHN GOERTZEN	1611

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 586803.92

Northing (Y): 3651670.55

Radius: 10000

*UTM location was derived from PLSS - see Help


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



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 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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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 09248		1	4	3	17	15S	28E	578704	3652884*

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

Driller Name: RAYMOND ANDERSON

Drill Start Date: 07/10/1996

Drill Finish Date: 07/13/1996

Plug Date:

Log File Date: 07/25/1996

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 2 GPM

Casing Size: 4.50

Depth Well: 150 feet

Depth Water: 45 feet

Water Bearing Stratifications:

Top Bottom Description

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

Casing Perforations:

Top Bottom

45	100
----	-----

*UTM location was derived from PLSS - see Help

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POD SUMMARY - RA 09248



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 10280		4	3	3	17	15S	28E	578501	3652680*

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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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 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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POD SUMMARY - RA 12429 POD1



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 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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POD SUMMARY - RA 09059

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 Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
	RA 12006 POD1	NE	NE	SW	19	15S	29E	587049.3	3651703.3	

* UTM location was derived from PLSS - see Help

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:


Depth Water:

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

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 Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
	RA 12007 POD1	SE	NE	SW	19	15S	29E	586999.1	3651508.8	

* UTM location was derived from PLSS - see Help

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

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

Legend

- RA09059-8,787-35 FT
- RA09248-8,190-45 FT
- RA10280-8,364-40 FT
- RA12428-6,258-125 FT
- RA12429 POD1-8,375-27 FT
- WEST MOUNT SPILL A

RA09059-8,787-35 FT
RA09248-8,190-45 FT

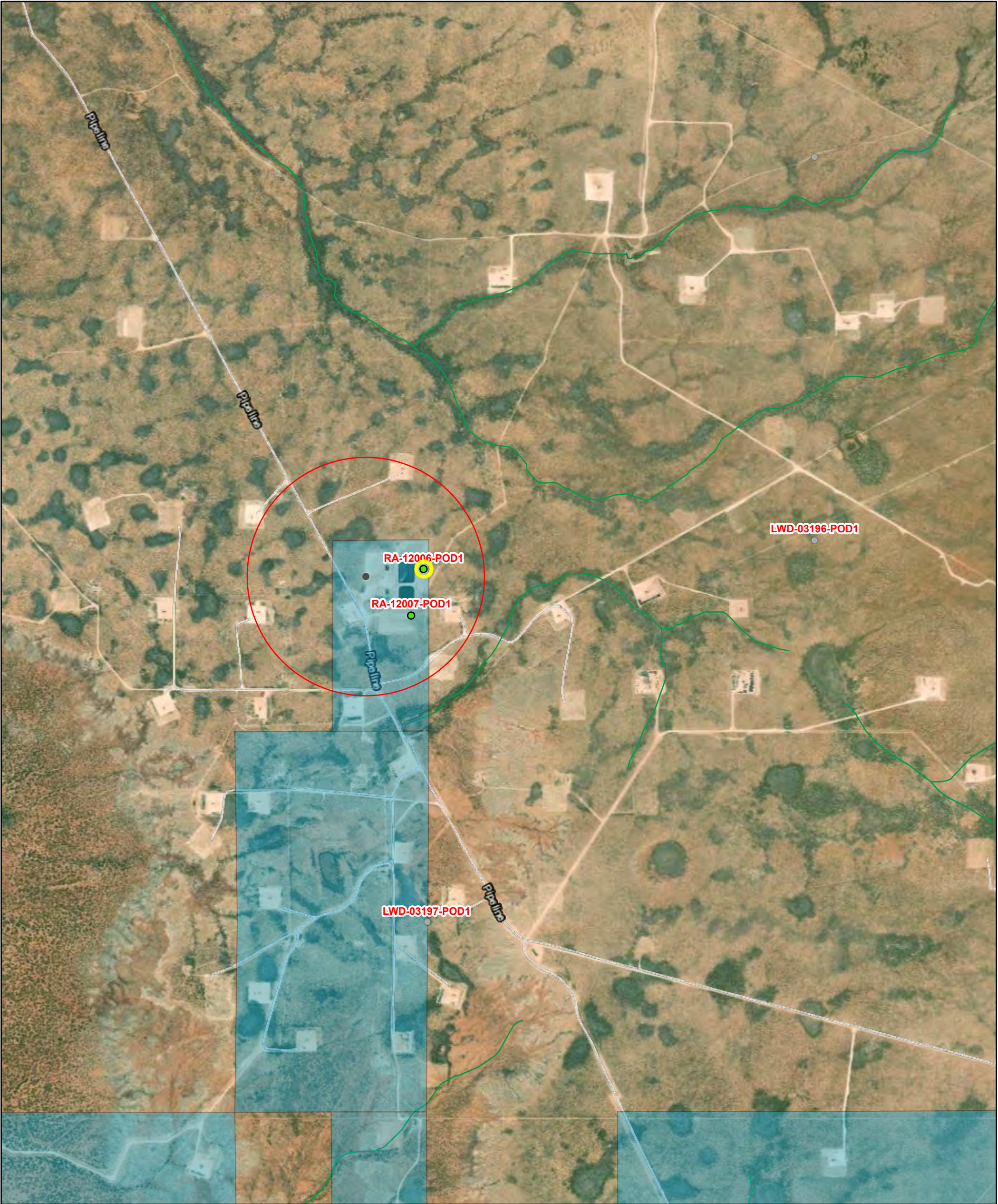
RA10280-8,364-40 FT

RA12428-6,258-125 FT

WEST MOUNT SPILL A

RA12429 POD1-8,375-27 FT

OSE POD Location Map



6/21/2024, 11:39:13 AM

GIS WATERS PODs

- Pending
-

OSE District Boundary

New Mexico State Trust Lands

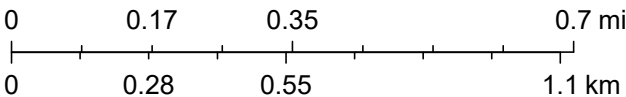
Both Estates

NHD Flowlines

— Artificial Path

— Stream River

1:18,056



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

Company Name: **MACK**Location Name: **WEST MOUNT SPILL A**

Release Date:

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Soil	Notes
SP1	SURF	1120	L	ND	ND	ND	ND	ND	1070		
	2	1280									
	4	480									
	6	880									
	8	400									
	10	320									
	12	320	L	ND	ND	ND	ND	ND	258		
SP2	SURF	3600	L	ND	ND	ND	ND	ND	3240		
	2	240									
	4	320									
	6	400									
	8	320	L	ND	ND	ND	ND	ND	240		
SP3	SURF	3680	L	ND	ND	ND	ND	ND	4100		
	2	400									
	4	320	L	ND	ND	ND	ND	ND	226		
SP4	SURF	880	L	ND	ND	31.1	ND	31.1	864		
	2	320									
	4	160	L	ND	ND	ND	ND	ND	66.5		
SP5	SURF	>4000	L	ND	ND	ND	ND	ND	6630		
	2	1440									
	4	1360									
	6	2000									
	8	1520									
	10	400									
	12	160	L	ND	ND	ND	ND	ND	62.9		
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	6560		

	2	1360									
	4	1280									
	6	1200									
	8	1440									
	10	160									
	12	320									
	14	80									
	16	80									
	18	80									
	20	80	L	ND	ND	ND	ND	ND	ND		
SP7	SURF	>4000	L	ND	ND	ND	ND	ND	5650		
	2	1600									
	4	880									
	6	480									
	8	400									
	10	400	L	ND	ND	ND	ND	ND	516		
SP8	SURF	>4000	L	ND	ND	ND	ND	ND	12000		
	2	560									
	4	720									
	6	160									
	8	80	L	ND	ND	ND	ND	ND	44.6		
SP9	SURF	>4000	L	ND	ND	ND	ND	ND	24100		
	2	80									
	4	560									
	6	160									
	8	160	L	ND	ND	ND	ND	ND	84.9		
SP10	SURF	>4000	L	ND	ND	ND	ND	ND	7540		
	2	320									
	4	240	L	ND	ND	ND	ND	ND	216		

SP11	SURF	>4000	L	ND	ND	ND	ND	ND	3880		
	2	240									
	4	240									
	6	80									
	8	80									
	10	80	L	ND	ND	ND	ND	ND	27.5		
SP12	SURF	>4000	L	ND	ND	ND	ND	ND	5960		
	2	800									
	4	560									
	6	320									
	8	400									
	10	240	L	ND	ND	ND	ND	ND	247		
SP13	SURF	>4000	L	ND	ND	28.4	50.4	78.8	11500		
	2	960									
	4	1280									
	6	2000									
	8	1760									
	10	1120									
	12	640									
	14	240									
	16	80	L	ND	ND	ND	ND	ND	24		
SP14	SURF	>4000	L	ND	ND	ND	ND	ND	10700		
	2	320									
	4	480									
	6	480	L	ND	ND	ND	ND	ND	604		
	8	480									
	10	480	L	ND	ND	ND	ND	ND	111		
SP15	SURF	>4000	L	ND	ND	ND	ND	ND	9240		
	2	640									
	4	720									

	6	480									
	8	720									
	10	400									
	12	320	L	ND	ND	ND	ND	ND	329		
SP16	SURF	>4000	L	ND	ND	ND	ND	ND	5580		
	2	960									
	4	320									
	6	480									
	8	560									
	10	400									
	12	320	L	ND	ND	ND	ND	ND	346		
SP17	SURF	480	L	ND	ND	ND	ND	ND	406		
	2	720									
	4	720									
	6	400									
	8	400	L	ND	ND	ND	ND	ND	388		
SP18	SURF	160	L	ND	ND	ND	ND	ND	56.1		
	2	160									
	4	160	L	ND	ND	ND	ND	ND	39.1		
SP19	SURF	2880	L	ND	ND	31.7	ND	31.7	3060		
	2	960									
	4	1200									
	6	1200									
	8	720									
	10	400									
	12	400	L	ND	ND	ND	ND	ND	428		
SP20	SURF	2800	L	ND	ND	ND	ND	ND	2860		
	2	640									
	4	1120									

	6	1120									
	8	640									
	10	320									
	12	320									
	14	160									
	16	160	L	ND	ND	ND	ND	ND	101		
SW1	SURF	800	L	ND	ND	ND	ND	ND	875		
	1	1040									
	2	960									
	3	400									
	4	320	L	ND	ND	ND	ND	ND	331		
SW2	SURF	>4000	L	ND	ND	ND	ND	ND	5960		
	1	960									
	2	640									
	3	320									
	4	160	L	ND	ND	ND	ND	ND	212		
SW3	SURF	480	L	ND	ND	ND	ND	ND	502		
	1	400									
	2	320	L	ND	ND	ND	ND	ND	464		
SW4	SURF	400	H	ND	ND	6650	ND	6650	208		
	1	1360									
	2	1200									
	3	480									
	4	240	L	ND	ND	ND	ND	ND	212		
SW5	SURF	>4000	L	ND	ND	26.3	ND	26.3	5190		
	1	720									
	2	960									
	3	560									
	4	400	L	ND	ND	ND	ND	ND	413		

SW6	SURF	>4000	L	ND	ND	25.6	ND	25.6	4870		
	1	2880									
	2	1120									
	3	400									
	4	240	L	ND	ND	ND	ND	ND	212		
SW7	SURF	>4000	L	ND	ND	ND	ND	ND	10500		
	1	1240									
	2	720									
	3	560									
	4	400	L	ND	ND	ND	ND	ND	537		
SW8	SURF	>4000	L	ND	ND	ND	ND	ND	9800		
	1	560									
	2	400	L	ND	ND	ND	ND	ND	310		
SW9	SURF	>4000	L	ND	ND	ND	ND	ND	10100		
	1	560									
	2	320	L	ND	ND	ND	ND	ND	235		
SW10	SURF	>4000	L	ND	ND	ND	ND	ND	8840		
	1	320									
	2	160	L	ND	ND	ND	ND	ND	137		
SW11	SURF	320	L	ND	ND	ND	ND	ND	310		
	1	480									
	2	240	L	ND	ND	ND	ND	ND	243		
SW12	SURF	>4000	L	ND	ND	ND	ND	ND	5720		
	1	560									
	2	480	L	ND	ND	ND	ND	ND	424		
SW13	SURF	>4000	H	ND	ND	50.4	57.6	108	15200		

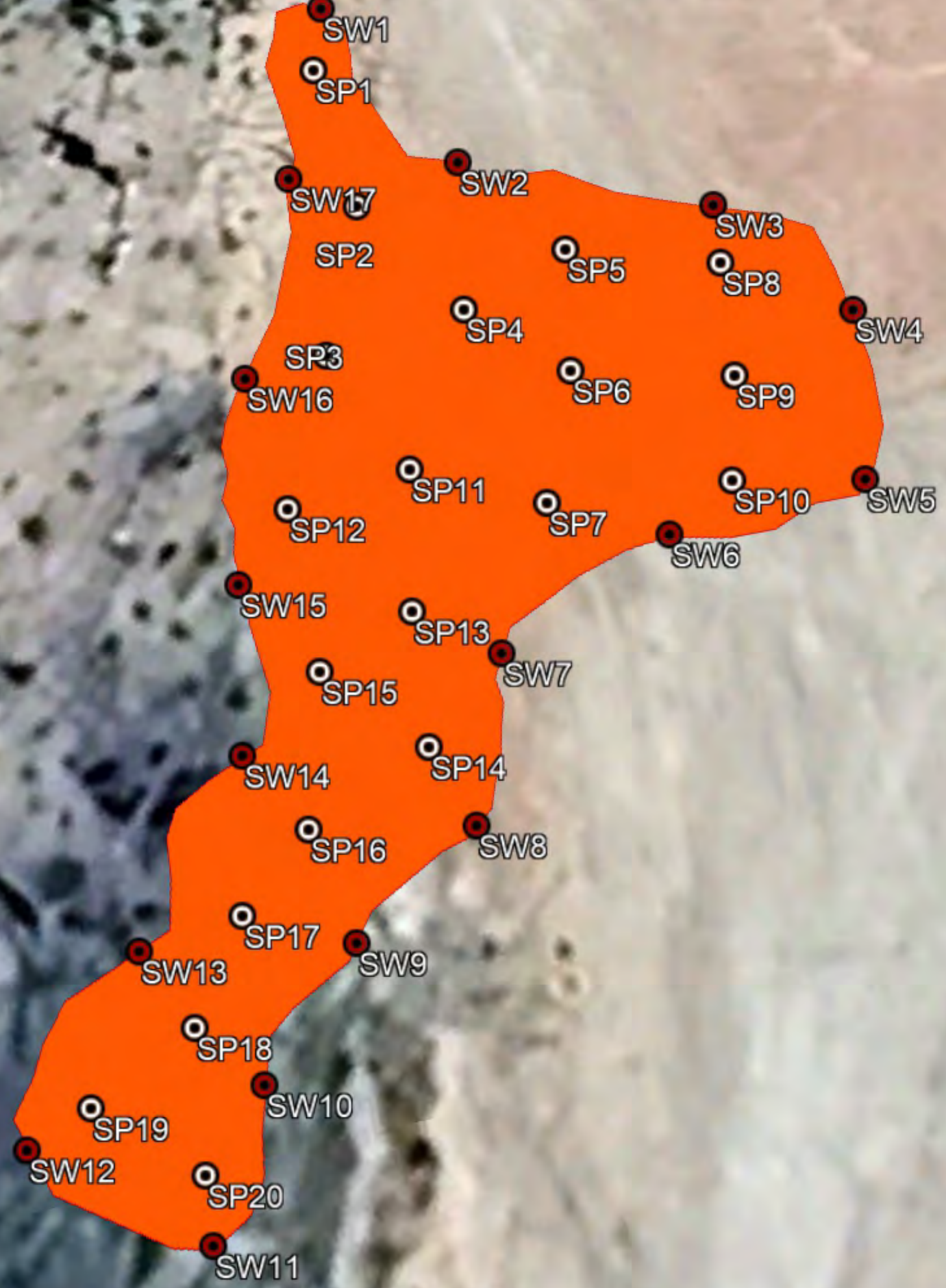
	1	160									
	2	160	L	ND	ND	ND	ND	ND	139		
SW14	SURF	320	H	ND	ND	57.9	120	177.9	316		
	1	160									
	2	160	L	ND	ND	ND	ND	ND	160		
SW15	SURF	>4000	L	ND	ND	ND	ND	ND	10800		
	1	240									
	2	160	L	ND	ND	ND	ND	ND	54.6		
SW16	SURF	640	L	ND	ND	ND	ND	ND	798		
	1	400									
	2	160	L	ND	ND	ND	ND	ND	121		
SW17	SURF	640	L	ND	ND	ND	ND	ND	753		
	1	400									
	2	240	L	ND	ND	ND	ND	ND	279		

Mack Energy

West Mount Spill A
Delineation Map

Legend

- Horizontal Sample Point
- Vertical Sample Point



CLIENT: MACK ENERGY**LOCATION:** WEST MOUNT SPILL A

SAMPLE ID	LAT	LONG
SP1	32.999928°	-104.070808°
SP2	32.999850°	-104.070801°
SP3	32.999779°	-104.070828°
SP4	32.999790°	-104.070763°
SP5	32.999812°	-104.070710°
SP6	32.999753°	-104.070723°
SP7	32.999697°	-104.070748°
SP8	32.999793°	-104.070641°
SP9	32.999738°	-104.070652°
SP10	32.999692°	-104.070668°
SP11	32.999722°	-104.070802°
SP12	32.999715°	-104.070856°
SP13	32.999664°	-104.070813°
SP14	32.999612°	-104.070817°
SP15	32.999648°	-104.070854°
SP16	32.999592°	-104.070868°
SP17	32.999568°	-104.070897°
SP18	32.999536°	-104.070919°
SP19	32.999519°	-104.070958°
SP20	32.999492°	-104.070921°
SW1	32.999964°	-104.070798°
SW2	32.999866°	-104.070749°
SW3	32.999823°	-104.070635°
SW4	32.999759°	-104.070589°
SW5	32.999682°	-104.070612°
SW6	32.999674°	-104.070701°
SW7	32.999641°	-104.070781°
SW8	32.999581°	-104.070805°
SW9	32.999551°	-104.070857°
SW10	32.999514°	-104.070897°
SW11	32.999472°	-104.070921°
SW12	32.999511°	-104.070981°
SW13	32.999564°	-104.070936°
SW14	32.999623°	-104.070889°
SW15	32.999688°	-104.070881°
SW16	32.999775°	-104.070865°
SW17	32.999870°	-104.070830°

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: Frac Line Spill A

Work Order: E311126

Job Number: 20046-0001

Received: 11/16/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/17/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 11/17/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: Frac Line Spill A
Workorder: E311126
Date Received: 11/16/2023 9:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/16/2023 9:00:00AM, under the Project Name: Frac Line Spill A.

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

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/23 17:23
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1-SURFACE	E311126-01A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW2-SURFACE	E311126-02A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW3-SURFACE	E311126-03A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW4-SURFACE	E311126-04A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW5-SURFACE	E311126-05A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW6-SURFACE	E311126-06A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW7-SURFACE	E311126-07A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW8-SURFACE	E311126-08A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW9-SURFACE	E311126-09A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW10-SURFACE	E311126-10A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW11-SURFACE	E311126-11A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW12-SURFACE	E311126-12A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW13-SURFACE	E311126-13A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW14-SURFACE	E311126-14A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW15-SURFACE	E311126-15A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW16-SURFACE	E311126-16A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW17-SURFACE	E311126-17A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/2023 5:23:36PM
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SW1-SURFACE

E311126-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	94.5 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.5 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346077	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>	92.8 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346087	
Chloride	875	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW2-SURFACE

E311126-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.9 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.2 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	87.6 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	5960	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW3-SURFACE

E311126-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	86.5 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	502	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:23:36PM

SW4-SURFACE

E311126-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	94.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.3 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346077	
Diesel Range Organics (C10-C28)	6650	50.0	2	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	100	2	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>	86.6 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346087	
Chloride	208	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW5-SURFACE

E311126-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	26.3	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	83.4 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	5190	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW6-SURFACE

E311126-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	25.6	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	81.5 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	4870	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW7-SURFACE

E311126-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	78.5 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	10500	400	20	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW8-SURFACE

E311126-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.9 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.3 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	80.7 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	9800	400	20	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW9-SURFACE

E311126-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.2 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	80.7 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	10100	400	20	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW10-SURFACE

E311126-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.2 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2346077	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	89.2 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2346087	
Chloride	8840	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW11-SURFACE

E311126-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	90.5 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	310	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW12-SURFACE

E311126-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.2 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	86.1 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	5720	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW13-SURFACE

E311126-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.5 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	50.4	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	57.6	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	88.0 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	15200	400	20	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW14-SURFACE

E311126-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	57.9	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	120	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	91.3 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	316	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW15-SURFACE

E311126-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2346082
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346077
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	84.2 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346087
Chloride	10800	400	20	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW16-SURFACE

E311126-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.3 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2346077	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	91.5 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2346087	
Chloride	798	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:23:36PM

SW17-SURFACE

E311126-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.7 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2346082	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2346077	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	88.8 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2346087	
Chloride	753	20.0	1	11/16/23	11/16/23	



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:23:36PM

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 (2346082-BLK1) Prepared: 11/16/23 Analyzed: 11/16/23

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 (2346082-BS1) Prepared: 11/16/23 Analyzed: 11/17/23

Benzene	5.26	0.0250	5.00		105	70-130			
Ethylbenzene	5.18	0.0250	5.00		104	70-130			
Toluene	5.24	0.0250	5.00		105	70-130			
o-Xylene	5.20	0.0250	5.00		104	70-130			
p,m-Xylene	10.5	0.0500	10.0		105	70-130			
Total Xylenes	15.7	0.0250	15.0		105	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.75		8.00		96.8	70-130			

Matrix Spike (2346082-MS1) Source: E311126-03 Prepared: 11/16/23 Analyzed: 11/17/23

Benzene	4.98	0.0250	5.00	ND	99.7	54-133			
Ethylbenzene	4.90	0.0250	5.00	ND	98.0	61-133			
Toluene	4.96	0.0250	5.00	ND	99.3	61-130			
o-Xylene	4.92	0.0250	5.00	ND	98.4	63-131			
p,m-Xylene	9.97	0.0500	10.0	ND	99.7	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.3	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			

Matrix Spike Dup (2346082-MSD1) Source: E311126-03 Prepared: 11/16/23 Analyzed: 11/17/23

Benzene	5.02	0.0250	5.00	ND	100	54-133	0.751	20	
Ethylbenzene	4.96	0.0250	5.00	ND	99.2	61-133	1.18	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	0.925	20	
o-Xylene	4.97	0.0250	5.00	ND	99.4	63-131	0.976	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.20	20	
Total Xylenes	15.1	0.0250	15.0	ND	100	63-131	1.13	20	
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:23:36PM

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 (2346082-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.34		8.00		91.7	70-130			

LCS (2346082-BS2)					Prepared: 11/16/23 Analyzed: 11/17/23				
Gasoline Range Organics (C6-C10)	43.7	20.0	50.0		87.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.43		8.00		92.8	70-130			

Matrix Spike (2346082-MS2)					Source: E311126-03		Prepared: 11/16/23 Analyzed: 11/17/23		
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0	ND	95.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.43		8.00		92.9	70-130			

Matrix Spike Dup (2346082-MSD2)					Source: E311126-03		Prepared: 11/16/23 Analyzed: 11/17/23		
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.7	70-130	2.60	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.46		8.00		93.3	70-130			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:23:36PM

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 (2346077-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.9		50.0		91.9	50-200			

LCS (2346077-BS1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Diesel Range Organics (C10-C28)	246	25.0	250		98.5	38-132			
Surrogate: n-Nonane	46.4		50.0		92.9	50-200			

Matrix Spike (2346077-MS1)					Source: E311100-43		Prepared: 11/16/23 Analyzed: 11/16/23		
Diesel Range Organics (C10-C28)	257	25.0	250	ND	103	38-132			
Surrogate: n-Nonane	46.5		50.0		93.0	50-200			

Matrix Spike Dup (2346077-MSD1)					Source: E311100-43		Prepared: 11/16/23 Analyzed: 11/16/23		
Diesel Range Organics (C10-C28)	265	25.0	250	ND	106	38-132	2.85	20	
Surrogate: n-Nonane	47.7		50.0		95.5	50-200			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:23:36PM

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 (2346087-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	ND	20.0							
LCS (2346087-BS1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	246	20.0	250		98.5	90-110			
Matrix Spike (2346087-MS1)					Source: E311126-08		Prepared: 11/16/23 Analyzed: 11/16/23		
Chloride	10300	400	250	9800	210	80-120			M4
Matrix Spike Dup (2346087-MSD1)					Source: E311126-08		Prepared: 11/16/23 Analyzed: 11/16/23		
Chloride	9860	400	250	9800	23.9	80-120	4.60	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:	Frac Line Spill A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/23 17:23

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

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

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



Project Information

Chain of Custody

Page 1 of 2

Client: <u>Mace Energy</u> Project: <u>Free Line Spill A</u> Project Manager: <u>Natalie Gladden</u> Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Report due by: _____					Bill To Attention: <u>ENERGY STAFFING SERVICES</u> Address: <u>2724 NW COUNTY RD</u> City, State, Zip: <u>HOBBS, NM 88240</u> Phone: <u>575-393-9048</u> Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u> <u>BRITTNEY@ENERGYSTAFFINGLLC.COM</u>					Lab Use Only Lab WO# <u>E31126</u> Job Number <u>200460001</u> Analysis and Method: _____					TAT 1D <input checked="" type="checkbox"/> 2D <input type="checkbox"/> 3D <input type="checkbox"/> Standard _____				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/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX							
	11/14/23	S	1	SW1-Surface	1							X								
				SW2-Surface	2															
				SW3-Surface	3															
				SW4-Surface	4															
				SW5-Surface	5															
				SW6-Surface	6															
				SW7-Surface	7															
				SW8-Surface	8															
				SW9-Surface	9															
	11/14/23	S	1	SW10-Surface	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.																				
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N								
Andy Torrey		11/14/23				Michelle Gyle		11-15-23		1430										
Michelle Gyle		11-15-23		1730		Michelle Gyle		11-16-23		900										
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		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.																				

Project Information

Chain of Custody

Page 2 of 2

Client: <u>Maack Energy</u>				Bill To				Lab Use Only				TAT				EPA Program																											
Project: <u>Frac line A Spill</u>				Attention: <u>ENERGY STAFFING SERVICES</u>				Lab WO# <u>E311126</u>				Job Number <u>200460001</u>				1D	2D	3D	Standard	CWA	SDWA																						
Project Manager: <u>Natalie Gladden</u>				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 300.0				BGDOC NM				BGDOC TX							
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	Remarks
	11/4/23	S	1	SW11 - Surface	11							X		
				SW12 - Surface	12									
				SW13 - Surface	13									
				SW14 - Surface	14									
				SW15 - Surface	15									
				SW16 - Surface	16									
	11/4/23	S	1	SW17 - Surface	17							X		

Additional Instructions:

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

Relinquished by: (Signature) Andy Toruga Date 11/4/23 Time 1430

Received by: (Signature) Natalie Gladden Date 11/5/23 Time 1430

Relinquished by: (Signature) Natalie Gladden Date 11/5/23 Time 1730

Received by: (Signature) Andy Toruga Date 11/6/23 Time 900

Relinquished by: (Signature) _____ Date _____ Time _____

Received by: (Signature) _____ Date _____ Time _____

Received on ice: Y / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

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

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

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

Envirotech Analytical Laboratory

Printed: 11/16/2023 10:47:39AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	11/16/23 09:00	Work Order ID:	E311126
Phone:	(575) 390-6397	Date Logged In:	11/15/23 15:28	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/17/23 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

Time sampled 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? 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

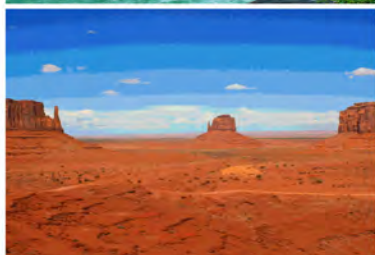
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: Frac Line Spill A

Work Order: E311127

Job Number: 20046-0001

Received: 11/16/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/17/23

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: 11/17/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: Frac Line Spill A
Workorder: E311127
Date Received: 11/16/2023 9:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/16/2023 9:00:00AM, under the Project Name: Frac Line Spill A.

The analytical test results summarized in this report with the Project Name: Frac Line Spill A 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

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/23 17:11
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP-1-SURF	E311127-01A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-2-SURF	E311127-02A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-3-SURF	E311127-03A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-4-SURF	E311127-04A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-5-SURF	E311127-05A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-6-SURF	E311127-06A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-7-SURF	E311127-07A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-8-SURF	E311127-08A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-9-SURF	E311127-09A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-10-SURF	E311127-10A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-11-SURF	E311127-11A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-12-SURF	E311127-12A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-13-SURF	E311127-13A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-14-SURF	E311127-14A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-15-SURF	E311127-15A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-16-SURF	E311127-16A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-17-SURF	E311127-17A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-18-SURF	E311127-18A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-19-SURF	E311127-19A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP-20-SURF	E311127-20A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/2023 5:11:46PM
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SP-1-SURF

E311127-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346083	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346083	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	91.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346078	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>	99.6 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346088	
Chloride	1070	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-2-SURF

E311127-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.9 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	3240	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-3-SURF

E311127-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.3 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	99.6 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	4100	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-4-SURF

E311127-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.4 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	31.1	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	864	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-5-SURF

E311127-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346083	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	<i>91.1 %</i>	<i>70-130</i>		<i>11/16/23</i>	<i>11/17/23</i>	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346083	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	<i>91.4 %</i>	<i>70-130</i>		<i>11/16/23</i>	<i>11/17/23</i>	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346078	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>	<i>91.6 %</i>	<i>50-200</i>		<i>11/16/23</i>	<i>11/16/23</i>	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346088	
Chloride	6630	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-6-SURF

E311127-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.9 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.4 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	83.9 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	6560	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-7-SURF

E311127-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346083	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	90.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346083	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	90.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346078	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>	72.7 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346088	
Chloride	5650	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-8-SURF

E311127-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.5 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	70.8 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	12000	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-9-SURF

E311127-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	94.7 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	24100	400	20	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-10-SURF

E311127-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.4 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	96.0 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	7540	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-11-SURF

E311127-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.5 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	94.3 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	3880	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-12-SURF

E311127-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	94.9 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	5960	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-13-SURF

E311127-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	28.4	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	50.4	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	11500	400	20	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-14-SURF

E311127-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.4 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	97.8 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	10700	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-15-SURF

E311127-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.5 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	96.0 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	9240	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-16-SURF

E311127-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	95.6 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	5580	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-17-SURF

E311127-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.4 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.1 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	93.0 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	406	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-18-SURF

E311127-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.2 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	98.5 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	56.1	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-19-SURF

E311127-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.6 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.2 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	31.7	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	3060	40.0	2	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

Project Name: Frac Line Spill A
Project Number: 20046-0001
Project Manager: Natalie Gladden

Reported:
11/17/2023 5:11:46PM

SP-20-SURF

E311127-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.2 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346083
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.4 %	70-130		11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346078
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	99.7 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346088
Chloride	2860	40.0	2	11/16/23	11/17/23	



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:11:46PM

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 (2346083-BLK1) Prepared: 11/16/23 Analyzed: 11/17/23

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	7.93		8.00		99.1	70-130			

LCS (2346083-BS1) Prepared: 11/16/23 Analyzed: 11/17/23

Benzene	5.11	0.0250	5.00		102	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.1	70-130			
Toluene	5.11	0.0250	5.00		102	70-130			
o-Xylene	5.04	0.0250	5.00		101	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.2	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.65		8.00		95.6	70-130			

Matrix Spike (2346083-MS1) Source: E311127-04 Prepared: 11/16/23 Analyzed: 11/17/23

Benzene	5.17	0.0250	5.00	ND	103	54-133			
Ethylbenzene	4.93	0.0250	5.00	ND	98.5	61-133			
Toluene	5.15	0.0250	5.00	ND	103	61-130			
o-Xylene	5.06	0.0250	5.00	ND	101	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.56		8.00		94.4	70-130			

Matrix Spike Dup (2346083-MSD1) Source: E311127-04 Prepared: 11/16/23 Analyzed: 11/17/23

Benzene	4.34	0.0250	5.00	ND	86.8	54-133	17.5	20	
Ethylbenzene	4.17	0.0250	5.00	ND	83.3	61-133	16.7	20	
Toluene	4.33	0.0250	5.00	ND	86.7	61-130	17.2	20	
o-Xylene	4.27	0.0250	5.00	ND	85.3	63-131	16.9	20	
p,m-Xylene	8.62	0.0500	10.0	ND	86.2	63-131	16.2	20	
Total Xylenes	12.9	0.0250	15.0	ND	85.9	63-131	16.4	20	
Surrogate: 4-Bromochlorobenzene-PID	7.50		8.00		93.7	70-130			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:11:46PM

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 (2346083-BLK1) Prepared: 11/16/23 Analyzed: 11/17/23

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

LCS (2346083-BS2) Prepared: 11/16/23 Analyzed: 11/17/23

Gasoline Range Organics (C6-C10)	44.5	20.0	50.0		88.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.8	70-130			

Matrix Spike (2346083-MS2) Source: E311127-04 Prepared: 11/16/23 Analyzed: 11/17/23

Gasoline Range Organics (C6-C10)	46.0	20.0	50.0	ND	91.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.2	70-130			

Matrix Spike Dup (2346083-MSD2) Source: E311127-04 Prepared: 11/16/23 Analyzed: 11/17/23

Gasoline Range Organics (C6-C10)	40.1	20.0	50.0	ND	80.2	70-130	13.6	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.31		8.00		91.4	70-130			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:11:46PM

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 (2346078-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.1		50.0		108	50-200			

LCS (2346078-BS1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Diesel Range Organics (C10-C28)	264	25.0	250		106	38-132			
Surrogate: n-Nonane	52.9		50.0		106	50-200			

Matrix Spike (2346078-MS1)					Source: E311127-06		Prepared: 11/16/23 Analyzed: 11/16/23		
Diesel Range Organics (C10-C28)	286	25.0	250	ND	114	38-132			
Surrogate: n-Nonane	53.5		50.0		107	50-200			

Matrix Spike Dup (2346078-MSD1)					Source: E311127-06		Prepared: 11/16/23 Analyzed: 11/16/23		
Diesel Range Organics (C10-C28)	279	25.0	250	ND	111	38-132	2.67	20	
Surrogate: n-Nonane	52.0		50.0		104	50-200			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:11:46PM

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 (2346088-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	ND	20.0							
LCS (2346088-BS1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	273	20.0	250		109	90-110			
Matrix Spike (2346088-MS1)					Source: E311127-10		Prepared: 11/16/23 Analyzed: 11/16/23		
Chloride	8240	200	250	7540	280	80-120			M4
Matrix Spike Dup (2346088-MSD1)					Source: E311127-10		Prepared: 11/16/23 Analyzed: 11/16/23		
Chloride	8300	200	250	7540	304	80-120	0.720	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:	Frac Line Spill A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/23 17:11

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

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

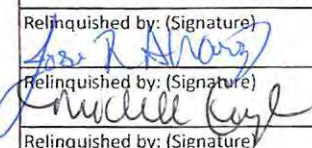
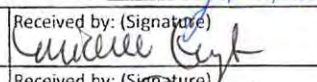
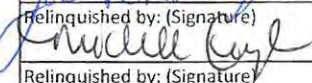
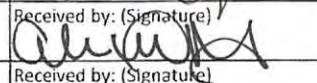
Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 2

Client: <u>Max Energy</u> Project: <u>Track Mine Mill A</u> Project Manager: <u>Natalie Gadden</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>E31127</u> Job Number <u>200440001</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	BGDOC NM	BGDOC TX						
	11/14/23	S	1	SP-1 - Surf	1														
				SP-2 - surf	2														
				SP-3 - surf	3														
				SP-4 - surf	4														
				SP-5 - surf	5														
				SP-6 - surf	6														
				SP-7 - surf	7														
				SP-8 - surf	8														
				SP-9 - surf	9														
	11/14/23	S	1	SP-10 - 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.																			
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							
		11/14/23						11-15-23		1430									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 _____ T2 _____ T3 _____							
		11-15-23		1730				11-16-23		9:00									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		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.																			

Project Information

Chain of Custody

Page 2 of 2

Client: <u>Mack Energy</u> Project: <u>Crack Line Spill A</u> Project Manager: <u>Natalie 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>E31127</u> Job Number <u>200412-0001</u> Analysis and Method					TAT 1D 2D 3D Standard				EPA Program CWA SDWA	
										RCRA				State NM CO UT AZ TX						
										BGDOC NM BGDOC 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	BGDOC NM	BGDOC TX							
	11/14/23	S	1	SP11 - Surf	11															
				SP12 - Surf	12															
				SP13 - Surf	13															
				SP14 - Surf	14															
				SP15 - Surf	15															
				SP16 - Surf	16															
				SP17 - Surf	17															
				SP18 - Surf	18															
				SP19 - Surf	19															
	11/14/23	S	1	SP20 - 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.																				
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								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 T2 T3								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		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: 11/16/2023 10:48:03AM

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:	11/16/23 09:00	Work Order ID:	E311127
Phone:	(575) 390-6397	Date Logged In:	11/15/23 15:32	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/17/23 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**

Time sampled 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? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

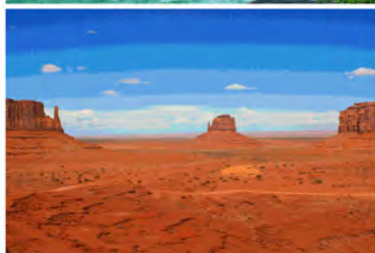
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill A

Work Order: E402166

Job Number: 20046-0001

Received: 2/20/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/21/24

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: 2/21/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount Spill A
Workorder: E402166
Date Received: 2/20/2024 5:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/20/2024 5:30:00AM, under the Project Name: West Mount Spill A.

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

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Sample Summary

Mack Energy	Project Name:	West Mount Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/21/24 15:44

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 1 -12'	E402166-01A	Soil	02/16/24	02/20/24	Glass Jar, 2 oz.
SP 2 -8'	E402166-02A	Soil	02/16/24	02/20/24	Glass Jar, 2 oz.
SP 3 -4'	E402166-03A	Soil	02/16/24	02/20/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 2/21/2024 3:44:41PM
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SP 1 -12'

E402166-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2408030	
Benzene	ND	0.0250	1	02/20/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/20/24	02/21/24	
Toluene	ND	0.0250	1	02/20/24	02/21/24	
o-Xylene	ND	0.0250	1	02/20/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/20/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/20/24	02/21/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	93.3 %	70-130		02/20/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2408030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/20/24	02/21/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.0 %	70-130		02/20/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2408033	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/20/24	02/20/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/20/24	02/20/24	
<i>Surrogate: n-Nonane</i>	108 %	50-200		02/20/24	02/20/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2408034	
Chloride	258	20.0	1	02/20/24	02/20/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/21/2024 3:44:41PM

SP 2 -8'

E402166-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408030
Benzene	ND	0.0250	1	02/20/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/20/24	02/21/24	
Toluene	ND	0.0250	1	02/20/24	02/21/24	
o-Xylene	ND	0.0250	1	02/20/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/20/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/20/24	02/21/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.7 %	70-130		02/20/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408030
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/20/24	02/21/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		02/20/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408033
Diesel Range Organics (C10-C28)	ND	25.0	1	02/20/24	02/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/20/24	02/21/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		02/20/24	02/21/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408034
Chloride	240	20.0	1	02/20/24	02/20/24	



Sample Data

Mack Energy	Project Name:	West Mount Spill A	Reported: 2/21/2024 3:44:41PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP 3 -4'

E402166-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408030	
Benzene	ND	0.0250	1	02/20/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/20/24	02/21/24	
Toluene	ND	0.0250	1	02/20/24	02/21/24	
o-Xylene	ND	0.0250	1	02/20/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/20/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/20/24	02/21/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.2 %	70-130		02/20/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/20/24	02/21/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.8 %	70-130		02/20/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408033	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/20/24	02/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/20/24	02/21/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		02/20/24	02/21/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2408034	
Chloride	226	20.0	1	02/20/24	02/20/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/21/2024 3:44:41PM

Volatile Organics by EPA 8021B

Analyst: EG

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 (2408030-BLK1) Prepared: 02/20/24 Analyzed: 02/20/24

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	7.51		8.00		93.8	70-130			

LCS (2408030-BS1) Prepared: 02/20/24 Analyzed: 02/20/24

Benzene	4.31	0.0250	5.00		86.3	70-130			
Ethylbenzene	4.31	0.0250	5.00		86.2	70-130			
Toluene	4.30	0.0250	5.00		86.0	70-130			
o-Xylene	4.24	0.0250	5.00		84.9	70-130			
p,m-Xylene	8.70	0.0500	10.0		87.0	70-130			
Total Xylenes	12.9	0.0250	15.0		86.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.39		8.00		92.4	70-130			

Matrix Spike (2408030-MS1) Source: E402165-01 Prepared: 02/20/24 Analyzed: 02/20/24

Benzene	4.49	0.0250	5.00	ND	89.9	54-133			
Ethylbenzene	4.50	0.0250	5.00	ND	89.9	61-133			
Toluene	4.48	0.0250	5.00	ND	89.7	61-130			
o-Xylene	4.44	0.0250	5.00	ND	88.9	63-131			
p,m-Xylene	9.08	0.0500	10.0	ND	90.8	63-131			
Total Xylenes	13.5	0.0250	15.0	ND	90.2	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.54		8.00		94.2	70-130			

Matrix Spike Dup (2408030-MSD1) Source: E402165-01 Prepared: 02/20/24 Analyzed: 02/20/24

Benzene	4.78	0.0250	5.00	ND	95.6	54-133	6.14	20	
Ethylbenzene	4.79	0.0250	5.00	ND	95.8	61-133	6.32	20	
Toluene	4.77	0.0250	5.00	ND	95.4	61-130	6.21	20	
o-Xylene	4.72	0.0250	5.00	ND	94.4	63-131	6.09	20	
p,m-Xylene	9.66	0.0500	10.0	ND	96.6	63-131	6.18	20	
Total Xylenes	14.4	0.0250	15.0	ND	95.9	63-131	6.15	20	
Surrogate: 4-Bromochlorobenzene-PID	7.57		8.00		94.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/21/2024 3:44:41PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

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 (2408030-BLK1) Prepared: 02/20/24 Analyzed: 02/20/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		8.00		94.7	70-130			

LCS (2408030-BS2) Prepared: 02/20/24 Analyzed: 02/20/24

Gasoline Range Organics (C6-C10)	54.3	20.0	50.0		109	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.74		8.00		96.8	70-130			

Matrix Spike (2408030-MS2) Source: E402165-01 Prepared: 02/20/24 Analyzed: 02/20/24

Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.73		8.00		96.6	70-130			

Matrix Spike Dup (2408030-MSD2) Source: E402165-01 Prepared: 02/20/24 Analyzed: 02/20/24

Gasoline Range Organics (C6-C10)	50.6	20.0	50.0	ND	101	70-130	2.24	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.73		8.00		96.6	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/21/2024 3:44:41PM

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 (2408033-BLK1)					Prepared: 02/20/24 Analyzed: 02/20/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.0		50.0		112	50-200			

LCS (2408033-BS1)					Prepared: 02/20/24 Analyzed: 02/20/24				
Diesel Range Organics (C10-C28)	282	25.0	250		113	38-132			
Surrogate: n-Nonane	60.4		50.0		121	50-200			

Matrix Spike (2408033-MS1)					Source: E402165-02		Prepared: 02/20/24 Analyzed: 02/20/24		
Diesel Range Organics (C10-C28)	303	25.0	250	ND	121	38-132			
Surrogate: n-Nonane	61.6		50.0		123	50-200			

Matrix Spike Dup (2408033-MSD1)					Source: E402165-02		Prepared: 02/20/24 Analyzed: 02/20/24		
Diesel Range Organics (C10-C28)	285	25.0	250	ND	114	38-132	6.21	20	
Surrogate: n-Nonane	57.8		50.0		116	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/21/2024 3:44:41PM

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 (2408034-BLK1)					Prepared: 02/20/24 Analyzed: 02/20/24				
Chloride	ND	20.0							
LCS (2408034-BS1)					Prepared: 02/20/24 Analyzed: 02/20/24				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2408034-MS1)					Source: E402165-02		Prepared: 02/20/24 Analyzed: 02/20/24		
Chloride	255	20.0	250	ND	102	80-120			
Matrix Spike Dup (2408034-MSD1)					Source: E402165-02		Prepared: 02/20/24 Analyzed: 02/20/24		
Chloride	257	20.0	250	ND	103	80-120	0.739	20	

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

Definitions and Notes

Mack Energy	Project Name:	West Mount Spill A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/21/24 15:44

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





Envirotech Analytical Laboratory

Printed: 2/20/2024 1:56:38PM

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
 Phone: (575) 390-6397
 Email: Natalie@energystaffingllc.com

Date Received: 02/20/24 05:30
 Date Logged In: 02/19/24 17:11
 Due Date: 02/21/24 17:00 (1 day TAT)

Work Order ID: E402166
 Logged In By: Alexa Michaels

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? 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 InstructionComments/Resolution

Project Manager and time sampled not documented on COC

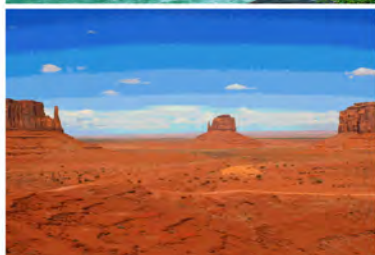
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E402182

Job Number: 20046-0001

Received: 2/21/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/22/24

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: 2/22/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E402182
Date Received: 2/21/2024 5:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/21/2024 5:30:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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Sample Summary

Mack Energy	Project Name:	West Mount A	Reported: 02/22/24 17:24
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. 4-4'	E402182-01A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
Sp. 5-12'	E402182-02A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
Sp. 6-20'	E402182-03A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
Sp. 7-10'	E402182-04A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
Sp. 8-8'	E402182-05A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:24:52PM

Sp. 4-4'

E402182-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		84.2 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		84.2 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/21/24	
Surrogate: n-Nonane		87.6 %	50-200	02/21/24	02/21/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408057
Chloride	66.5	20.0	1	02/21/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:24:52PM

Sp. 5-12'

E402182-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		102 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		83.7 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		102 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		83.7 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/21/24	
Surrogate: n-Nonane		90.5 %	50-200	02/21/24	02/21/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408057
Chloride	62.9	20.0	1	02/21/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:24:52PM

Sp. 6-20'

E402182-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		87.3 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408057
Chloride	ND	20.0	1	02/21/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:24:52PM

Sp. 7-10'

E402182-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		96.9 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		96.9 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		84.3 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408057
Chloride	516	20.0	1	02/21/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:24:52PM

Sp. 8-8'

E402182-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		112 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.8 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		112 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.8 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		85.0 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408057
Chloride	44.6	20.0	1	02/21/24	02/22/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:24:52PM

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 (2408049-BLK1)

Prepared: 02/21/24 Analyzed: 02/21/24

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	0.512		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.448		0.500		89.6	70-130			

LCS (2408049-BS1)

Prepared: 02/21/24 Analyzed: 02/21/24

Benzene	2.81	0.0250	2.50		113	70-130			
Ethylbenzene	2.27	0.0250	2.50		90.9	70-130			
Toluene	2.26	0.0250	2.50		90.3	70-130			
o-Xylene	2.22	0.0250	2.50		88.9	70-130			
p,m-Xylene	4.37	0.0500	5.00		87.4	70-130			
Total Xylenes	6.59	0.0250	7.50		87.9	70-130			
Surrogate: Bromofluorobenzene	0.492		0.500		98.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.448		0.500		89.5	70-130			

Matrix Spike (2408049-MS1)

Source: E402182-01

Prepared: 02/21/24 Analyzed: 02/21/24

Benzene	2.85	0.0250	2.50	ND	114	48-131			
Ethylbenzene	2.47	0.0250	2.50	ND	98.7	45-135			
Toluene	2.43	0.0250	2.50	ND	97.3	48-130			
o-Xylene	2.33	0.0250	2.50	ND	93.1	43-135			
p,m-Xylene	4.53	0.0500	5.00	ND	90.6	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500		102	70-130			
Surrogate: Toluene-d8	0.479		0.500		95.8	70-130			

Matrix Spike Dup (2408049-MSD1)

Source: E402182-01

Prepared: 02/21/24 Analyzed: 02/21/24

Benzene	2.88	0.0250	2.50	ND	115	48-131	1.14	23	
Ethylbenzene	2.37	0.0250	2.50	ND	94.7	45-135	4.14	27	
Toluene	2.32	0.0250	2.50	ND	92.8	48-130	4.69	24	
o-Xylene	2.35	0.0250	2.50	ND	94.1	43-135	1.07	27	
p,m-Xylene	4.59	0.0500	5.00	ND	91.8	43-135	1.36	27	
Total Xylenes	6.94	0.0250	7.50	ND	92.6	43-135	1.26	27	
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.8	70-130			
Surrogate: Toluene-d8	0.449		0.500		89.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:24:52PM

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 (2408049-BLK1)

Prepared: 02/21/24 Analyzed: 02/21/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.512		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.448		0.500		89.6	70-130			

LCS (2408049-BS2)

Prepared: 02/21/24 Analyzed: 02/21/24

Gasoline Range Organics (C6-C10)	47.0	20.0	50.0		94.0	70-130			
Surrogate: Bromofluorobenzene	0.557		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.527		0.500		105	70-130			
Surrogate: Toluene-d8	0.446		0.500		89.2	70-130			

Matrix Spike (2408049-MS2)

Source: E402182-01

Prepared: 02/21/24 Analyzed: 02/21/24

Gasoline Range Organics (C6-C10)	40.7	20.0	50.0	ND	81.3	70-130			
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.455		0.500		90.9	70-130			

Matrix Spike Dup (2408049-MSD2)

Source: E402182-01

Prepared: 02/21/24 Analyzed: 02/21/24

Gasoline Range Organics (C6-C10)	39.5	20.0	50.0	ND	79.0	70-130	2.88	20	
Surrogate: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.451		0.500		90.1	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:24:52PM

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 (2408048-BLK1)					Prepared: 02/21/24 Analyzed: 02/21/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.8		50.0		91.5	50-200			

LCS (2408048-BS1)					Prepared: 02/21/24 Analyzed: 02/21/24				
Diesel Range Organics (C10-C28)	222	25.0	250		89.0	38-132			
Surrogate: n-Nonane	42.4		50.0		84.8	50-200			

Matrix Spike (2408048-MS1)					Source: E402182-03		Prepared: 02/21/24 Analyzed: 02/21/24		
Diesel Range Organics (C10-C28)	232	25.0	250	ND	93.0	38-132			
Surrogate: n-Nonane	45.0		50.0		90.0	50-200			

Matrix Spike Dup (2408048-MSD1)					Source: E402182-03		Prepared: 02/21/24 Analyzed: 02/21/24		
Diesel Range Organics (C10-C28)	234	25.0	250	ND	93.7	38-132	0.810	20	
Surrogate: n-Nonane	41.7		50.0		83.3	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:24:52PM

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 (2408057-BLK1)					Prepared: 02/21/24 Analyzed: 02/21/24				
Chloride	ND	20.0							
LCS (2408057-BS1)					Prepared: 02/21/24 Analyzed: 02/21/24				
Chloride	249	20.0	250		99.5	90-110			
Matrix Spike (2408057-MS1)					Source: E402170-03		Prepared: 02/21/24 Analyzed: 02/22/24		
Chloride	792	20.0	250	494	120	80-120			
Matrix Spike Dup (2408057-MSD1)					Source: E402170-03		Prepared: 02/21/24 Analyzed: 02/22/24		
Chloride	877	20.0	250	494	154	80-120	10.2	20	M2

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



Definitions and Notes

Mack Energy	Project Name:	West Mount A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/22/24 17:24

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

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

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



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: <u>Sandra Perez</u>									
Relinquished by: (Signature) <u>S. Perez</u>	Date <u>02/19/24</u>	Time	Received by: (Signature) <u>Micelle Cough</u>	Date <u>2-20-24</u>	Time <u>1300</u>	Lab Use Only Received on ice: <u>(Y)</u> N			
Relinquished by: (Signature) <u>Micelle Cough</u>	Date <u>2-20-24</u>	Time <u>1615</u>	Received by: (Signature) <u>Andrew Moss</u>	Date <u>2-20-24</u>	Time <u>1700</u>	T1 _____ T2 _____ T3 _____			
Relinquished by: (Signature) <u>Andrew Moss</u>	Date <u>2-20-24</u>	Time <u>2400</u>	Received by: (Signature) <u>Raymond R Hall</u>	Date <u>2-21-24</u>	Time <u>0830</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: 2/21/2024 8:22:34AM

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: 02/21/24 05:30	Work Order ID: E402182
Phone: (575) 390-6397	Date Logged In: 02/20/24 15:44	Logged In By: Alexa Michaels
Email: Natalie@energystaffingllc.com	Due Date: 02/22/24 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 | Carrier: <u>Courier</u> |
| 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. | | |

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: <u>4°C</u> | |

Sample Container

- | | |
|--|-----|
| 14. Are aqueous VOC samples present? | No |
| 15. Are VOC samples collected in VOA Vials? | NA |
| 16. Is the head space less than 6-8 mm (pea sized or less)? | NA |
| 17. Was a trip blank (TB) included for VOC analyses? | NA |
| 18. Are non-VOC samples collected in the correct 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 InstructionComments/Resolution

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

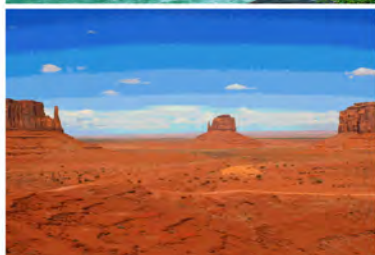
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E402194

Job Number: 20046-0001

Received: 2/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/23/24

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: 2/23/24



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount A
Workorder: E402194
Date Received: 2/22/2024 5:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/22/2024 5:30:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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Sample Summary

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/23/24 11:51

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sp. 9-8'	E402194-01A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
Sp. 10-4'	E402194-02A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
Sp. 11-10'	E402194-03A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
Sp. 12-10'	E402194-04A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
Sp. 13-16'	E402194-05A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 2/23/2024 11:51:26AM
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Sp. 9-8'
E402194-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
Surrogate: 4-Bromochlorobenzene-PID	93.3 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	96.0 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2408068	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
Surrogate: n-Nonane	105 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2408071	
Chloride	84.9	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 2/23/2024 11:51:26AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sp. 10-4'

E402194-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.7 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.0 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2408068	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2408071	
Chloride	216	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 2/23/2024 11:51:26AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sp. 11-10'

E402194-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.0 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2408068	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	114 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2408071	
Chloride	27.5	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:51:26AM

Sp. 12-10'

E402194-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.1 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	247	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:51:26AM

Sp. 13-16'

E402194-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.4 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.9 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	24.0	20.0	1	02/22/24	02/22/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:51:26AM

Volatile Organics by EPA 8021B

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 (2408069-BLK1) Prepared: 02/22/24 Analyzed: 02/22/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.57		8.00		94.6	70-130			

LCS (2408069-BS1) Prepared: 02/22/24 Analyzed: 02/22/24

Benzene	3.69	0.0250	5.00		73.8	70-130			
Ethylbenzene	3.87	0.0250	5.00		77.5	70-130			
Toluene	3.81	0.0250	5.00		76.1	70-130			
o-Xylene	3.84	0.0250	5.00		76.7	70-130			
p,m-Xylene	7.84	0.0500	10.0		78.4	70-130			
Total Xylenes	11.7	0.0250	15.0		77.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130			

Matrix Spike (2408069-MS1) Source: E402194-03 Prepared: 02/22/24 Analyzed: 02/22/24

Benzene	4.53	0.0250	5.00	ND	90.7	54-133			
Ethylbenzene	4.78	0.0250	5.00	ND	95.6	61-133			
Toluene	4.70	0.0250	5.00	ND	93.9	61-130			
o-Xylene	4.74	0.0250	5.00	ND	94.8	63-131			
p,m-Xylene	9.64	0.0500	10.0	ND	96.4	63-131			
Total Xylenes	14.4	0.0250	15.0	ND	95.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.63		8.00		95.4	70-130			

Matrix Spike Dup (2408069-MSD1) Source: E402194-03 Prepared: 02/22/24 Analyzed: 02/22/24

Benzene	4.98	0.0250	5.00	ND	99.7	54-133	9.48	20	
Ethylbenzene	5.27	0.0250	5.00	ND	105	61-133	9.82	20	
Toluene	5.17	0.0250	5.00	ND	103	61-130	9.53	20	
o-Xylene	5.22	0.0250	5.00	ND	104	63-131	9.68	20	
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131	9.56	20	
Total Xylenes	15.8	0.0250	15.0	ND	106	63-131	9.60	20	
Surrogate: 4-Bromochlorobenzene-PID	7.59		8.00		94.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:51:26AM

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 (2408069-BLK1) Prepared: 02/22/24 Analyzed: 02/22/24

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

LCS (2408069-BS2) Prepared: 02/22/24 Analyzed: 02/22/24

Gasoline Range Organics (C6-C10)	48.3	20.0	50.0		96.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.7	70-130			

Matrix Spike (2408069-MS2) Source: E402194-03 Prepared: 02/22/24 Analyzed: 02/22/24

Gasoline Range Organics (C6-C10)	47.4	20.0	50.0	ND	94.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.8	70-130			

Matrix Spike Dup (2408069-MSD2) Source: E402194-03 Prepared: 02/22/24 Analyzed: 02/23/24

Gasoline Range Organics (C6-C10)	54.2	20.0	50.0	ND	108	70-130	13.5	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.99		8.00		99.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:51:26AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

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

Blank (2408068-BLK1)					Prepared: 02/22/24 Analyzed: 02/22/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.3		50.0		111	50-200			

LCS (2408068-BS1)					Prepared: 02/22/24 Analyzed: 02/22/24				
Diesel Range Organics (C10-C28)	241	25.0	250		96.5	38-132			
Surrogate: n-Nonane	53.0		50.0		106	50-200			

Matrix Spike (2408068-MS1)					Source: E402193-03		Prepared: 02/22/24 Analyzed: 02/22/24		
Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	54.2		50.0		108	50-200			

Matrix Spike Dup (2408068-MSD1)					Source: E402193-03		Prepared: 02/22/24 Analyzed: 02/22/24		
Diesel Range Organics (C10-C28)	258	25.0	250	ND	103	38-132	2.36	20	
Surrogate: n-Nonane	55.3		50.0		111	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:51:26AM

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 (2408071-BLK1)					Prepared: 02/22/24 Analyzed: 02/22/24				
Chloride	ND	20.0							
LCS (2408071-BS1)					Prepared: 02/22/24 Analyzed: 02/22/24				
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2408071-MS1)					Source: E402192-02		Prepared: 02/22/24 Analyzed: 02/22/24		
Chloride	285	20.0	250	32.0	101	80-120			
Matrix Spike Dup (2408071-MSD1)					Source: E402192-02		Prepared: 02/22/24 Analyzed: 02/22/24		
Chloride	280	20.0	250	32.0	99.2	80-120	1.69	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/23/24 11:51

- 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.





Envirotech Analytical Laboratory

Printed: 2/22/2024 9:21:24AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	02/22/24 05:30	Work Order ID:	E402194
Phone:	(575) 390-6397	Date Logged In:	02/21/24 16:06	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	02/23/24 17:00 (1 day TAT)		

Chain of Custody (COC)

- | | |
|---|-----|
| 1. Does the sample ID match the COC? | Yes |
| 2. Does the number of samples per sampling site location match the COC | Yes |
| 3. Were samples dropped off by client or carrier? | Yes |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | No |
| 5. Were all samples received within holding time? | Yes |

Carrier: Courier

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

Comments/Resolution

Project manager and time sampled are not
documented 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 A

Work Order: E402208

Job Number: 20046-0001

Received: 2/23/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/26/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 2/26/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E402208
Date Received: 2/23/2024 5:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/23/2024 5:30:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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

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Sample Summary

Mack Energy	Project Name:	West Mount A	Reported: 02/26/24 14:05
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. 14-6'	E402208-01A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
Sp. 15-12'	E402208-02A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
Sp. 16-12'	E402208-03A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
Sp. 17-8'	E402208-04A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
Sp. 18-4'	E402208-05A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
Sp. 19-12'	E402208-06A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
Sp. 20-16'	E402208-07A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:05:08PM

Sp. 14-6'

E402208-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
Surrogate: 4-Bromochlorobenzene-PID	92.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	96.4 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408077
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
Surrogate: n-Nonane	107 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2408082
Chloride	604	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:05:08PM

Sp. 15-12'

E402208-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: EG		Batch: 2408078
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.2 %	70-130	02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: EG		Batch: 2408078
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.8 %	70-130	02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KM		Batch: 2408077
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	02/23/24	02/23/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: IY		Batch: 2408082
Chloride	329	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:05:08PM

Sp. 16-12'

E402208-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.4 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	346	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:05:08PM

Sp. 17-8'

E402208-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.2 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.3 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408077
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	117 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2408082
Chloride	388	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:05:08PM

Sp. 18-4'

E402208-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.7 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.8 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	39.1	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:05:08PM

Sp. 19-12'

E402208-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.0 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.4 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	428	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 2/26/2024 2:05:08PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sp. 20-16'

E402208-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	101	20.0	1	02/23/24	02/23/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:05:08PM

Volatile Organics by EPA 8021B

Analyst: EG

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 (2408078-BLK1) Prepared: 02/23/24 Analyzed: 02/23/24

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	6.96		8.00		87.0	70-130			

LCS (2408078-BS1) Prepared: 02/23/24 Analyzed: 02/23/24

Benzene	5.12	0.0250	5.00		102	70-130			
Ethylbenzene	5.12	0.0250	5.00		102	70-130			
Toluene	5.12	0.0250	5.00		102	70-130			
o-Xylene	5.01	0.0250	5.00		100	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.3	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.08		8.00		88.5	70-130			

Matrix Spike (2408078-MS1) Source: E402208-03 Prepared: 02/23/24 Analyzed: 02/23/24

Benzene	5.21	0.0250	5.00	ND	104	54-133			
Ethylbenzene	5.20	0.0250	5.00	ND	104	61-133			
Toluene	5.19	0.0250	5.00	ND	104	61-130			
o-Xylene	5.10	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131			
Total Xylenes	15.6	0.0250	15.0	ND	104	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.21		8.00		90.1	70-130			

Matrix Spike Dup (2408078-MSD1) Source: E402208-03 Prepared: 02/23/24 Analyzed: 02/23/24

Benzene	4.88	0.0250	5.00	ND	97.6	54-133	6.53	20	
Ethylbenzene	4.88	0.0250	5.00	ND	97.5	61-133	6.48	20	
Toluene	4.87	0.0250	5.00	ND	97.4	61-130	6.48	20	
o-Xylene	4.78	0.0250	5.00	ND	95.5	63-131	6.53	20	
p,m-Xylene	9.81	0.0500	10.0	ND	98.1	63-131	6.42	20	
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131	6.45	20	
Surrogate: 4-Bromochlorobenzene-PID	7.23		8.00		90.3	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:05:08PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

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 (2408078-BLK1) Prepared: 02/23/24 Analyzed: 02/23/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.94		8.00		99.2	70-130			

LCS (2408078-BS2) Prepared: 02/23/24 Analyzed: 02/23/24

Gasoline Range Organics (C6-C10)	59.4	20.0	50.0		119	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.01		8.00		100	70-130			

Matrix Spike (2408078-MS2) Source: E402208-03 Prepared: 02/23/24 Analyzed: 02/23/24

Gasoline Range Organics (C6-C10)	55.7	20.0	50.0	ND	111	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.86		8.00		98.3	70-130			

Matrix Spike Dup (2408078-MSD2) Source: E402208-03 Prepared: 02/23/24 Analyzed: 02/23/24

Gasoline Range Organics (C6-C10)	54.9	20.0	50.0	ND	110	70-130	1.47	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.90		8.00		98.7	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:05:08PM

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 (2408077-BLK1)					Prepared: 02/23/24 Analyzed: 02/23/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	59.1		50.0		118	50-200			

LCS (2408077-BS1)					Prepared: 02/23/24 Analyzed: 02/23/24				
Diesel Range Organics (C10-C28)	259	25.0	250		103	38-132			
Surrogate: n-Nonane	61.6		50.0		123	50-200			

Matrix Spike (2408077-MS1)					Source: E402208-03		Prepared: 02/23/24 Analyzed: 02/23/24		
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	63.4		50.0		127	50-200			

Matrix Spike Dup (2408077-MSD1)					Source: E402208-03		Prepared: 02/23/24 Analyzed: 02/23/24		
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132	14.2	20	
Surrogate: n-Nonane	61.2		50.0		122	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:05:08PM

Anions by EPA 300.0/9056A

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 (2408082-BLK1)					Prepared: 02/23/24 Analyzed: 02/23/24				
Chloride	ND	20.0							
LCS (2408082-BS1)					Prepared: 02/23/24 Analyzed: 02/23/24				
Chloride	251	20.0	250		101	90-110			
Matrix Spike (2408082-MS1)					Source: E402208-03		Prepared: 02/23/24 Analyzed: 02/23/24		
Chloride	597	20.0	250	346	100	80-120			
Matrix Spike Dup (2408082-MSD1)					Source: E402208-03		Prepared: 02/23/24 Analyzed: 02/23/24		
Chloride	596	20.0	250	346	100	80-120	0.105	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/26/24 14:05

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

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

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



Project Information

Chain of Custody

Page 1 of 1

Client: <u>MACK Energy</u> Project: <u>West Mount (A)</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>E402208</u> Job Number <u>20046-0001</u>					TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard				EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
Analysis and Method										State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks						
	02/21	S	1	Sp. 14 - 6'	1							✓								
	02/21	S	1	Sp. 15 - 12'	2							✓								
	02/21	S	1	Sp. 16 - 12'	3							✓								
	02/21	S	1	Sp. 17 - 8'	4							✓								
	02/21	S	1	Sp. 18 - 4'	5							✓								
	02/21	S	1	Sp. 19 - 12'	6							✓								
	02/21	S	1	Sp. 20 - 10'	7							✓								
Additional Instructions:																				
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																				
Relinquished by: (Signature) <u>Sandra Perez</u> Date <u>02/21/24</u> Time <u></u>																				
Relinquished by: (Signature) <u>Andrew Moss</u> Date <u>2.22.24</u> Time <u>2400</u>																				
Received by: (Signature) <u>Nicole Bayl</u> Date <u>2-22-24</u> Time <u>1244</u>																				
Received by: (Signature) <u>Andrew Moss</u> Date <u>2.22.24</u> Time <u>1730</u>																				
Received by: (Signature) <u>Kyle R Hall</u> Date <u>2-23-24</u> Time <u>0530</u>																				
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																				
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																				
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				


enviro+tech

Envirotech Analytical Laboratory

Printed: 2/23/2024 8:39:09AM

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:	02/23/24 05:30	Work Order ID:	E402208
Phone:	(575) 390-6397	Date Logged In:	02/22/24 18:08	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	02/26/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

Carrier: Courier

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:

Sample ID?	Yes
Date/Time Collected?	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 InstructionComments/Resolution

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

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E402223

Job Number: 20046-0001

Received: 2/24/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/27/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 2/27/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E402223
Date Received: 2/24/2024 12:30:00PM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/24/2024 12:30:00PM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

Walter Hinchman
Laboratory Director
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Cell: 775-287-1762
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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 02/27/24 14:04
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW- 1 -4'	E402223-01A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW2 -4'	E402223-02A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW3 -2'	E402223-03A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW4 -4'	E402223-04A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW5 -4'	E402223-05A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW6 -4'	E402223-06A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW7 -4'	E402223-07A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW8 -2'	E402223-08A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW9 -2'	E402223-09A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW10 -2'	E402223-10A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW11 -2'	E402223-11A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW12 -2'	E402223-12A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW13 -2'	E402223-13A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW14 -2'	E402223-14A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW15 -2'	E402223-15A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW16 -2'	E402223-16A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.
SW17 -2'	E402223-17A	Soil	02/22/24	02/24/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 2/27/2024 2:04:30PM
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SW- 1 -4'

E402223-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	96.5 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.6 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>	91.5 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	331	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW2 -4'

E402223-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.2 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>						
	93.1 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	212	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW3 -2'

E402223-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.5 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.7 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>						
	96.2 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	464	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW4 -4'

E402223-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.5 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>						
	96.2 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	212	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW5 -4'

E402223-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	413	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW6 -4'

E402223-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.2 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.0 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	212	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW7 -4'

E402223-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.9 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	537	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW8 -2'

E402223-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.9 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.6 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/26/24	
<i>Surrogate: n-Nonane</i>						
	95.8 %	50-200		02/26/24	02/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	310	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW9 -2'

E402223-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.4 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	98.0 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	235	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW10 -2'

E402223-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.6 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.1 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	91.5 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	137	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW11 -2'

E402223-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.7 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	98.7 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	243	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW12 -2'

E402223-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.8 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.5 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	424	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW13 -2'

E402223-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.2 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.3 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	97.6 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	139	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW14 -2'

E402223-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.8 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.7 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	97.3 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	160	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 2/27/2024 2:04:30PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW15 -2'

E402223-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
Surrogate: 4-Bromochlorobenzene-PID	95.5 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.7 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
Surrogate: n-Nonane	97.2 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	54.6	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW16 -2'

E402223-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.0 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.8 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	95.9 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	121	20.0	1	02/26/24	02/26/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/27/2024 2:04:30PM

SW17 -2'

E402223-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Benzene	ND	0.0250	1	02/26/24	02/26/24	
Ethylbenzene	ND	0.0250	1	02/26/24	02/26/24	
Toluene	ND	0.0250	1	02/26/24	02/26/24	
o-Xylene	ND	0.0250	1	02/26/24	02/26/24	
p,m-Xylene	ND	0.0500	1	02/26/24	02/26/24	
Total Xylenes	ND	0.0250	1	02/26/24	02/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.0 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2409002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/26/24	02/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		02/26/24	02/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2409004	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/26/24	02/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/26/24	02/27/24	
<i>Surrogate: n-Nonane</i>						
	95.9 %	50-200		02/26/24	02/27/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2409001	
Chloride	279	20.0	1	02/26/24	02/26/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/27/2024 2:04:30PM

Volatile Organics by EPA 8021B

Analyst: EG

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 (2409002-BLK1) Prepared: 02/26/24 Analyzed: 02/26/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.45		8.00		93.1	70-130			

LCS (2409002-BS1) Prepared: 02/26/24 Analyzed: 02/26/24

Benzene	4.60	0.0250	5.00		91.9	70-130			
Ethylbenzene	4.59	0.0250	5.00		91.9	70-130			
Toluene	4.58	0.0250	5.00		91.6	70-130			
o-Xylene	4.52	0.0250	5.00		90.4	70-130			
p,m-Xylene	9.27	0.0500	10.0		92.7	70-130			
Total Xylenes	13.8	0.0250	15.0		91.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.49		8.00		93.6	70-130			

Matrix Spike (2409002-MS1) Source: E402223-06 Prepared: 02/26/24 Analyzed: 02/26/24

Benzene	4.83	0.0250	5.00	ND	96.7	54-133			
Ethylbenzene	4.83	0.0250	5.00	ND	96.7	61-133			
Toluene	4.82	0.0250	5.00	ND	96.4	61-130			
o-Xylene	4.77	0.0250	5.00	ND	95.4	63-131			
p,m-Xylene	9.75	0.0500	10.0	ND	97.5	63-131			
Total Xylenes	14.5	0.0250	15.0	ND	96.8	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.50		8.00		93.7	70-130			

Matrix Spike Dup (2409002-MSD1) Source: E402223-06 Prepared: 02/26/24 Analyzed: 02/26/24

Benzene	4.60	0.0250	5.00	ND	91.9	54-133	5.06	20	
Ethylbenzene	4.59	0.0250	5.00	ND	91.9	61-133	5.04	20	
Toluene	4.59	0.0250	5.00	ND	91.7	61-130	5.01	20	
o-Xylene	4.53	0.0250	5.00	ND	90.6	63-131	5.12	20	
p,m-Xylene	9.27	0.0500	10.0	ND	92.7	63-131	5.05	20	
Total Xylenes	13.8	0.0250	15.0	ND	92.0	63-131	5.07	20	
Surrogate: 4-Bromochlorobenzene-PID	7.54		8.00		94.3	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/27/2024 2:04:30PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

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 (2409002-BLK1) Prepared: 02/26/24 Analyzed: 02/26/24

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

LCS (2409002-BS2) Prepared: 02/26/24 Analyzed: 02/26/24

Gasoline Range Organics (C6-C10)	49.0	20.0	50.0		98.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.89		8.00		98.6	70-130			

Matrix Spike (2409002-MS2) Source: E402223-06 Prepared: 02/26/24 Analyzed: 02/26/24

Gasoline Range Organics (C6-C10)	49.8	20.0	50.0	ND	99.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.86		8.00		98.2	70-130			

Matrix Spike Dup (2409002-MSD2) Source: E402223-06 Prepared: 02/26/24 Analyzed: 02/26/24

Gasoline Range Organics (C6-C10)	52.6	20.0	50.0	ND	105	70-130	5.40	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.92		8.00		99.0	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/27/2024 2:04:30PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2409004-BLK1)	Prepared: 02/26/24 Analyzed: 02/26/24								
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.6		50.0		97.3	50-200			

LCS (2409004-BS1)	Prepared: 02/26/24 Analyzed: 02/26/24								
Diesel Range Organics (C10-C28)	278	25.0	250		111	38-132			
Surrogate: n-Nonane	49.8		50.0		99.7	50-200			

Matrix Spike (2409004-MS1)				Source: E402223-08	Prepared: 02/26/24 Analyzed: 02/26/24				
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	46.9		50.0		93.8	50-200			

Matrix Spike Dup (2409004-MSD1)				Source: E402223-08	Prepared: 02/26/24 Analyzed: 02/26/24				
Diesel Range Organics (C10-C28)	269	25.0	250	ND	108	38-132	1.11	20	
Surrogate: n-Nonane	46.4		50.0		92.8	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/27/2024 2:04:30PM

Anions by EPA 300.0/9056A

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 (2409001-BLK1)					Prepared: 02/26/24 Analyzed: 02/26/24				
Chloride	ND	20.0							
LCS (2409001-BS1)					Prepared: 02/26/24 Analyzed: 02/26/24				
Chloride	256	20.0	250		102	90-110			
Matrix Spike (2409001-MS1)					Source: E402223-04		Prepared: 02/26/24 Analyzed: 02/26/24		
Chloride	475	20.0	250	212	105	80-120			
Matrix Spike Dup (2409001-MSD1)					Source: E402223-04		Prepared: 02/26/24 Analyzed: 02/26/24		
Chloride	459	20.0	250	212	98.8	80-120	3.37	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/27/24 14:04

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



Additional Instructions:

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

Lab Use Only

Received on ice: ☒ Y ☐ N

T1 _____ T2 _____ T3 _____

AVG Temp °C 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.

Project Information

Chain of Custody

Page 2 of 2

Client: <u>Mack Energy</u>					Bill To					Lab Use Only					TAT				EPA Program																											
Project: <u>WEST MOUNTAIN (A)</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E402223</u>					Job Number <u>200460001</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																																								
	02/22	S	1	SW 11 - 2'	11																																									
	02/22	S	1	SW 12 - 2'	12																																									
	02/22	S	1	SW 13 - 2'	13																																									
	02/22	S	1	SW 14 - 2'	14																																									
	02/22	S	1	SW 15 - 2'	15																																									
	02/22	S	1	SW 16 - 2'	16																																									
	02/22	S	1	SW 17 - 2'	17																																									
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>S. Perez</u>		02/24/24		1218		<u>Middle Cuyf</u>		2-23-24		1218		Received on ice: <u>Y</u> N																																		
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 _____ T2 _____ T3 _____																																		
<u>Middle Cuyf</u>		2-23-24		1545		<u>Sandra</u>		2-23-24		1700																																				
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>																																		
<u>Sandra</u>		2-23-24		2400		<u>Alu</u>		2/24/24		1230																																				
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: 2/26/2024 8:18:14AM

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:	02/24/24 12:30	Work Order ID:	E402223
Phone:	(575) 390-6397	Date Logged In:	02/24/24 13:20	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	02/27/24 17:00 (1 day TAT)		

Chain of Custody (COC)

- | | | |
|---|-----|-------------------------|
| 1. Does the sample ID match the COC? | Yes | |
| 2. Does the number of samples per sampling site location match the COC | Yes | |
| 3. Were samples dropped off by client or carrier? | Yes | Carrier: <u>Courier</u> |
| 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.

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 InstructionComments/Resolution

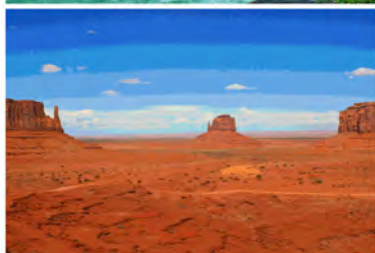
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E404019

Job Number: 20046-0001

Received: 4/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/5/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 4/5/24



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount A
Workorder: E404019
Date Received: 4/4/2024 7:00:00AM

Natalie Gladden,

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

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

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Sample Summary

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	04/05/24 14:26

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sp. 14-10'	E404019-01A	Soil	04/02/24	04/04/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
4/5/2024 2:26:05PM

Sp. 14-10'

E404019-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2414050	
Benzene	ND	0.0250	1	04/04/24	04/05/24	
Ethylbenzene	ND	0.0250	1	04/04/24	04/05/24	
Toluene	ND	0.0250	1	04/04/24	04/05/24	
o-Xylene	ND	0.0250	1	04/04/24	04/05/24	
p,m-Xylene	ND	0.0500	1	04/04/24	04/05/24	
Total Xylenes	ND	0.0250	1	04/04/24	04/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.4 %	70-130		04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2414050	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	91.6 %	70-130		04/04/24	04/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2414039	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/04/24	04/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/04/24	04/04/24	
<i>Surrogate: n-Nonane</i>	109 %	50-200		04/04/24	04/04/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2414059	
Chloride	111	20.0	1	04/04/24	04/04/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 2:26:05PM

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 (2414050-BLK1) Prepared: 04/04/24 Analyzed: 04/05/24

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 7.67 8.00 95.8 70-130

LCS (2414050-BS1) Prepared: 04/04/24 Analyzed: 04/05/24

Benzene	5.33	0.0250	5.00		107	70-130			
Ethylbenzene	5.17	0.0250	5.00		103	70-130			
Toluene	5.32	0.0250	5.00		106	70-130			
o-Xylene	5.26	0.0250	5.00		105	70-130			
p,m-Xylene	10.6	0.0500	10.0		106	70-130			
Total Xylenes	15.8	0.0250	15.0		105	70-130			

Surrogate: 4-Bromochlorobenzene-PID 7.71 8.00 96.3 70-130

Matrix Spike (2414050-MS1) Source: E404020-02 Prepared: 04/04/24 Analyzed: 04/05/24

Benzene	5.02	0.0250	5.00	ND	100	54-133			
Ethylbenzene	4.85	0.0250	5.00	ND	97.1	61-133			
Toluene	5.00	0.0250	5.00	ND	100	61-130			
o-Xylene	4.94	0.0250	5.00	ND	98.7	63-131			
p,m-Xylene	9.92	0.0500	10.0	ND	99.2	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.1	63-131			

Surrogate: 4-Bromochlorobenzene-PID 7.78 8.00 97.2 70-130

Matrix Spike Dup (2414050-MSD1) Source: E404020-02 Prepared: 04/04/24 Analyzed: 04/05/24

Benzene	5.03	0.0250	5.00	ND	101	54-133	0.162	20	
Ethylbenzene	4.88	0.0250	5.00	ND	97.6	61-133	0.508	20	
Toluene	5.02	0.0250	5.00	ND	100	61-130	0.319	20	
o-Xylene	4.97	0.0250	5.00	ND	99.3	63-131	0.602	20	
p,m-Xylene	9.98	0.0500	10.0	ND	99.8	63-131	0.530	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.6	63-131	0.554	20	

Surrogate: 4-Bromochlorobenzene-PID 7.72 8.00 96.5 70-130



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 2:26:05PM

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 (2414050-BLK1) Prepared: 04/04/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			

LCS (2414050-BS2) Prepared: 04/04/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	42.9	20.0	50.0		85.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.2	70-130			

Matrix Spike (2414050-MS2) Source: E404020-02 Prepared: 04/04/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	35.3	20.0	50.0	ND	70.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			

Matrix Spike Dup (2414050-MSD2) Source: E404020-02 Prepared: 04/04/24 Analyzed: 04/05/24

Gasoline Range Organics (C6-C10)	36.9	20.0	50.0	ND	73.9	70-130	4.42	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.36		8.00		92.1	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 2:26:05PM

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 (2414039-BLK1) Prepared: 04/04/24 Analyzed: 04/04/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	63.1		50.0		126	50-200			

LCS (2414039-BS1) Prepared: 04/04/24 Analyzed: 04/04/24

Diesel Range Organics (C10-C28)	309	25.0	250		124	38-132			
Surrogate: n-Nonane	61.8		50.0		124	50-200			

Matrix Spike (2414039-MS1) Source: E404014-03 Prepared: 04/04/24 Analyzed: 04/04/24

Diesel Range Organics (C10-C28)	322	25.0	250	ND	129	38-132			
Surrogate: n-Nonane	64.3		50.0		129	50-200			

Matrix Spike Dup (2414039-MSD1) Source: E404014-03 Prepared: 04/04/24 Analyzed: 04/04/24

Diesel Range Organics (C10-C28)	323	25.0	250	ND	129	38-132	0.439	20	
Surrogate: n-Nonane	64.1		50.0		128	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 2:26:05PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2414059-BLK1)					Prepared: 04/04/24 Analyzed: 04/04/24				
Chloride	ND	20.0							
LCS (2414059-BS1)					Prepared: 04/04/24 Analyzed: 04/04/24				
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2414059-MS1)					Source: E404018-08		Prepared: 04/04/24 Analyzed: 04/04/24		
Chloride	382	100	250	146	94.6	80-120			M1
Matrix Spike Dup (2414059-MSD1)					Source: E404018-08		Prepared: 04/04/24 Analyzed: 04/04/24		
Chloride	400	100	250	146	102	80-120	4.53	20	M1

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



Definitions and Notes

Mack Energy	Project Name:	West Mount A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	04/05/24 14:26

- M1 Matrix spike recovery was above acceptance limits. The associated LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

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

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





Envirotech Analytical Laboratory

Printed: 4/4/2024 8:46:28AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	04/04/24 07:00	Work Order ID:	E404019
Phone:	(575) 390-6397	Date Logged In:	04/03/24 16:39	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	04/05/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
 2. Does the number of samples per sampling site location match the COC? Yes
 3. Were samples dropped off by client or carrier? Yes
 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
 5. Were all samples received within holding time? Yes
- Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Project Manager and Time sampled not documented 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.

**MACK ENERGY: WEST MOUNT SPILL A
DELINEATION SITE PHOTOS**







Feb 16, 2024 at 2:14:09 PM
+32.9998,-104.0707
Chaves County
Mack Energy
West Mount
Frack spill (A)



Feb 16, 2024 at 2:02:21 PM
+32.9999,-104.0707
Chaves County
Mack Energy
West Mount
Frack spill (A)



Feb 16, 2024 at 1:55:55 PM
+32.9999,-104.0707
Chaves County
Mack Energy
West Mount
Frack spill (A)



Feb 16, 2024 at 1:55:51 PM
+32.9999,-104.0707
Chaves County
Mack Energy
West Mount
Frack spill (A)



Feb 16, 2024 at 1:55:52 PM
+32.9999,-104.0707
Chaves County
Mack Energy
West Mount
Frack spill (A)



Feb 16, 2024 at 1:10:47 PM
+33.0002,-104.0706
Chaves County
Mack Energy
West Mount
Frack spill (A)



Feb 16, 2024 at 2:36:49 PM
+33.0001,-104.0705
Chaves County
Mack Energy
West Mount
Frack spill (A)



22 Feb 2024 10:17:50 AM
+32.999714,-104.070590
Chaves County
Mack Energy
West Mount
Frack Spill (A)





22 Feb 2024 10:55:20 AM

+32.999788,-104.070566

Chaves County

Mack Energy

West Mount

Frack Spill (A)





22 Feb 2024 11:04:23 AM
+32.999714,-104.070603
Chaves County
Mack Energy
West Mount
Frack Spill (A)





22 Feb 2024 11:04:38 AM

+32.999683,-104.070664

Chaves County

Mack Energy

West Mount

Frack Spill (A)







02 Apr 2024 08:56:45 AM
+32.999776, -104.070675
Chaves County
Mack Energy
West Mount (A)
Delemination



02 Apr 2024 09:49:38 AM

+32.999882,-104.070709

Chaves County

Mack Energy

West Mount (A)

Delemination

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

Sent: Wednesday, December 11, 2024 12:06 PM

To: Natalie Gladden <natalie@energystaffingllc.com>

Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 410723

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#) nAPP2327756575.

The sampling event is expected to take place:

When: 12/16/2024 @ 07:00

Where: K-19-15S-29E 0 FNL 0 FEL (33.0000002,-104.070796)

Additional Information: PLEASE CONTACT NATALIE GLADDEN AT 5753906397 TO SAMPLE THE WEST MOUNT SPILL A PROJECT

Additional Instructions: 33.0000002 -104.070796

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**Location: WEST MOUNT SPILL A**

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
COMP1	10	240	L	ND	ND	ND	ND	ND	137
COMP2	2	320	L	ND	ND	ND	ND	ND	287
COMP3	2	320	L	ND	ND	ND	ND	ND	286
COMP4	10	320	L	ND	ND	ND	ND	ND	283
COMP5	8	320	L	ND	ND	ND	ND	ND	279
COMP6	8	400	L	ND	ND	ND	ND	ND	287
COMP7	8	320	L	ND	ND	ND	ND	ND	288
COMP8	6	400	L	ND	ND	ND	ND	ND	1150
COMP8A	8	240	L	ND	ND	ND	ND	ND	487
COMP9	2	240	L	ND	ND	ND	ND	ND	133
COMP10	2	240	L	ND	ND	ND	ND	ND	140
COMP11	12	240	L	ND	ND	ND	ND	ND	75.4
COMP12	10	240	L	ND	ND	ND	ND	ND	71
COMP13	10	240	L	ND	ND	ND	ND	ND	66.6
COMP14	14	320	L	ND	ND	ND	ND	ND	337
COMP15	10	320	L	ND	ND	ND	ND	ND	347
COMP16	10	320	L	ND	ND	ND	ND	ND	333
COMP17	10	320	L	ND	ND	ND	ND	ND	347
COMP18	14	320	L	ND	ND	ND	ND	ND	346
COMP19	12	400	L	ND	ND	ND	ND	ND	374
COMP20	12	400	L	ND	ND	ND	ND	ND	308
COMP21	12	400	L	ND	ND	ND	ND	ND	513

COMP22	6	400	L	ND	ND	ND	ND	ND	382
COMP23	6	160	L	ND	ND	ND	ND	ND	125
COMP24	6	240	L	ND	ND	ND	ND	ND	108
COMP25	6	240	L	ND	ND	ND	ND	ND	230
COMP26	6	240	L	ND	ND	ND	ND	ND	211
COMP27	6	160	L	ND	ND	ND	ND	ND	114
COMP28	6	160	L	ND	ND	ND	ND	ND	111
COMP29	6	320	L	ND	ND	ND	ND	ND	640
COMP29A	8	320	L	ND	ND	ND	ND	ND	275
COMP30	6	320	L	ND	ND	ND	ND	ND	630
COMP30A	8	240	L	ND	ND	ND	ND	ND	274
COMP31	12	240	L	ND	ND	ND	ND	ND	209
COMP32	12	240	L	ND	ND	ND	ND	ND	216
COMP33	6	160	L	ND	ND	ND	ND	ND	107
COMP34	2	240	L	ND	ND	ND	ND	ND	231
COMP35	2	320	L	ND	ND	ND	ND	ND	201
COMP36	2	320	L	ND	ND	ND	ND	ND	187
COMP37	2	240	L	ND	ND	ND	ND	ND	328
COMP38	2	240	L	ND	ND	ND	ND	ND	332
COMP39	2	320	L	ND	ND	ND	ND	ND	195
COMP40	6	320	L	ND	ND	ND	ND	ND	194
COMP41	6	160	L	ND	ND	ND	ND	ND	288
COMP42	6	160	L	ND	ND	ND	ND	ND	264
COMP43	6	160	L	ND	ND	ND	ND	ND	260
COMP44	12	160	L	ND	ND	ND	ND	ND	244

COMP45	12	160	L	ND	ND	ND	ND	ND	247
COMP46	12	160	L	ND	ND	ND	ND	ND	227
COMP47	4	320	L	ND	ND	ND	ND	ND	354
COMP48	4	320	L	ND	ND	ND	ND	ND	323
COMP49	4	240	L	ND	ND	ND	ND	ND	194
COMP50	4	240	L	ND	ND	ND	ND	ND	184
COMP51	4	240	L	ND	ND	ND	ND	ND	233
SWCOMP1	10	160	L	ND	ND	ND	ND	ND	130
SWCOMP2	10	160	L	ND	ND	ND	ND	ND	127
SWCOMP3	4	160	L	ND	ND	ND	ND	ND	128
SWCOMP4	10	160	L	ND	ND	ND	ND	ND	137
SWCOMP5	10	160	L	ND	ND	ND	ND	ND	119
SWCOMP6	14	160	L	ND	ND	ND	ND	ND	122
SWCOMP7	14	160	L	ND	ND	ND	ND	ND	180
SWCOMP8	12	320	L	ND	ND	ND	ND	ND	181
SWCOMP9	12	320	L	ND	ND	ND	ND	ND	184
SWCOMP10	8	320	L	ND	ND	ND	ND	ND	178
SWCOMP11	8	320	L	ND	ND	ND	ND	ND	209
SWCOMP12	8	320	L	ND	ND	ND	ND	ND	209
SWCOMP13	12	320	L	ND	ND	ND	ND	ND	209

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E412171

Job Number: 20046-0001

Received: 12/23/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/24/24

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Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
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Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 12/24/24



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount A
Workorder: E412171
Date Received: 12/23/2024 6:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/23/2024 6:30:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/24/24 08:17
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 1-10	E412171-01A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 2-2	E412171-02A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 3-2	E412171-03A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 4-10	E412171-04A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 5-8	E412171-05A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 6-8	E412171-06A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 7-8	E412171-07A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 8-6	E412171-08A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 9-2	E412171-09A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.
SP Comp 10-2	E412171-10A	Soil	12/19/24	12/23/24	Glass Jar, 2 oz.



Sample Data

Mack Energy	Project Name:	West Mount A	
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	Reported: 12/24/2024 8:17:58AM

SP Comp 1-10

E412171-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.4 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	91.3 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>	105 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	137	20.0	1	12/23/24	12/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/24/2024 8:17:58AM

SP Comp 2-2

E412171-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.1 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.4 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	287	40.0	2	12/23/24	12/23/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/24/2024 8:17:58AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 3-2
E412171-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.9 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.2 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	286	40.0	2	12/23/24	12/23/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/24/2024 8:17:58AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 4-10
E412171-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
Surrogate: 4-Bromochlorobenzene-PID	95.7 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.7 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
Surrogate: n-Nonane	106 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	283	40.0	2	12/23/24	12/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/24/2024 8:17:58AM

SP Comp 5-8

E412171-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.2 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.2 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	279	40.0	2	12/23/24	12/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/24/2024 8:17:58AM

SP Comp 6-8

E412171-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.6 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.1 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	287	20.0	1	12/23/24	12/23/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/24/2024 8:17:58AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 7-8
E412171-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.7 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.2 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	288	40.0	2	12/23/24	12/23/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/24/2024 8:17:58AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 8-6
E412171-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.8 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	1150	100	5	12/23/24	12/23/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/24/2024 8:17:58AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 9-2
E412171-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.2 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.1 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	133	20.0	1	12/23/24	12/23/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/24/2024 8:17:58AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 10-2
E412171-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Benzene	ND	0.0250	1	12/23/24	12/23/24	
Ethylbenzene	ND	0.0250	1	12/23/24	12/23/24	
Toluene	ND	0.0250	1	12/23/24	12/23/24	
o-Xylene	ND	0.0250	1	12/23/24	12/23/24	
p,m-Xylene	ND	0.0500	1	12/23/24	12/23/24	
Total Xylenes	ND	0.0250	1	12/23/24	12/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.0 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2452002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/23/24	12/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.0 %	70-130		12/23/24	12/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452006	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/23/24	12/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/23/24	12/23/24	
<i>Surrogate: n-Nonane</i>						
	80.4 %	50-200		12/23/24	12/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2452003	
Chloride	140	20.0	1	12/23/24	12/23/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/24/2024 8:17:58AM

Volatile Organics by EPA 8021B

Analyst: SL

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

Blank (2452002-BLK1) Prepared: 12/23/24 Analyzed: 12/23/24

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 (2452002-BS1) Prepared: 12/23/24 Analyzed: 12/23/24

Benzene	5.68	0.0250	5.00		114	70-130			
Ethylbenzene	5.47	0.0250	5.00		109	70-130			
Toluene	5.59	0.0250	5.00		112	70-130			
o-Xylene	5.46	0.0250	5.00		109	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	7.45		8.00		93.2	70-130			

LCS Dup (2452002-BSD1) Prepared: 12/23/24 Analyzed: 12/23/24

Benzene	5.47	0.0250	5.00		109	70-130	3.69	20	
Ethylbenzene	5.30	0.0250	5.00		106	70-130	3.11	20	
Toluene	5.40	0.0250	5.00		108	70-130	3.53	20	
o-Xylene	5.29	0.0250	5.00		106	70-130	3.17	20	
p,m-Xylene	10.8	0.0500	10.0		108	70-130	3.15	20	
Total Xylenes	16.1	0.0250	15.0		107	70-130	3.15	20	
Surrogate: 4-Bromochlorobenzene-PID	7.50		8.00		93.8	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/24/2024 8:17:58AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2452002-BLK1) Prepared: 12/23/24 Analyzed: 12/23/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.9	70-130			

LCS (2452002-BS2) Prepared: 12/23/24 Analyzed: 12/23/24

Gasoline Range Organics (C6-C10)	50.4	20.0	50.0		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.53		8.00		94.1	70-130			

LCS Dup (2452002-BSD2) Prepared: 12/23/24 Analyzed: 12/23/24

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.6	70-130	8.55	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.51		8.00		93.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/24/2024 8:17:58AM

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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LCS (2452006-BS1)					Prepared: 12/23/24 Analyzed: 12/23/24				
Diesel Range Organics (C10-C28)	258	25.0	250		103	38-132			
Surrogate: n-Nonane	50.4		50.0		101	50-200			
Matrix Spike (2452006-MS1)					Source: E412171-10		Prepared: 12/23/24 Analyzed: 12/23/24		
Diesel Range Organics (C10-C28)	275	25.0	250	ND	110	38-132			
Surrogate: n-Nonane	54.7		50.0		109	50-200			
Matrix Spike Dup (2452006-MSD1)					Source: E412171-10		Prepared: 12/23/24 Analyzed: 12/23/24		
Diesel Range Organics (C10-C28)	288	25.0	250	ND	115	38-132	4.75	20	
Surrogate: n-Nonane	55.7		50.0		111	50-200			
Blank (2452006-BLK2)					Prepared: 12/23/24 Analyzed: 12/23/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.6		50.0		89.2	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/24/2024 8:17:58AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2452003-BLK1)					Prepared: 12/23/24 Analyzed: 12/23/24				
Chloride	ND	20.0							
LCS (2452003-BS1)					Prepared: 12/23/24 Analyzed: 12/23/24				
Chloride	256	20.0	250		102	90-110			
LCS Dup (2452003-BSD1)					Prepared: 12/23/24 Analyzed: 12/23/24				
Chloride	257	20.0	250		103	90-110	0.364	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/24/24 08:17

- 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.



1945-1946

Page 1 of 1

Released to Imaging: 6/10/2025 2:07:43 PM

Envirotech Analytical Laboratory

Printed: 12/23/2024 8:52:41AM

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:	12/23/24 06:30	Work Order ID:	E412171
Phone:	(575) 390-6397	Date Logged In:	12/23/24 06:31	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	12/24/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not listed on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:

Sample ID?	Yes
Date/Time Collected?	No
Collectors name?	No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

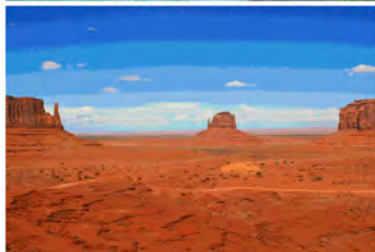
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E412186

Job Number: 20046-0001

Received: 12/24/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/30/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 12/30/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E412186
Date Received: 12/24/2024 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/24/2024 8:00:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/30/24 13:47
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 11-12	E412186-01A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 12-10	E412186-02A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 13-10	E412186-03A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 14-14	E412186-04A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 15-10	E412186-05A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 16-10	E412186-06A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 17-10	E412186-07A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 18-14	E412186-08A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 19-12	E412186-09A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 20-12	E412186-10A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 21-12	E412186-11A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.
SP Comp 22-6	E412186-12A	Soil	12/20/24	12/24/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 11-12

E412186-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
<i>Surrogate: Bromofluorobenzene</i>		115 %	70-130	12/24/24	12/24/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.5 %	70-130	12/24/24	12/24/24	
<i>Surrogate: Toluene-d8</i>		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
<i>Surrogate: Bromofluorobenzene</i>		115 %	70-130	12/24/24	12/24/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.5 %	70-130	12/24/24	12/24/24	
<i>Surrogate: Toluene-d8</i>		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
<i>Surrogate: n-Nonane</i>		109 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	75.4	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 12-10

E412186-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		119 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.5 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		119 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.5 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		114 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	71.0	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/30/2024 1:47:05PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 13-10
E412186-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2452026	
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		118 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2452026	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		118 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452033	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		109 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2452029	
Chloride	66.6	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 14-14

E412186-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		118 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		91.0 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		111 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		118 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		91.0 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		111 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		114 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	337	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 15-10

E412186-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		121 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		121 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		114 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	347	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/30/2024 1:47:05PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 16-10
E412186-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2452026	
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		119 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2452026	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		119 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452033	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		108 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2452029	
Chloride	333	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 17-10

E412186-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		118 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.4 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		113 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		118 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.4 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		113 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		112 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	347	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 18-14

E412186-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		112 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		109 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	346	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 19-12

E412186-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		114 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		114 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		116 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	374	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 20-12

E412186-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		113 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		113 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		110 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	308	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/30/2024 1:47:05PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 21-12
E412186-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2452026	
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		111 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2452026	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		111 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2452033	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		111 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2452029	
Chloride	513	20.0	1	12/24/24	12/24/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/30/2024 1:47:05PM

SP Comp 22-6

E412186-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Benzene	ND	0.0250	1	12/24/24	12/24/24	
Ethylbenzene	ND	0.0250	1	12/24/24	12/24/24	
Toluene	ND	0.0250	1	12/24/24	12/24/24	
o-Xylene	ND	0.0250	1	12/24/24	12/24/24	
p,m-Xylene	ND	0.0500	1	12/24/24	12/24/24	
Total Xylenes	ND	0.0250	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		113 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2452026
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/24/24	12/24/24	
Surrogate: Bromofluorobenzene		117 %	70-130	12/24/24	12/24/24	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	12/24/24	12/24/24	
Surrogate: Toluene-d8		113 %	70-130	12/24/24	12/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2452033
Diesel Range Organics (C10-C28)	ND	25.0	1	12/24/24	12/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/24/24	12/24/24	
Surrogate: n-Nonane		118 %	50-200	12/24/24	12/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2452029
Chloride	382	20.0	1	12/24/24	12/24/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/30/2024 1:47:05PM

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 (2452026-BLK1) Prepared: 12/23/24 Analyzed: 12/23/24

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	0.605		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.459		0.500		91.7	70-130			
Surrogate: Toluene-d8	0.567		0.500		113	70-130			

LCS (2452026-BS1) Prepared: 12/23/24 Analyzed: 12/23/24

Benzene	2.66	0.0250	2.50		106	70-130			
Ethylbenzene	2.78	0.0250	2.50		111	70-130			
Toluene	2.74	0.0250	2.50		109	70-130			
o-Xylene	2.91	0.0250	2.50		116	70-130			
p,m-Xylene	5.79	0.0500	5.00		116	70-130			
Total Xylenes	8.69	0.0250	7.50		116	70-130			
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.464		0.500		92.8	70-130			
Surrogate: Toluene-d8	0.551		0.500		110	70-130			

LCS Dup (2452026-BSD1) Prepared: 12/23/24 Analyzed: 12/23/24

Benzene	2.47	0.0250	2.50		98.7	70-130	7.38	23	
Ethylbenzene	2.62	0.0250	2.50		105	70-130	6.22	27	
Toluene	2.56	0.0250	2.50		103	70-130	6.53	24	
o-Xylene	2.75	0.0250	2.50		110	70-130	5.70	27	
p,m-Xylene	5.47	0.0500	5.00		109	70-130	5.61	27	
Total Xylenes	8.22	0.0250	7.50		110	70-130	5.64	27	
Surrogate: Bromofluorobenzene	0.599		0.500		120	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		95.9	70-130			
Surrogate: Toluene-d8	0.557		0.500		111	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/30/2024 1:47:05PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2452026-BLK1) Prepared: 12/23/24 Analyzed: 12/23/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.605		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.459		0.500		91.7	70-130			
Surrogate: Toluene-d8	0.567		0.500		113	70-130			

LCS (2452026-BS2) Prepared: 12/23/24 Analyzed: 12/23/24

Gasoline Range Organics (C6-C10)	60.4	20.0	50.0		121	70-130			
Surrogate: Bromofluorobenzene	0.609		0.500		122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.559		0.500		112	70-130			

LCS Dup (2452026-BSD2) Prepared: 12/23/24 Analyzed: 12/23/24

Gasoline Range Organics (C6-C10)	59.8	20.0	50.0		120	70-130	1.07	20	
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.7	70-130			
Surrogate: Toluene-d8	0.572		0.500		114	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/30/2024 1:47:05PM

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 (2452033-BLK1) Prepared: 12/24/24 Analyzed: 12/24/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.6		50.0		103	50-200			

LCS (2452033-BS1) Prepared: 12/24/24 Analyzed: 12/24/24

Diesel Range Organics (C10-C28)	194	25.0	250		77.4	38-132			
Surrogate: n-Nonane	51.7		50.0		103	50-200			

Matrix Spike (2452033-MS1) Source: E412186-04 Prepared: 12/24/24 Analyzed: 12/24/24

Diesel Range Organics (C10-C28)	292	25.0	250	ND	117	38-132			
Surrogate: n-Nonane	55.3		50.0		111	50-200			

Matrix Spike Dup (2452033-MSD1) Source: E412186-04 Prepared: 12/24/24 Analyzed: 12/24/24

Diesel Range Organics (C10-C28)	293	25.0	250	ND	117	38-132	0.541	20	
Surrogate: n-Nonane	55.0		50.0		110	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/30/2024 1:47:05PM

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 (2452029-BLK1)					Prepared: 12/23/24 Analyzed: 12/23/24				
Chloride	ND	20.0							
LCS (2452029-BS1)					Prepared: 12/23/24 Analyzed: 12/23/24				
Chloride	254	20.0	250		102	90-110			
LCS Dup (2452029-BSD1)					Prepared: 12/23/24 Analyzed: 12/23/24				
Chloride	255	20.0	250		102	90-110	0.280	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/30/24 13:47

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



Project Information

Chain of Custody

Page 1 of 2

Client: <u>Black Energy</u> Project: <u>Westmount A</u> 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# <u>E412186</u> Job Number <u>20046-0001</u>					TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard <input type="checkbox"/>				EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
Analysis and Method										State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks						
	11/20/24	S	1	Spcomp 11-12	1															
				Spcomp 12-10	2															
				Spcomp 13-10	3															
				Spcomp 14-14	4															
				Spcomp 15-10	5															
				Spcomp 16-10	6															
				Spcomp 17-10	7															
				Spcomp 18-14	8															
				Spcomp 19-12	9															
	12/20/24	S	4	Spcomp 20-12	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>Andy Tonga</u>																				
Relinquished by: (Signature) <u>Andy Tonga</u> Date <u>11/20/24</u> Time <u></u>										Received by: (Signature) <u>Carthman</u> Date <u>12.23.24</u> Time <u>1145</u>										
Relinquished by: (Signature) <u>Carthman</u> Date <u>12.23.24</u> Time <u>2200</u>										Received by: (Signature) <u>Carthman</u> Date <u>12.24.24</u> Time <u>8:00</u>										
Relinquished by: (Signature) <u></u> Date <u></u> Time <u></u>										Received by: (Signature) <u></u> Date <u></u> Time <u></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: 12/24/2024 8:10:55AM

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:	12/24/24 08:00	Work Order ID:	E412186
Phone:	(575) 390-6397	Date Logged In:	12/23/24 12:18	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	12/30/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:

Sample ID?	Yes
Date/Time Collected?	No
Collectors name?	No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

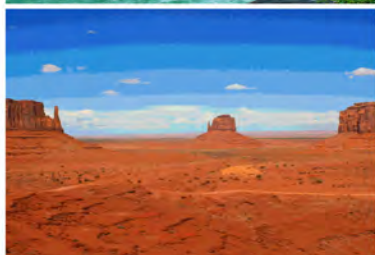
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E412194

Job Number: 20046-0001

Received: 12/30/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/31/24

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

Date Reported: 12/31/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E412194
Date Received: 12/30/2024 7:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/30/2024 7:00:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount A Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/31/24 13:02
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 23-6	E412194-01A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 24-6	E412194-02A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 25-6	E412194-03A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 26-6	E412194-04A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 27-6	E412194-05A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 28-6	E412194-06A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 29-6	E412194-07A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 30-6	E412194-08A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 31-12	E412194-09A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 32-12	E412194-10A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 33-6	E412194-11A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.
SP Comp 34-2	E412194-12A	Soil	12/23/24	12/30/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 1:02:03PM

SP Comp 23-6

E412194-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.6 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.6 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	125	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 1:02:03PM

SP Comp 24-6

E412194-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.8 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	108	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 1:02:03PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 25-6
E412194-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
Surrogate: 4-Bromochlorobenzene-PID	90.3 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.9 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
Surrogate: n-Nonane	119 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	230	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 1:02:03PM

SP Comp 26-6

E412194-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.5 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	116 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	211	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 1:02:03PM

SP Comp 27-6

E412194-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.3 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	114	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 1:02:03PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 28-6
E412194-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.9 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	111	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 1:02:03PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 29-6
E412194-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.7 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	116 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	640	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 1:02:03PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 30-6
E412194-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.2 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	630	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 1:02:03PM

SP Comp 31-12

E412194-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2453002
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.7 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2453002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2453008
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	116 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2453009
Chloride	209	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 1:02:03PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 32-12
E412194-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
Surrogate: 4-Bromochlorobenzene-PID	85.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
Surrogate: n-Nonane	119 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	216	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 1:02:03PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 33-6
E412194-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
Surrogate: 4-Bromochlorobenzene-PID	85.1 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	91.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
Surrogate: n-Nonane	119 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	107	20.0	1	12/30/24	12/30/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 1:02:03PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 34-2
E412194-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
Surrogate: 4-Bromochlorobenzene-PID	84.6 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	91.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453008	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
Surrogate: n-Nonane	122 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453009	
Chloride	231	20.0	1	12/30/24	12/30/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 1:02:03PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2453002-BLK1) Prepared: 12/29/24 Analyzed: 12/29/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.10		8.00		88.7	70-130			

LCS (2453002-BS1) Prepared: 12/29/24 Analyzed: 12/30/24

Benzene	5.37	0.0250	5.00		107	70-130			
Ethylbenzene	5.21	0.0250	5.00		104	70-130			
Toluene	5.32	0.0250	5.00		106	70-130			
o-Xylene	5.18	0.0250	5.00		104	70-130			
p,m-Xylene	10.6	0.0500	10.0		106	70-130			
Total Xylenes	15.8	0.0250	15.0		105	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.32		8.00		91.5	70-130			

Matrix Spike (2453002-MS1) Source: E412193-04 Prepared: 12/29/24 Analyzed: 12/30/24

Benzene	5.14	0.0250	5.00	ND	103	54-133			
Ethylbenzene	4.98	0.0250	5.00	ND	99.7	61-133			
Toluene	5.10	0.0250	5.00	ND	102	61-130			
o-Xylene	4.93	0.0250	5.00	ND	98.6	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.02		8.00		87.7	70-130			

Matrix Spike Dup (2453002-MSD1) Source: E412193-04 Prepared: 12/29/24 Analyzed: 12/29/24

Benzene	4.76	0.0250	5.00	ND	95.2	54-133	7.68	20	
Ethylbenzene	4.61	0.0250	5.00	ND	92.3	61-133	7.70	20	
Toluene	4.71	0.0250	5.00	ND	94.2	61-130	7.88	20	
o-Xylene	4.59	0.0250	5.00	ND	91.8	63-131	7.11	20	
p,m-Xylene	9.38	0.0500	10.0	ND	93.8	63-131	7.94	20	
Total Xylenes	14.0	0.0250	15.0	ND	93.2	63-131	7.67	20	
Surrogate: 4-Bromochlorobenzene-PID	7.53		8.00		94.1	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 1:02:03PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2453002-BLK1) Prepared: 12/29/24 Analyzed: 12/29/24

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

LCS (2453002-BS2) Prepared: 12/29/24 Analyzed: 12/30/24

Gasoline Range Organics (C6-C10)	41.3	20.0	50.0		82.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			

Matrix Spike (2453002-MS2) Source: E412193-04 Prepared: 12/29/24 Analyzed: 12/30/24

Gasoline Range Organics (C6-C10)	43.8	20.0	50.0	ND	87.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.17		8.00		89.7	70-130			

Matrix Spike Dup (2453002-MSD2) Source: E412193-04 Prepared: 12/29/24 Analyzed: 12/30/24

Gasoline Range Organics (C6-C10)	40.2	20.0	50.0	ND	80.3	70-130	8.71	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.3	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 1:02:03PM

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 (2453008-BLK1)					Prepared: 12/30/24 Analyzed: 12/30/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	57.8		50.0		116	50-200			

LCS (2453008-BS1)					Prepared: 12/30/24 Analyzed: 12/30/24				
Diesel Range Organics (C10-C28)	286	25.0	250		114	38-132			
Surrogate: n-Nonane	59.5		50.0		119	50-200			

Matrix Spike (2453008-MS1)					Source: E412194-01		Prepared: 12/30/24 Analyzed: 12/30/24		
Diesel Range Organics (C10-C28)	285	25.0	250	ND	114	38-132			
Surrogate: n-Nonane	57.0		50.0		114	50-200			

Matrix Spike Dup (2453008-MSD1)					Source: E412194-01		Prepared: 12/30/24 Analyzed: 12/30/24		
Diesel Range Organics (C10-C28)	293	25.0	250	ND	117	38-132	2.84	20	
Surrogate: n-Nonane	58.8		50.0		118	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 1:02:03PM

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 (2453009-BLK1)					Prepared: 12/30/24 Analyzed: 12/30/24				
Chloride	ND	20.0							
LCS (2453009-BS1)					Prepared: 12/30/24 Analyzed: 12/30/24				
Chloride	251	20.0	250		100	90-110			
LCS Dup (2453009-BSD1)					Prepared: 12/30/24 Analyzed: 12/30/24				
Chloride	262	20.0	250		105	90-110	4.14	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/24 13:02

- 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 A</u> 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# <u>E412194</u> Job Number <u>200410001</u> Analysis and Method					TAT 1D <input checked="" type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input checked="" type="checkbox"/> Standard			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"/>									
										DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC NM BGDOC TX									
										Remarks									
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number														
	12/23/24	S	1	Spcomp 23 - C	1														
				Spcomp 24 - C	2														
				Spcomp 25 - C	3														
				Spcomp 26 - C	4														
				Spcomp 27 - C	5														
				Spcomp 28 - C	6														
				Spcomp 29 - C	7														
				Spcomp 30 - C	8														
				Spcomp 31 - 12	9														
	12/23/24	S	1	Spcomp 32 - 12	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) <u>Andy Tuvaga</u> Date <u>12/23/24</u> Time _____ Relinquished by: (Signature) <u>Andy Tuvaga</u> Date <u>12-27-24</u> Time <u>1400</u> Relinquished by: (Signature) <u>Caitlin Mann</u> Date <u>12-27-24</u> Time <u>7:00</u>																			
Received by: (Signature) <u>Andy Tuvaga</u> Date <u>12-27-24</u> Time <u>1200</u> Received by: (Signature) <u>Andy Tuvaga</u> Date <u>12-27-24</u> Time <u>17:34</u> Received by: (Signature) <u>Caitlin Mann</u> Date <u>12-27-24</u> Time <u>7:00</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.																			

[illegible]

Envirotech Analytical Laboratory

Printed: 12/29/2024 11:06:39AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	12/30/24 07:00	Work Order ID:	E412194
Phone:	(575) 390-6397	Date Logged In:	12/29/24 11:05	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	12/31/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Work Order: E412195

Job Number: 20046-0001

Received: 12/30/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/31/24

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: 12/31/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E412195
Date Received: 12/30/2024 7:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/30/2024 7:00:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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

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

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mgonzales@envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount A	Reported: 12/31/24 14:06
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 35-2	E412195-01A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 36-2	E412195-02A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 37-2	E412195-03A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 38-2	E412195-04A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 39-2	E412195-05A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 40-6	E412195-06A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 41-6	E412195-07A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 42-6	E412195-08A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 43-6	E412195-09A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 44-12	E412195-10A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 45-12	E412195-11A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 46-12	E412195-12A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 47-4	E412195-13A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 48-4	E412195-14A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 49-4	E412195-15A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.
SP Comp 50-4	E412195-16A	Soil	12/26/24	12/30/24	Glass Jar, 2 oz.



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 2:06:28PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 35-2
E412195-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
Surrogate: 4-Bromochlorobenzene-PID	86.8 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.9 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
Surrogate: n-Nonane	110 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	201	20.0	1	12/30/24	12/31/24	

Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 36-2

E412195-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0500	2	12/29/24	12/29/24	
Ethylbenzene	ND	0.0500	2	12/29/24	12/29/24	
Toluene	ND	0.0500	2	12/29/24	12/29/24	
o-Xylene	ND	0.0500	2	12/29/24	12/29/24	
p,m-Xylene	ND	0.100	2	12/29/24	12/29/24	
Total Xylenes	ND	0.0500	2	12/29/24	12/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.7 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	40.0	2	12/29/24	12/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.8 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	98.5 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	187	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 37-2

E412195-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2453003
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	85.4 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2453003
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2453007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	99.5 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2453010
Chloride	328	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 38-2

E412195-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: SL		Batch: 2453003
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		86.3 %	70-130	12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: SL		Batch: 2453003
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.2 %	70-130	12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: NV		Batch: 2453007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>		106 %	50-200	12/30/24	12/30/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: DT		Batch: 2453010
Chloride	332	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 2:06:28PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 39-2
E412195-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
Surrogate: 4-Bromochlorobenzene-PID	85.5 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.2 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
Surrogate: n-Nonane	98.9 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	195	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 2:06:28PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 40-6
E412195-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
Surrogate: 4-Bromochlorobenzene-PID	84.8 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.8 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
Surrogate: n-Nonane	107 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	194	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 2:06:28PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 41-6
E412195-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
Surrogate: 4-Bromochlorobenzene-PID	84.8 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.6 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
Surrogate: n-Nonane	109 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	288	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 42-6

E412195-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2453003
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	85.3 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2453003
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.9 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2453007
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2453010
Chloride	264	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 43-6

E412195-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/29/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/29/24	
Toluene	ND	0.0250	1	12/29/24	12/29/24	
o-Xylene	ND	0.0250	1	12/29/24	12/29/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/29/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/29/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	84.1 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/29/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.9 %	70-130		12/29/24	12/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	260	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 44-12

E412195-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	83.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	244	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 45-12

E412195-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	83.4 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.4 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/30/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/30/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		12/30/24	12/30/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	247	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 46-12

E412195-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	84.0 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.3 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	227	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 2:06:28PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 47-4
E412195-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
Surrogate: 4-Bromochlorobenzene-PID	84.1 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	96.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
Surrogate: n-Nonane	108 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	354	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 2:06:28PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 48-4
E412195-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0250	1	12/29/24	12/30/24	
Ethylbenzene	ND	0.0250	1	12/29/24	12/30/24	
Toluene	ND	0.0250	1	12/29/24	12/30/24	
o-Xylene	ND	0.0250	1	12/29/24	12/30/24	
p,m-Xylene	ND	0.0500	1	12/29/24	12/30/24	
Total Xylenes	ND	0.0250	1	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	83.7 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.3 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	323	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy	Project Name:	West Mount A	Reported: 12/31/2024 2:06:28PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 49-4
E412195-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0500	2	12/29/24	12/30/24	
Ethylbenzene	ND	0.0500	2	12/29/24	12/30/24	
Toluene	ND	0.0500	2	12/29/24	12/30/24	
o-Xylene	ND	0.0500	2	12/29/24	12/30/24	
p,m-Xylene	ND	0.100	2	12/29/24	12/30/24	
Total Xylenes	ND	0.0500	2	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	82.7 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	40.0	2	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	194	20.0	1	12/30/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
12/31/2024 2:06:28PM

SP Comp 50-4

E412195-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Benzene	ND	0.0500	2	12/29/24	12/30/24	
Ethylbenzene	ND	0.0500	2	12/29/24	12/30/24	
Toluene	ND	0.0500	2	12/29/24	12/30/24	
o-Xylene	ND	0.0500	2	12/29/24	12/30/24	
p,m-Xylene	ND	0.100	2	12/29/24	12/30/24	
Total Xylenes	ND	0.0500	2	12/29/24	12/30/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	82.8 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453003	
Gasoline Range Organics (C6-C10)	ND	40.0	2	12/29/24	12/30/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.0 %	70-130		12/29/24	12/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453007	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/30/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/30/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	117 %	50-200		12/30/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453010	
Chloride	184	20.0	1	12/30/24	12/31/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 2:06:28PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2453003-BLK1) Prepared: 12/29/24 Analyzed: 12/29/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	6.78		8.00		84.7	70-130			

LCS (2453003-BS1) Prepared: 12/29/24 Analyzed: 12/30/24

Benzene	4.74	0.0250	5.00		94.8	70-130			
Ethylbenzene	4.60	0.0250	5.00		92.0	70-130			
Toluene	4.70	0.0250	5.00		94.0	70-130			
o-Xylene	4.54	0.0250	5.00		90.8	70-130			
p,m-Xylene	9.37	0.0500	10.0		93.7	70-130			
Total Xylenes	11.8	0.0250	15.0		78.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.56		8.00		82.0	70-130			

Matrix Spike (2453003-MS1) Source: E412195-02 Prepared: 12/29/24 Analyzed: 12/30/24

Benzene	9.16	0.0500	10.0	ND	91.6	54-133			
Ethylbenzene	8.88	0.0500	10.0	ND	88.8	61-133			
Toluene	9.06	0.0500	10.0	ND	90.6	61-130			
o-Xylene	8.76	0.0500	10.0	ND	87.6	63-131			
p,m-Xylene	18.1	0.100	20.0	ND	90.3	63-131			
Total Xylenes	26.8	0.0500	30.0	ND	89.4	63-131			
Surrogate: 4-Bromochlorobenzene-PID	13.4		16.0		83.5	70-130			

Matrix Spike Dup (2453003-MSD1) Source: E412195-02 Prepared: 12/29/24 Analyzed: 12/29/24

Benzene	11.1	0.0500	10.0	ND	111	54-133	19.3	20	
Ethylbenzene	10.8	0.0500	10.0	ND	108	61-133	19.2	20	
Toluene	11.0	0.0500	10.0	ND	110	61-130	19.2	20	
o-Xylene	10.7	0.0500	10.0	ND	107	63-131	19.6	20	
p,m-Xylene	21.9	0.100	20.0	ND	109	63-131	19.0	20	
Total Xylenes	32.5	0.0500	30.0	ND	108	63-131	19.2	20	
Surrogate: 4-Bromochlorobenzene-PID	13.8		16.0		86.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 2:06:28PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2453003-BLK1) Prepared: 12/29/24 Analyzed: 12/29/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.70		8.00		96.3	70-130			

LCS (2453003-BS2) Prepared: 12/29/24 Analyzed: 12/29/24

Gasoline Range Organics (C6-C10)	46.1	20.0	50.0		92.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.73		8.00		96.6	70-130			

Matrix Spike (2453003-MS2) Source: E412195-02 Prepared: 12/29/24 Analyzed: 12/30/24

Gasoline Range Organics (C6-C10)	92.4	40.0	100	ND	92.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	16.2		16.0		101	70-130			

Matrix Spike Dup (2453003-MSD2) Source: E412195-02 Prepared: 12/29/24 Analyzed: 12/30/24

Gasoline Range Organics (C6-C10)	86.0	40.0	100	ND	86.0	70-130	7.19	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	16.0		16.0		99.8	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 2:06:28PM

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 (2453007-BLK1)					Prepared: 12/30/24 Analyzed: 12/30/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.3		50.0		107	50-200			

LCS (2453007-BS1)					Prepared: 12/30/24 Analyzed: 12/30/24				
Diesel Range Organics (C10-C28)	265	25.0	250		106	38-132			
Surrogate: n-Nonane	52.8		50.0		106	50-200			

Matrix Spike (2453007-MS1)					Source: E412195-04		Prepared: 12/30/24 Analyzed: 12/30/24		
Diesel Range Organics (C10-C28)	266	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	50.9		50.0		102	50-200			

Matrix Spike Dup (2453007-MSD1)					Source: E412195-04		Prepared: 12/30/24 Analyzed: 12/30/24		
Diesel Range Organics (C10-C28)	263	25.0	250	ND	105	38-132	1.08	20	
Surrogate: n-Nonane	52.3		50.0		105	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/2024 2:06:28PM

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 (2453010-BLK1)					Prepared: 12/30/24 Analyzed: 12/31/24				
Chloride	ND	20.0							
LCS (2453010-BS1)					Prepared: 12/30/24 Analyzed: 12/31/24				
Chloride	256	20.0	250		102	90-110			
LCS Dup (2453010-BSD1)					Prepared: 12/30/24 Analyzed: 12/31/24				
Chloride	257	20.0	250		103	90-110	0.252	20	

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



Definitions and Notes

Mack Energy	Project Name:	West Mount A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/31/24 14:06

- 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

Page 1 of 2

Client: <u>Energy Staffing</u> Project: <u>WCS + Mount A</u> 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# <u>E412195</u> Job Number <u>200460001</u> Analysis and Method					TAT 1D <input checked="" type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard			EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
										State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>			Remarks						
Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX						
	12/24/24	S	1	Spcomp 35 - 2	1							<input checked="" type="checkbox"/>							
				Spcomp 36 - 2	2														
				Spcomp 37 - 2	3														
				Spcomp 38 - 2	4														
				Spcomp 39 - 2	5														
				Spcomp 40 - 4	6														
				Spcomp 41 - 4	7														
				Spcomp 42 - 4	8														
				Spcomp 43 - 4	9														
	12/24/24	S	1	Spcomp 44 - 12	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)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
<u>Andy Tonga</u> <u>12/27/24</u>		<u>12/27/24</u>		<u>14:00</u>		<u>[Signature]</u> <u>12/27/24</u>		<u>17:34</u>		<u>12:27/24</u>		<u>17:34</u>		T1 T2 T3					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>							
<u>[Signature]</u> <u>12/30/24</u>		<u>12/30/24</u>		<u>7:00</u>		<u>Caitlin Mann</u> <u>12/30/24</u>		<u>7:00</u>		<u>12:30/24</u>		<u>7:00</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.																			

[illegible]

Envirotech Analytical Laboratory

Printed: 12/29/2024 11:12:03AM

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:	12/30/24 07:00	Work Order ID:	E412195
Phone:	(575) 390-6397	Date Logged In:	12/29/24 11:10	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	12/31/24 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

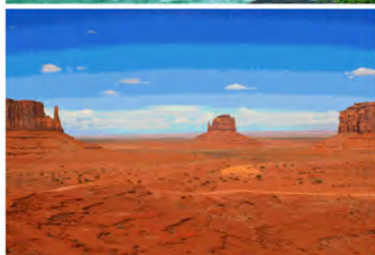
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E412199

Job Number: 20046-0001

Received: 12/31/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
1/2/25

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 1/2/25

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E412199
Date Received: 12/31/2024 7:15:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/31/2024 7:15:00AM, under the Project Name: West Mount A.

The analytical test results summarized in this report with the Project Name: West Mount A 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
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Sample Summary

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	01/02/25 13:36

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 51-4	E412199-01A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:36:03PM

SP Comp 51-4

E412199-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	93.4 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	87.0 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>	108 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	233	20.0	1	12/31/24	12/31/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:36:03PM

Volatile Organics by EPA 8021B

Analyst: SL

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

Blank (2453029-BLK1) Prepared: 12/31/24 Analyzed: 12/31/24

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	7.07		8.00		88.4	70-130			

LCS (2453029-BS1) Prepared: 12/31/24 Analyzed: 12/31/24

Benzene	5.21	0.0250	5.00		104	70-130			
Ethylbenzene	5.10	0.0250	5.00		102	70-130			
Toluene	5.19	0.0250	5.00		104	70-130			
o-Xylene	5.07	0.0250	5.00		101	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.4	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.41		8.00		92.7	70-130			

LCS Dup (2453029-BSD1) Prepared: 12/31/24 Analyzed: 12/31/24

Benzene	5.32	0.0250	5.00		106	70-130	2.10	20	
Ethylbenzene	5.20	0.0250	5.00		104	70-130	2.12	20	
Toluene	5.29	0.0250	5.00		106	70-130	1.97	20	
o-Xylene	5.18	0.0250	5.00		104	70-130	2.14	20	
p,m-Xylene	10.6	0.0500	10.0		106	70-130	2.16	20	
Total Xylenes	15.8	0.0250	15.0		105	70-130	2.16	20	
Surrogate: 4-Bromochlorobenzene-PID	7.47		8.00		93.4	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:36:03PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2453029-BLK1) Prepared: 12/31/24 Analyzed: 12/31/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.04		8.00		88.0	70-130			

LCS (2453029-BS2) Prepared: 12/31/24 Analyzed: 12/31/24

Gasoline Range Organics (C6-C10)	44.8	20.0	50.0		89.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.4	70-130			

LCS Dup (2453029-BSD2) Prepared: 12/31/24 Analyzed: 12/31/24

Gasoline Range Organics (C6-C10)	46.5	20.0	50.0		92.9	70-130	3.68	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.3	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:36:03PM

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 (2453031-BLK1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.5		50.0		101	50-200			

LCS (2453031-BS1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Diesel Range Organics (C10-C28)	265	25.0	250		106	38-132			
Surrogate: n-Nonane	52.0		50.0		104	50-200			

Matrix Spike (2453031-MS1)					Source: E412198-01		Prepared: 12/31/24 Analyzed: 12/31/24		
Diesel Range Organics (C10-C28)	586	25.0	250	311	110	38-132			
Surrogate: n-Nonane	53.7		50.0		107	50-200			

Matrix Spike Dup (2453031-MSD1)					Source: E412198-01		Prepared: 12/31/24 Analyzed: 12/31/24		
Diesel Range Organics (C10-C28)	569	25.0	250	311	103	38-132	2.87	20	
Surrogate: n-Nonane	49.8		50.0		99.7	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:36:03PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2453033-BLK1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Chloride	ND	20.0							
LCS (2453033-BS1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Chloride	253	20.0	250		101	90-110			
LCS Dup (2453033-BSD1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Chloride	254	20.0	250		102	90-110	0.354	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	01/02/25 13:36

- 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.



[illegible]

Envirotech Analytical Laboratory

Printed: 12/31/2024 8:28:05AM

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:	12/31/24 07:15	Work Order ID:	E412199
Phone:	(575) 390-6397	Date Logged In:	12/30/24 14:29	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	01/02/25 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

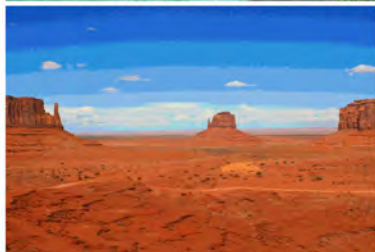
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount A

Work Order: E412200

Job Number: 20046-0001

Received: 12/31/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
1/2/25

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 1/2/25

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount A
Workorder: E412200
Date Received: 12/31/2024 7:15:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/31/2024 7:15:00AM, under the Project Name: West Mount A.

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

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

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

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

Respectfully,

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Sample Summary

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	01/02/25 13:38

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW Comp 1-10	E412200-01A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 2-10	E412200-02A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 3-4	E412200-03A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 4-10	E412200-04A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 5-10	E412200-05A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 6-14	E412200-06A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 7-14	E412200-07A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 8-12	E412200-08A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 9-12	E412200-09A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 10-8	E412200-10A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 11-8	E412200-11A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 12-8	E412200-12A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.
SW Comp 13-12	E412200-13A	Soil	12/27/24	12/31/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 1-10

E412200-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	94.0 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	86.4 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>	94.5 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	130	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 2-10

E412200-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.3 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	99.8 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	127	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 3-4

E412200-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.5 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.4 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	116 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	128	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 4-10

E412200-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.5 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.3 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	137	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 5-10

E412200-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.8 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.8 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	119	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 6-14

E412200-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.6 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.8 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	122	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 7-14

E412200-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.6 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.3 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	180	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 8-12

E412200-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.6 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.0 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	181	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 9-12

E412200-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.0 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	184	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 10-8

E412200-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.5 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.2 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	99.3 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	178	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 11-8

E412200-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.9 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.6 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	97.3 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	209	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 12-8

E412200-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.7 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.0 %	70-130		12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	209	20.0	1	12/31/24	12/31/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
1/2/2025 1:38:28PM

SW Comp 13-12

E412200-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Benzene	ND	0.0250	1	12/31/24	12/31/24	
Ethylbenzene	ND	0.0250	1	12/31/24	12/31/24	
Toluene	ND	0.0250	1	12/31/24	12/31/24	
o-Xylene	ND	0.0250	1	12/31/24	12/31/24	
p,m-Xylene	ND	0.0500	1	12/31/24	12/31/24	
Total Xylenes	ND	0.0250	1	12/31/24	12/31/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2453029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/31/24	12/31/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		87.0 %	70-130	12/31/24	12/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2453031	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/31/24	12/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	12/31/24	12/31/24	
<i>Surrogate: n-Nonane</i>						
		106 %	50-200	12/31/24	12/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2453033	
Chloride	209	20.0	1	12/31/24	12/31/24	



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:38:28PM

Volatile Organics by EPA 8021B

Analyst: SL

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

Blank (2453029-BLK1) Prepared: 12/31/24 Analyzed: 12/31/24

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	7.07		8.00		88.4	70-130			

LCS (2453029-BS1) Prepared: 12/31/24 Analyzed: 12/31/24

Benzene	5.21	0.0250	5.00		104	70-130			
Ethylbenzene	5.10	0.0250	5.00		102	70-130			
Toluene	5.19	0.0250	5.00		104	70-130			
o-Xylene	5.07	0.0250	5.00		101	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.4	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.41		8.00		92.7	70-130			

LCS Dup (2453029-BSD1) Prepared: 12/31/24 Analyzed: 12/31/24

Benzene	5.32	0.0250	5.00		106	70-130	2.10	20	
Ethylbenzene	5.20	0.0250	5.00		104	70-130	2.12	20	
Toluene	5.29	0.0250	5.00		106	70-130	1.97	20	
o-Xylene	5.18	0.0250	5.00		104	70-130	2.14	20	
p,m-Xylene	10.6	0.0500	10.0		106	70-130	2.16	20	
Total Xylenes	15.8	0.0250	15.0		105	70-130	2.16	20	
Surrogate: 4-Bromochlorobenzene-PID	7.47		8.00		93.4	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:38:28PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2453029-BLK1) Prepared: 12/31/24 Analyzed: 12/31/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.04		8.00		88.0	70-130			

LCS (2453029-BS2) Prepared: 12/31/24 Analyzed: 12/31/24

Gasoline Range Organics (C6-C10)	44.8	20.0	50.0		89.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.4	70-130			

LCS Dup (2453029-BSD2) Prepared: 12/31/24 Analyzed: 12/31/24

Gasoline Range Organics (C6-C10)	46.5	20.0	50.0		92.9	70-130	3.68	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.3	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:38:28PM

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 (2453031-BLK1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.5		50.0		101	50-200			

LCS (2453031-BS1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Diesel Range Organics (C10-C28)	265	25.0	250		106	38-132			
Surrogate: n-Nonane	52.0		50.0		104	50-200			

Matrix Spike (2453031-MS1)					Source: E412198-01		Prepared: 12/31/24 Analyzed: 12/31/24		
Diesel Range Organics (C10-C28)	586	25.0	250	311	110	38-132			
Surrogate: n-Nonane	53.7		50.0		107	50-200			

Matrix Spike Dup (2453031-MSD1)					Source: E412198-01		Prepared: 12/31/24 Analyzed: 12/31/24		
Diesel Range Organics (C10-C28)	569	25.0	250	311	103	38-132	2.87	20	
Surrogate: n-Nonane	49.8		50.0		99.7	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount A	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	1/2/2025 1:38:28PM

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 (2453033-BLK1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Chloride	ND	20.0							
LCS (2453033-BS1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Chloride	253	20.0	250		101	90-110			
LCS Dup (2453033-BSD1)					Prepared: 12/31/24 Analyzed: 12/31/24				
Chloride	254	20.0	250		102	90-110	0.354	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 A	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	01/02/25 13:38

- 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

Page 1 of 2

Client: <u>Mack Energy</u> Project: <u>Westmont A</u> 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# <u>E412200</u> Job Number <u>200460001</u>					TAT 1D 2D 3D Standard			EPA Program CWA SDWA	
Analysis and Method										NM CO UT AZ TX <input checked="" type="checkbox"/>		RCRA							
DRO/GRO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC NM BGDOC TX										State		Remarks							
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number														
	12/21/24	S	1	SWcomp 1-10	1														
				SWcomp 2-10	2														
				SWcomp 3-4	3														
				SWcomp 4-10	4														
				SWcomp 5-10	5														
				SWcomp 6-14	6														
				SWcomp 7-14	7														
				SWcomp 8-12	8														
				SWcomp 9-12	9														
	12/21/24	S	1	SWcomp 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. Sampled by: <u>Andy Tonga</u>																			
Relinquished by: (Signature) <u>Andy Tonga</u> Date <u>12/21/24</u> Time Relinquished by: (Signature) <u>Michelle Gonzales</u> Date <u>12-30-24</u> Time <u>1630</u> Relinquished by: (Signature) <u>[Signature]</u> Date <u>12-30-24</u> Time <u>2300</u>										Received by: (Signature) <u>Michelle Gonzales</u> Date <u>12/30/24</u> Time <u>1335</u> Received by: (Signature) <u>[Signature]</u> Date <u>12-30-24</u> Time <u>1630</u> Received by: (Signature) <u>Carth Mar</u> Date <u>12/30/24</u> Time <u>715</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.																			

[illegible]

Envirotech Analytical Laboratory

Printed: 12/31/2024 8:30:57AM

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:	12/31/24 07:15	Work Order ID:	E412200
Phone:	(575) 390-6397	Date Logged In:	12/30/24 14:34	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	01/02/25 17:00 (1 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

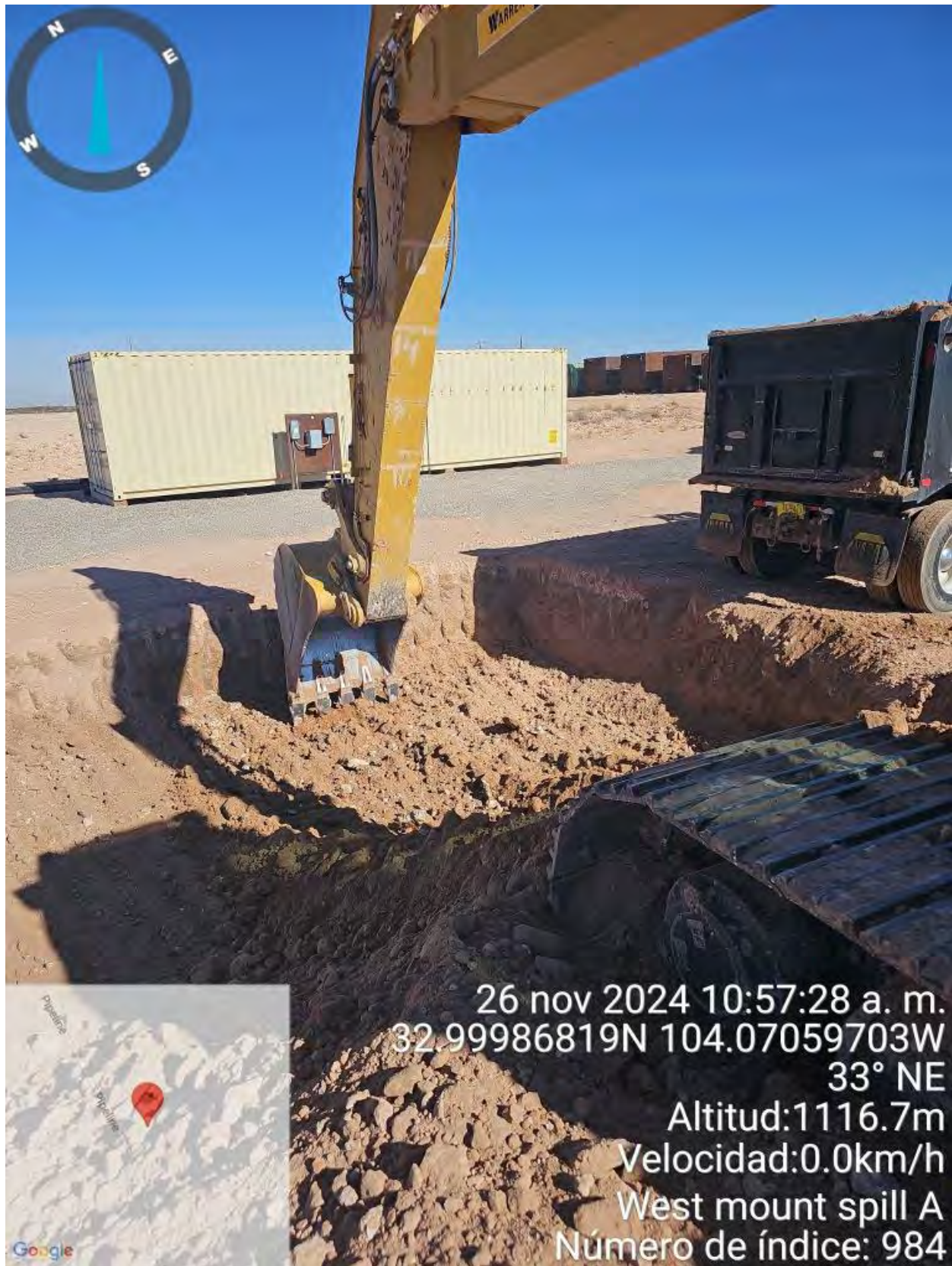


envirotech Inc.

**MACK ENERGY: WEST MOUNT SPILL A
REMEDIATION AND FINAL PHOTOS**













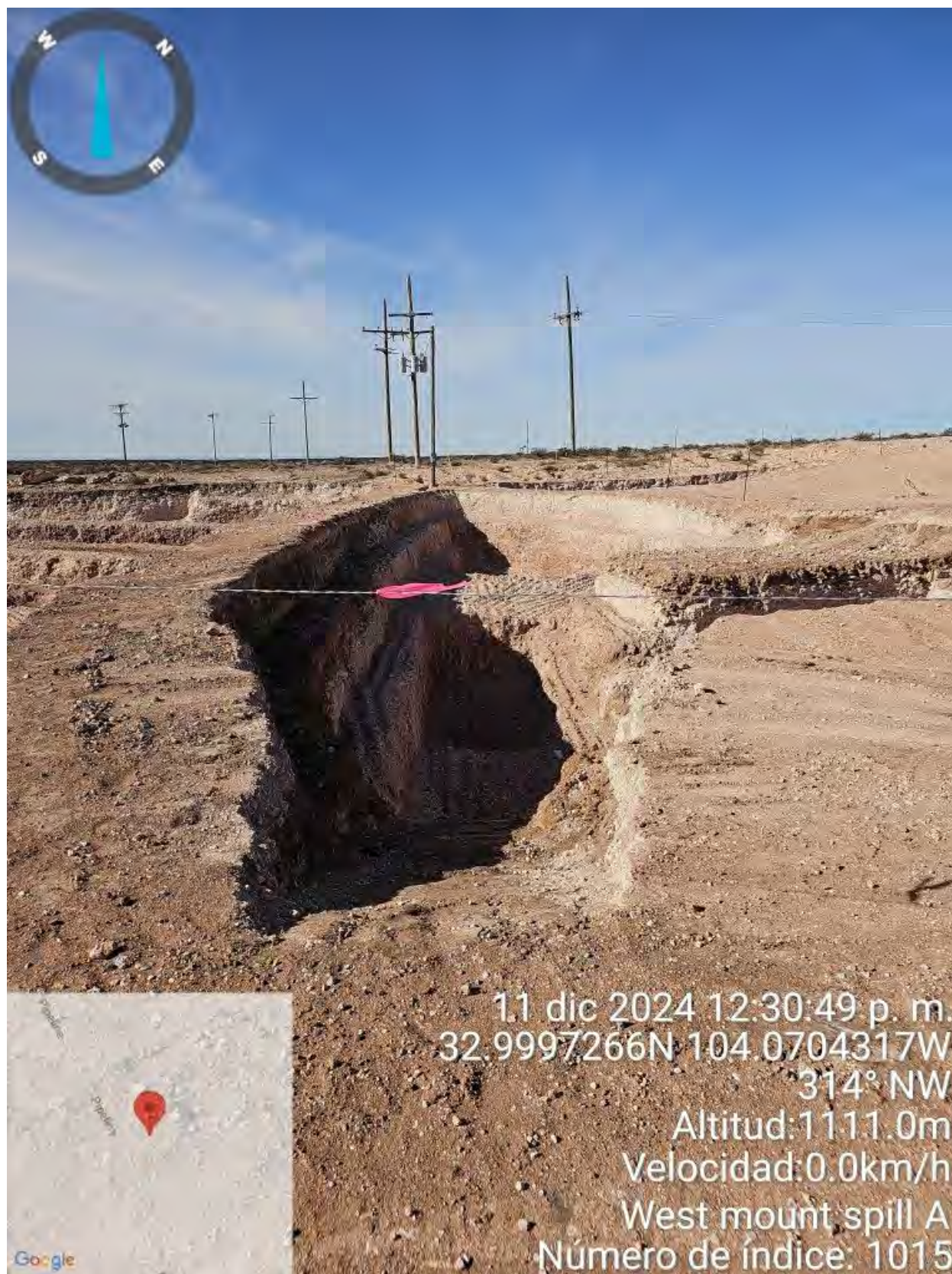
Dec 2, 2024 8:23:18 AM
32.99979444N 104.07065015W
Chaves County
Mack Energy
West mount (A)
Remediation









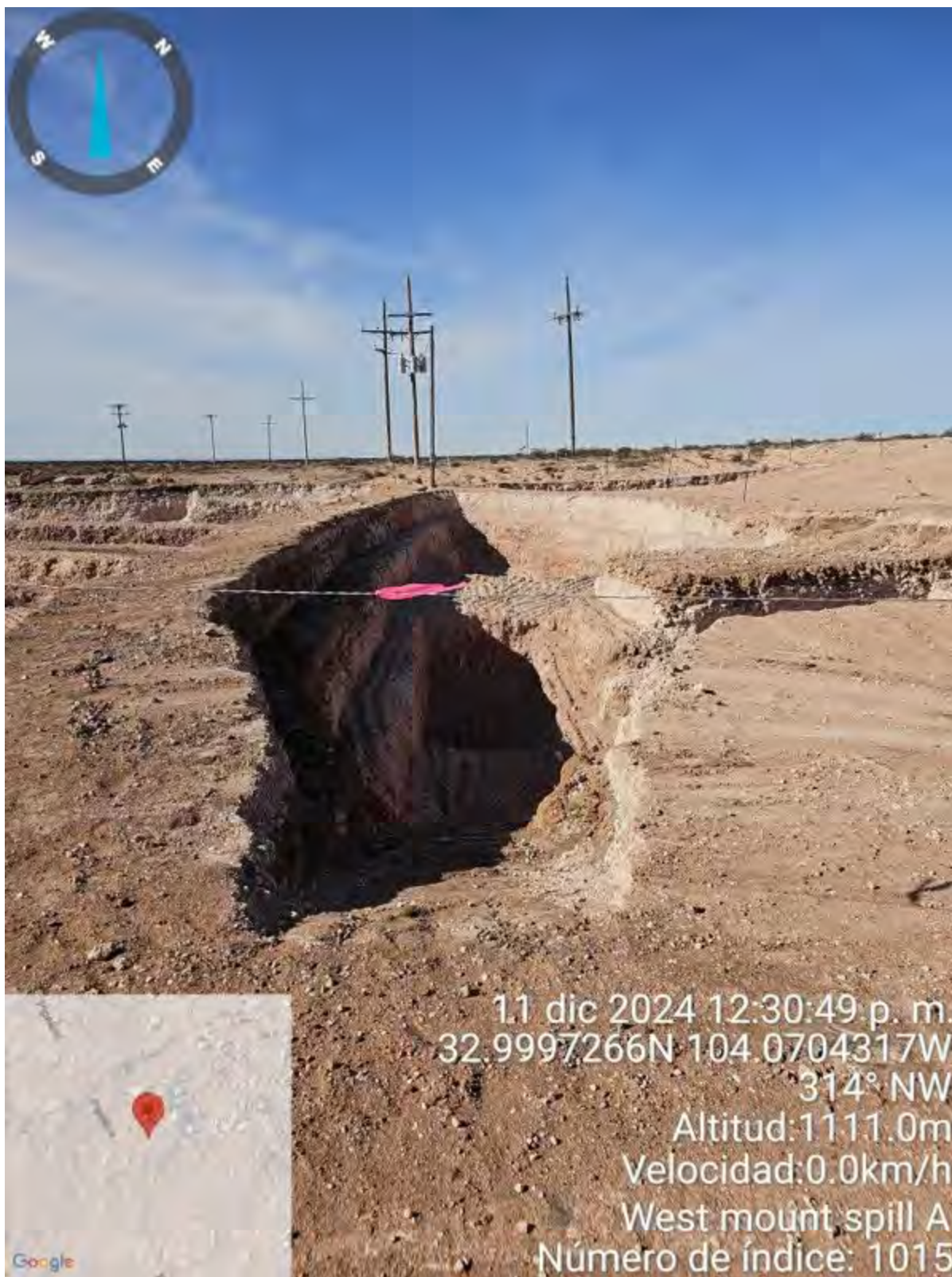




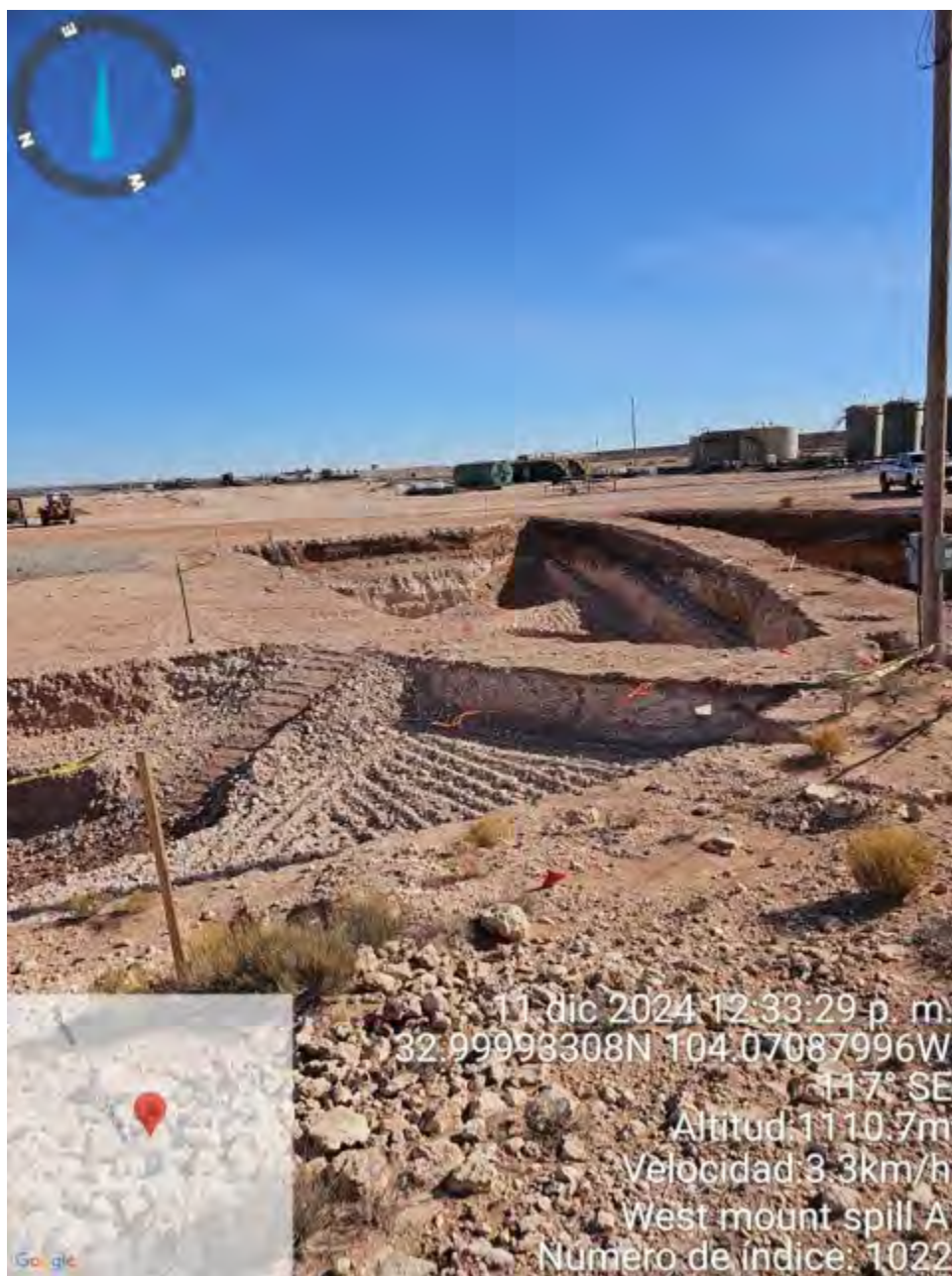












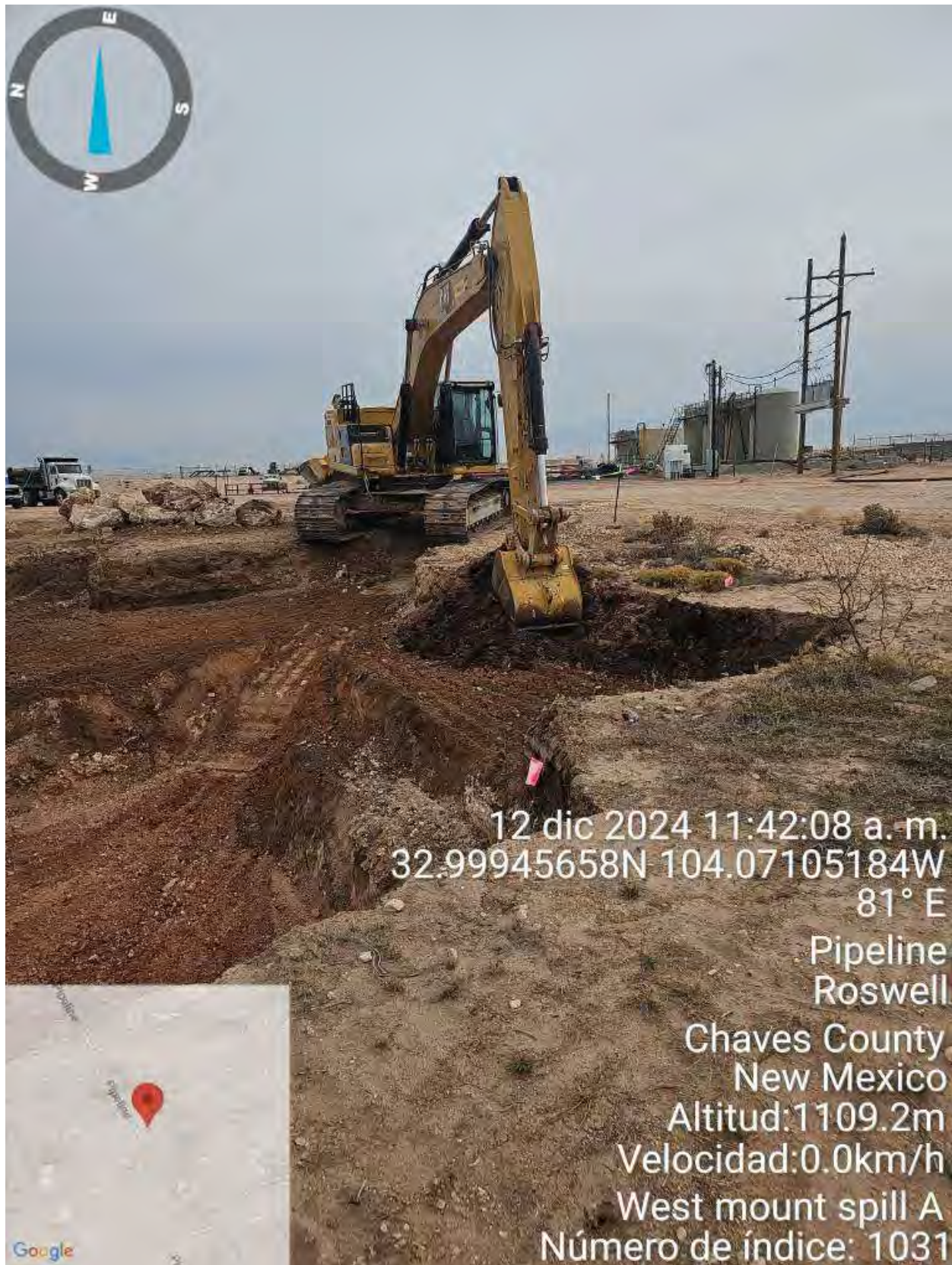






















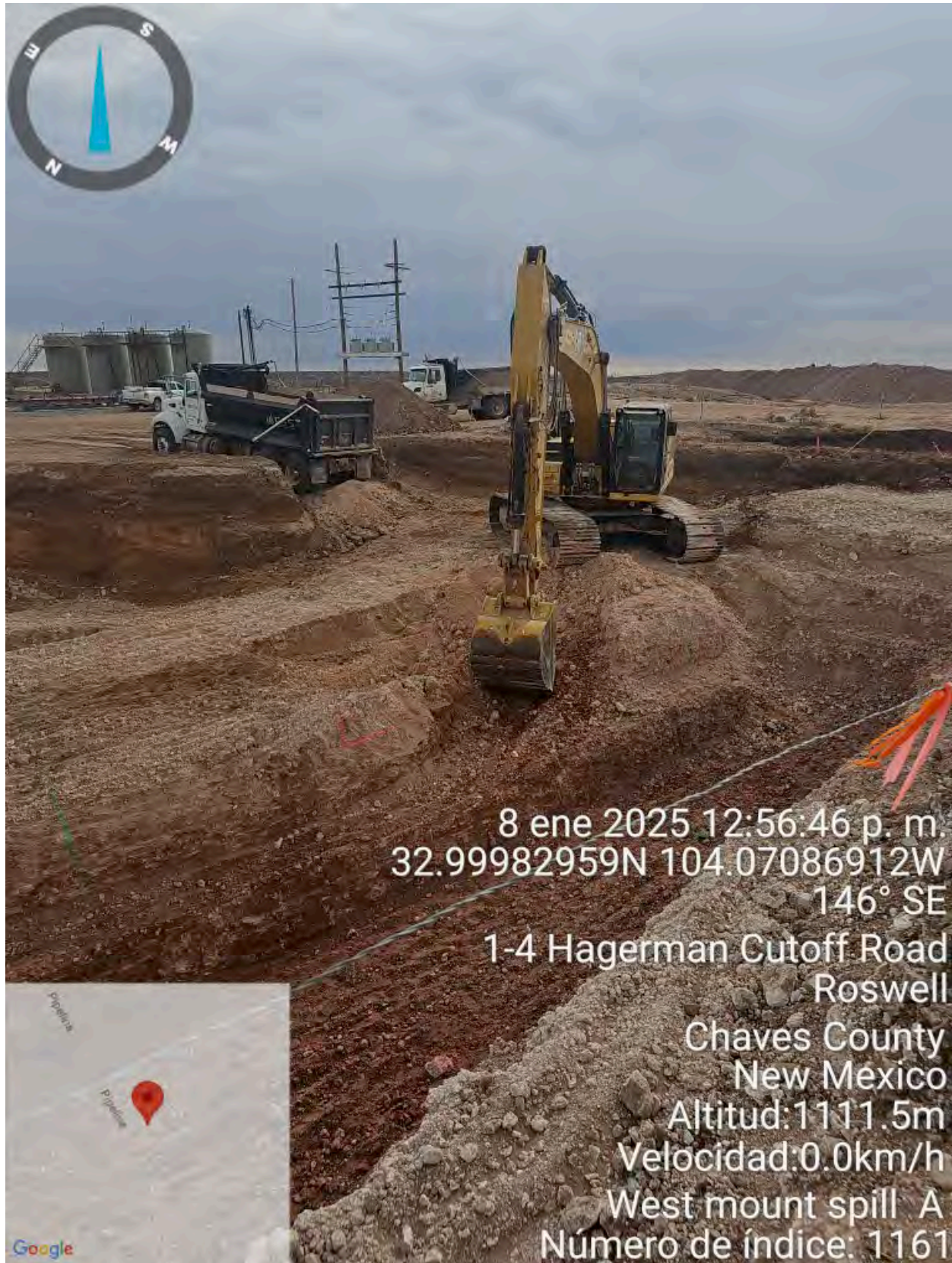




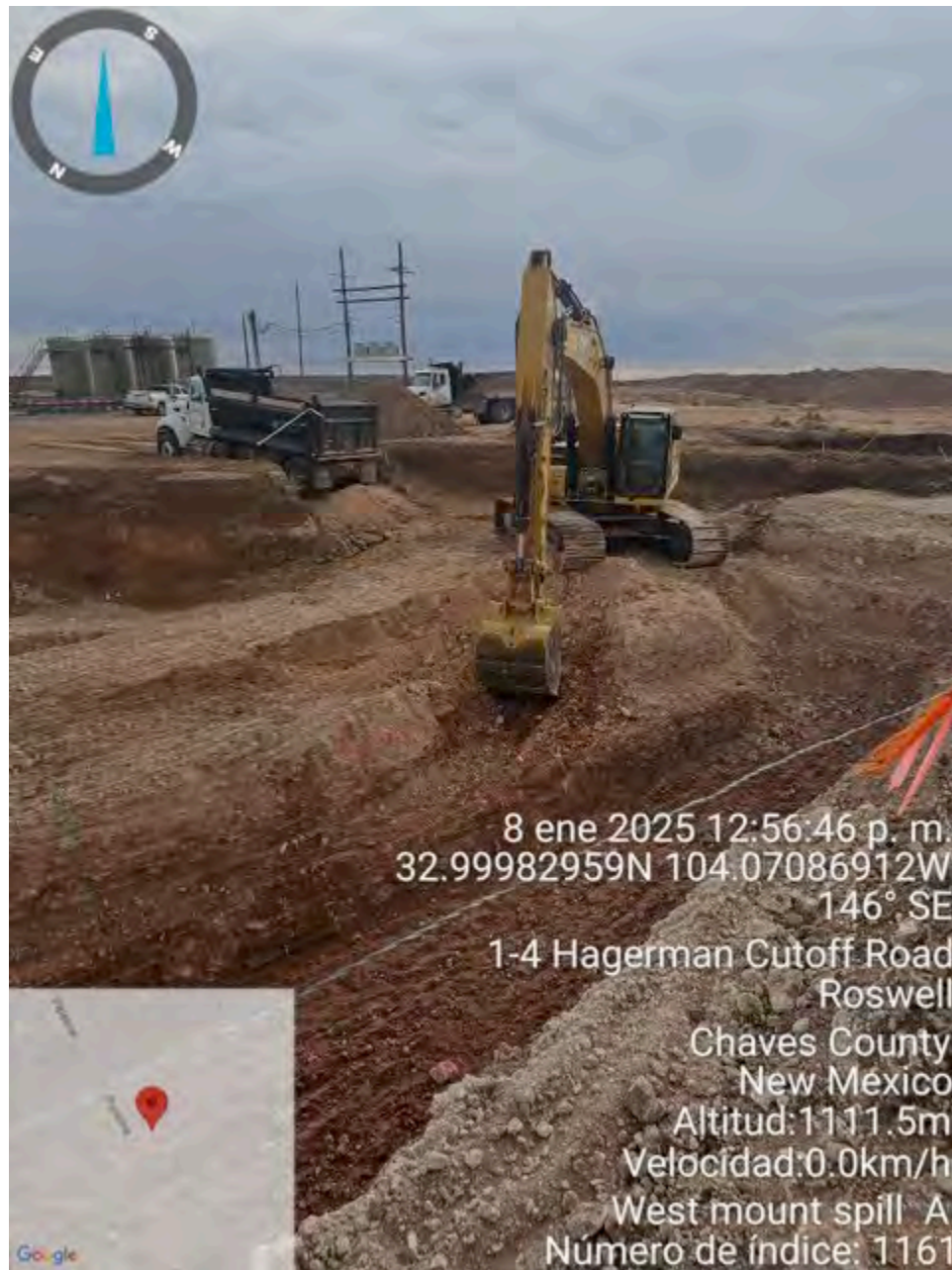


















Friday, January 24, 2025
32.9997° N, 104.0706° W
Chaves County
Altitude:3740.4ft
Speed:0.0mph
MEC West Mount Site A Backfilling
Index number:413















Tuesday, January 28, 2025
32.9999° N, 104.0707° W
Chaves County
Altitude:3760.0ft
Speed:2.1mph
MEC West Mount Site A Backfilling
Index number:420















Mack Energy
NMSLO Sandy Loam- 1.8 Ac Broadcasted
Lot #: 68135
 28.29

Item	% Pure Mix	Origin	Purity	Germ	Dormant	Total	Germ:	Test Date
Little Bluestem, Aldous	9.72%	Kansas	61.69%	59.00%	31.00%	90.00%		11/2024
Galleta, Viva	9.30%	Texas	86.14%	21.00%	73.00%	94.00%		9/2024
Blue Grama, Alma	7.36%	Texas	31.75%	94.00%	1.00%	95.00%		10/2024
Sidecoats Grama, Niner	7.21%	Texas	71.10%	16.00%	81.00%	97.00%		12/2024
Four-wing Saltbush, Variety Not Stated	7.07%	New Mexico	91.52%	0.00%	0.00%	99.00%		11/2024
Winter Fat, Variety Not Stated	6.66%	New Mexico	88.97%	90.00%	2.00%	92.00%		8/2024
Palmer Penstemon, Variety Not Stated	3.72%	Utah	98.86%	15.00%	79.00%	94.00%		7/2024
Sand Dropseed, Variety Not Stated	3.61%	Oklahoma	95.21%	92.00%	5.00%	97.00%		10/2024
Gaillardia Aristata, Variety Not Stated	3.61%	Oregon	89.09%	97.00%	0.00%	97.00%		6/2024
Blue Flax, Appar	3.60%	Washington	98.42%	97.00%	0.00%	97.00%		6/2024
Blackeyed Susan, Variety Not Stated	3.53%	Iowa	99.38%	99.00%	0.00%	99.00%		6/2024
Seed Total	65.39%							
Inert Matter:	34.54%							
Other Crop:	0.08%							
Weed Seed:	0.01%							

curtisseed.com

Noxious Weed: None

4500 North Prince, Clovis, NM 88101

NMSLO Sandy Loam-1.8 AC Broadcasted.
 Bag into 3) 0.5 acre Bag into 3) 0.5 ac
 broadcasted bags @ 28.29 bulk pounds

(575) 762-4759







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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 461625

QUESTIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 461625
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327756575
Incident Name	NAPP2327756575 WEST MOUNT SPILL A @ 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	
<i>Please answer all the questions in this group.</i>	
Site Name	WEST MOUNT SPILL A
Date Release Discovered	09/20/2023
Surface Owner	State

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Produced Water Released: 85 BBL Recovered: 0 BBL Lost: 85 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 461625

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 461625
	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: 05/13/2025
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QUESTIONS, Page 3

Action 461625

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 461625
	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)	Between 1000 (ft.) and ½ (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)	24100
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	6650
GRO+DRO (EPA SW-846 Method 8015M)	6650
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	10/25/2024
On what date will (or did) the final sampling or liner inspection occur	12/19/2024
On what date will (or was) the remediation complete(d)	12/30/2024
What is the estimated surface area (in square feet) that will be reclaimed	1468
What is the estimated volume (in cubic yards) that will be reclaimed	218
What is the estimated surface area (in square feet) that will be remediated	8066
What is the estimated volume (in cubic yards) that will be remediated	4480
<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 461625

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 461625
	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: 05/13/2025
<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 461625

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 461625
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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Action 461625

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 461625
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	410723
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	12/16/2024
What was the (estimated) number of samples that were to be gathered	90
What was the sampling surface area in square feet	12841

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	8066
What was the total volume (cubic yards) remediated	4480
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	1468
What was the total volume (in cubic yards) reclaimed	218
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: 05/13/2025
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Action 461625

QUESTIONS (continued)

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	Action Number: 461625
	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	1468
What was the total volume of replacement material (in cubic yards) for this site	218
<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)	02/18/2025
Summarize any additional reclamation activities not included by answers (above)	USED THE NMSLO SEEDING CRITERIA FOR THE SITE
<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: 05/13/2025

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Action 461625

QUESTIONS (continued)

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	Action Number: 461625
	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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CONDITIONS

Action 461625

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 461625
	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 #NAPP2327756575 WEST MOUNT SPILL A, thank you. This Reclamation Report is approved. For future reference, the reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical.	6/10/2025