WEST MOUNT SPILL D
CLOSURE REQUEST

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

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

03/11/2025
Prepared by:

2724 NW COUNTY ROAD
HOBBS, NM 88240

March 11, 2025

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

Mack Energy Corporation
11344 Lovington Hwy
Artesia, NM 88210

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

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

To Whom It May Concern:

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

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

Incident Description

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

Site Characterization

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

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

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

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

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

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

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

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

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

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

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

Closure Criteria Determination

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

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

Soil Remediation Action Levels

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

Soil Sampling Procedures

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

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

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

Volatile Organics by EPA 8021B
- Benzene, Toluene, Ethylbenzene, p.m. Xylene, o-Xylene and Total Xylenes

Nonhalogenated Organics by EPA 8015D – GRO
- Gasoline Range Organics (C6-C10)

Nonhalogenated Organics by EPA 8015D – DRO/ORO
- Diesel Range Organics (C10-C28)
- Oil Range Organics (C28-C40)

Anions by EPA 300.0/9056A
- Chloride

Release Investigation Data

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

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

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

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

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

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

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

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

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

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

COMP9	10	320	L	ND	ND	ND	ND	ND	ND
COMP10	10	320	L	ND	ND	ND	ND	ND	ND
COMP11	10	240	L	ND	ND	ND	ND	ND	24.7
COMP12	10	160	L	ND	ND	ND	ND	ND	57.6
COMP13	6	160	L	ND	ND	ND	ND	ND	51.1
COMP14	6	160	L	ND	ND	ND	ND	ND	48.9
COMP15	6	160	L	ND	ND	ND	ND	ND	51.9
COMP16	6	160	L	ND	ND	ND	ND	ND	42.2
COMP17	6	160	L	ND	ND	ND	ND	ND	55
COMP18	6	240	L	ND	ND	ND	ND	ND	80.6
COMP19	6	160	L	ND	ND	ND	ND	ND	ND
COMP20	6	240	L	ND	ND	ND	ND	ND	67.9
SWCOMP1	6	160	L	ND	ND	ND	ND	ND	64.1
SWCOMP2	6	240	L	ND	ND	ND	ND	ND	88
SWCOMP3	6	240	L	ND	ND	ND	ND	ND	86.9
SWCOMP4	6	160	L	ND	ND	ND	ND	ND	ND
SWCOMP5	6	160	L	ND	ND	ND	ND	ND	ND
SWCOMP6	6	240	L	ND	ND	ND	ND	ND	83.9
SWCOMP7	6	160	L	ND	ND	ND	ND	ND	63

Please find the attached remediation photos.

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

Closure Request

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

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

Sincerely,

Director of Environmental and Regulatory Services
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

Outlook

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	
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 # *(assigned by OCD)*
Contact mailing address **11344 Lovington Highway, Artesia NM 88210**	

Location of Release Source

Latitude **32.997533** Longitude **-104.070702**
(NAD 83 in decimal degrees to 5 decimal places)

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

Unit Letter	Section	Township	Range	County
N	**19**	**15S**	**29E**	**CHAVES**

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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) **23.97**	Volume Recovered (bbls)0BBLS
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

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

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? **DUE TO VOLUME OF RELEASE**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Email was sent was sent to the OCD, Bratcher, Hamlet, Venegas, on 9/22 at 4:12pm**	

Initial Response

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

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

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

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

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

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

Signature: Natalie Gladden Date: 10/18/23

email: **natalie@energystaffingll.com** Telephone: **575-390-6397**

OCD Only

Received by: _____ Date: _____

MACK ENERGY - WEST MOUNT SPILL D

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	72.06	89.92	0.083	537.80972	23.97	Medium Sand
Coarse Sand	0.26	10	10	0.083	8.3	0.38	Coarse Sand
Gravely Sand	0.26	10	10	0.083	8.3	0.38	Gravely Sand
Fine Gravel	0.26	10	10	0.083	8.3	0.38	Fine Gravel
Medium Gravel	0.20	10	10	0.083	8.3	0.30	Medium Gravel
Coarse Gravel	0.18	10	10	0.083	8.3	0.27	Coarse Gravel
Sandstone	0.25	10	10	0.083	8.3	0.37	Sandstone
Siltstone	0.18	10	10	0.083	8.3	0.27	Siltstone
Shale	0.05	10	10	0.083	8.3	0.07	Shale
Limestone	0.13	10	10	0.083	8.3	0.19	Limestone
Basalt	0.19	10	10	0.083	8.3	0.28	Basalt
Volcanic Tuff	0.20	10	10	0.083	8.3	0.30	Volcanic Tuff
Standing Liquids	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 requred *(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)

MACK ENERGY

WEST MOUNT SPILL D
IMPACT MAP

Legend

- Mack Energy. WestMount #1 Spill D 3919 SQ. FT.
- WEST MOUNT SPILL D

WEST MOUNT SPILL D

Google Earth

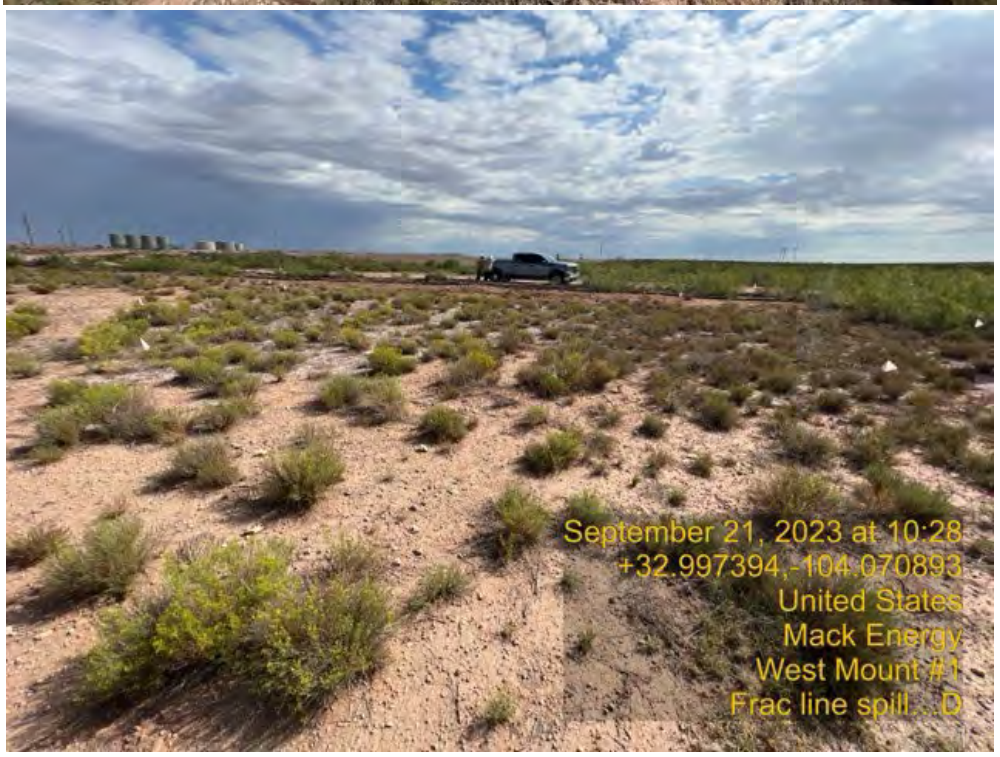
N

90 ft

MACK ENERGY: WEST MOUNT SPILL D

INITIAL SITE PHOTOS


September 21, 2023 at 10:27
+32.997418,-104.070774
United States
Mack Energy
West Mount #1
Frac line spill...D


September 21, 2023 at 10:28
+32.997394,-104.070893
United States
Mack Energy
West Mount #1
Frac line spill...D

MACK ENERGY

WEST MOUNT SPILL D
SITE MAP

Legend

WEST MOUNT SPILL D

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition

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

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

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

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

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

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

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

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

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

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition–Chaves County, New Mexico, Southern Part								
Map unit symbol and soil 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		

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

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

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

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	12.6	100.0%
Totals for Area of Interest		**12.6**	**100.0%**

National Flood Hazard Layer FIRMette

FEMA

104°4'33"W 33°0'6"N

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

1:6,000

104°3'56"W 32°59'36"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

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

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

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

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

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

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

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

MACK

WEST MOUNT SPILL D
KARST MAP

MACK ENERGY

WEST MOUNT SPILL D
WETLANDS MAP

Legend
- PEM
- RIVERINE
- WEST MOUNT SPILL D

PEM 12
PEM 1
PEM 2
PEM 11
PEM 3
PEM 10
PEM 14
PEM 4
PEM 9
WEST MOUNT SPILL D
PEM8
RIVERINE 1
RIVERINE 2
PEM 6
PEM 7
RIVERINE 3

Google Earth
Image © 2025 Airbus

N
1000 ft

MACK ENERGY

WEST MOUNT SPILL D
WATERCOURSE MAP

Legend
WEST MOUNT SPILL D

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) 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

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	**Plug Date:**	
Log File Date:	11/28/2016	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	5.13	**Depth Well:**	62 feet	**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

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**

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) 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	**Plug Date:**	
Log File Date:	04/23/2003	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:	SUBMER	**Pipe Discharge Size:**	1.25	**Estimated Yield:**	10 GPM
Casing Size:	5.00	**Depth Well:**	70 feet	**Depth Water:**	40 feet

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

Casing Perforations:	Top	Bottom
	40	70

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) 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**

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	Tws	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:**

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

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	Tws	Rng	X	Y	Map
	RA 12007 POD1	SE	NE	SW	19	15S	29E	586999.1	3651508.8	

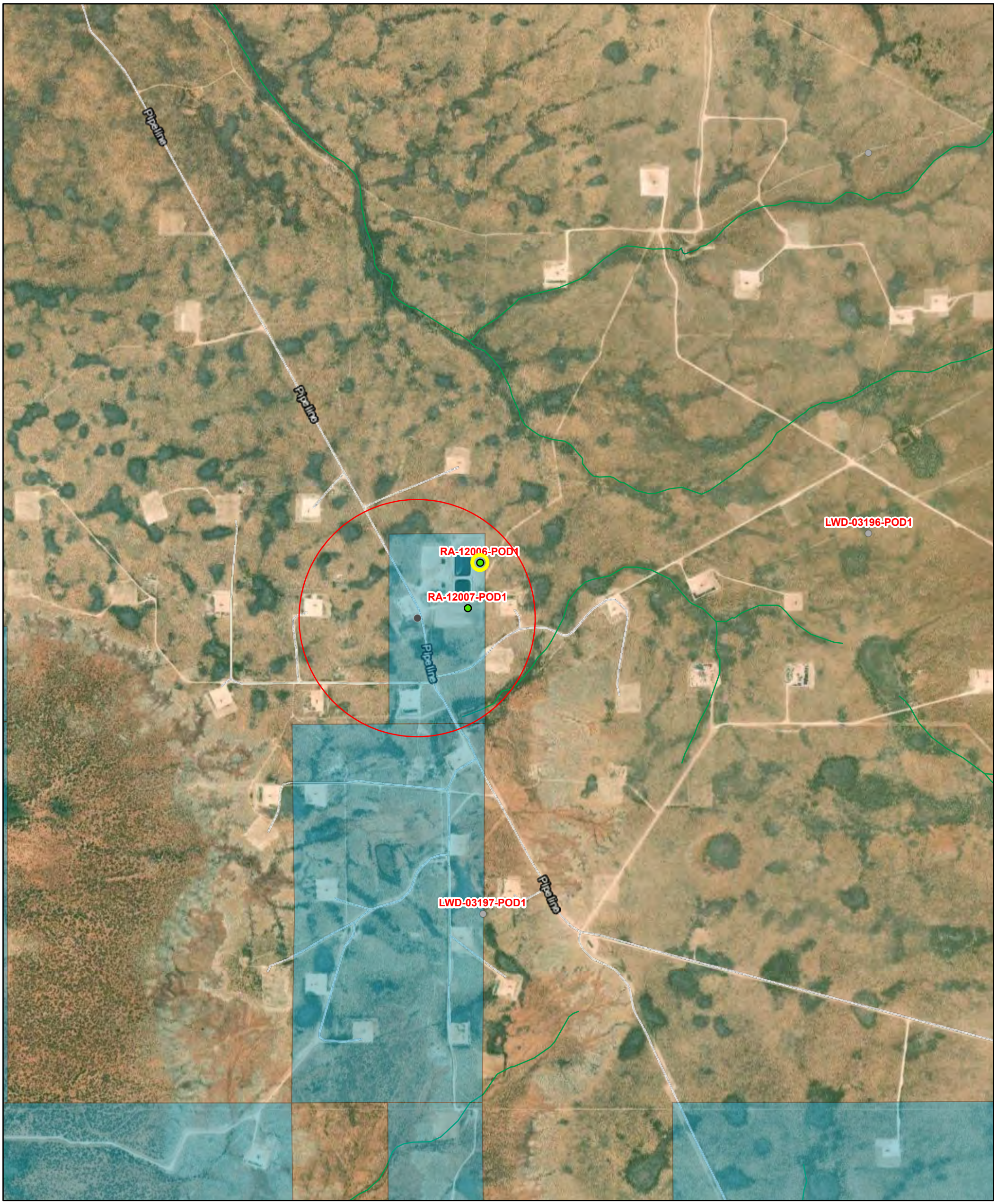
*** UTM location was derived from PLSS - see Help**

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:**

MACK

WEST MOUNT SPILL D
GROUNDWATER MAP

OSE POD Location Map



6/21/2024, 11:56:02 AM

GIS WATERS PODs

Pending

OSE District Boundary

New Mexico State Trust Lands

Both Estates

NHD Flowlines

Artificial Path

Stream River

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

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

Online web user

This is an unofficial map from the OSE's online application.

Mack Energy

Delineation Map

West Mount Spill D

Legend

- Horizontal Sample Points
- Vertical Sample Points

Company Nam MACK **Location Name: WEST MOUNT SPILL D**

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
SP1	SURF	>4000	L	ND	ND	ND	ND	ND	9920	11/15/2023
	2	320								
	4	400								
	6	240								
	8	160	I	ND	ND	ND	ND	ND	70	3/4/2024
SP2	SURF	>4000	L	ND	ND	ND	ND	ND	7790	11/15/2023
	2	320								
	4	320								
	6	160								
	8	160	L	ND	ND	ND	ND	ND	152	3/4/2024
SP3	SURF	800	L	ND	ND	ND	ND	ND	1380	11/15/2023
	2	400								
	4	240								
	6	160								
	8	160	L	ND	ND	ND	ND	ND	87.2	3/4/2024
SP4	SURF	1280	L	ND	ND	ND	ND	ND	2490	11/15/2023
	2	320								
	4	320								
	6	160								
	8	160	L	ND	ND	ND	ND	ND	25.1	3/4/2024
SP5	SURF	240	L	ND	ND	33.8	65.1	98.9	532	11/15/2023
	2	400								
	4	320								
	6	400								
	8	160	L	ND	ND	ND	ND	ND	40.4	3/4/2024
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	14400	11/15/2023
	2	320								
	4	320								
	6	160								
	8	160	L	ND	ND	ND	ND	ND	65.7	3/4/2024
SP7	SURF	720	L	ND	ND	ND	ND	ND	684	11/15/2023
	2	320								
	4	240								
	6	480								
	8	160	H	ND	ND	35.1	109	144.1	40.7	3/5/2024

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

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

CLIENT: MACK ENERGY

LOCATION: WEST MOUNT SPILL D

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

Report to:

Natalie Gladden

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 Frack Line Spill D
Work Order:	E311140
Job Number:	20046-0001
Received:	11/17/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/20/23

Date Reported: 11/20/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Frack Line Spill D
Workorder: E311140
Date Received: 11/17/2023 7:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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Table of Contents

Sample Summary

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

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

Sample Data

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

SW 1- Surf

E311140-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*119 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*93.1 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*119 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*93.1 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/18/23	
Surrogate: n-Nonane		*90.0 %*	*50-200*	*11/17/23*	*11/18/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2346124
Chloride	**1170**	200	10	11/17/23	11/20/23	

Sample Data

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

SW 2- Surf

E311140-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*115 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*96.1 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*115 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*96.1 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/18/23	
Surrogate: n-Nonane		*87.0 %*	*50-200*	*11/17/23*	*11/18/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2346124
Chloride	**675**	200	10	11/17/23	11/20/23	

Sample Data

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

SW 3- Surf

E311140-03

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

Sample Data

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

SW 4- Surf

E311140-04

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

Sample Data

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

SW 5- Surf

E311140-05

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

Sample Data

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

SW 6- Surf

E311140-06

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

Sample Data

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

SW 7- Surf

E311140-07

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

Sample Data

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

SW 8- Surf

E311140-08

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

QC Summary Data

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

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 (2346116-BLK1)									Prepared: 11/17/23 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: Bromofluorobenzene	*0.589*		*0.500*		*118*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.537*		*0.500*		*107*	*70-130*			
LCS (2346116-BS1)									Prepared: 11/17/23 Analyzed: 11/17/23
Benzene	2.52	0.0250	2.50		101	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Toluene	2.53	0.0250	2.50		101	70-130			
o-Xylene	2.55	0.0250	2.50		102	70-130			
p,m-Xylene	5.12	0.0500	5.00		102	70-130			
Total Xylenes	7.67	0.0250	7.50		102	70-130			
Surrogate: Bromofluorobenzene	*0.581*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.547*		*0.500*		*109*	*70-130*			
Matrix Spike (2346116-MS1)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Benzene	2.55	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.66	0.0250	2.50	ND	107	45-135			
Toluene	2.58	0.0250	2.50	ND	103	48-130			
o-Xylene	2.59	0.0250	2.50	ND	104	43-135			
p,m-Xylene	5.22	0.0500	5.00	ND	104	43-135			
Total Xylenes	7.81	0.0250	7.50	ND	104	43-135			
Surrogate: Bromofluorobenzene	*0.592*		*0.500*		*118*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.495*		*0.500*		*99.0*	*70-130*			
Surrogate: Toluene-d8	*0.546*		*0.500*		*109*	*70-130*			
Matrix Spike Dup (2346116-MSD1)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Benzene	2.72	0.0250	2.50	ND	109	48-131	6.15	23	
Ethylbenzene	2.84	0.0250	2.50	ND	114	45-135	6.34	27	
Toluene	2.73	0.0250	2.50	ND	109	48-130	5.66	24	
o-Xylene	2.75	0.0250	2.50	ND	110	43-135	5.89	27	
p,m-Xylene	5.53	0.0500	5.00	ND	111	43-135	5.80	27	
Total Xylenes	8.28	0.0250	7.50	ND	110	43-135	5.83	27	
Surrogate: Bromofluorobenzene	*0.580*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.547*		*0.500*		*109*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - GRO

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 (2346116-BLK1)									Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.589*		*0.500*		*118*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.537*		*0.500*		*107*	*70-130*			
LCS (2346116-BS2)									Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	54.3	20.0	50.0		109	70-130			
Surrogate: Bromofluorobenzene	*0.583*		*0.500*		*117*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.483*		*0.500*		*96.5*	*70-130*			
Surrogate: Toluene-d8	*0.552*		*0.500*		*110*	*70-130*			
Matrix Spike (2346116-MS2)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	57.3	20.0	50.0	ND	115	70-130			
Surrogate: Bromofluorobenzene	*0.606*		*0.500*		*121*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.491*		*0.500*		*98.1*	*70-130*			
Surrogate: Toluene-d8	*0.560*		*0.500*		*112*	*70-130*			
Matrix Spike Dup (2346116-MSD2)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130	6.77	20	
Surrogate: Bromofluorobenzene	*0.595*		*0.500*		*119*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.489*		*0.500*		*97.8*	*70-130*			
Surrogate: Toluene-d8	*0.562*		*0.500*		*112*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2346121-BLK1)									Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*44.7*		*50.0*		*89.4*	*50-200*			
LCS (2346121-BS1)									Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	227	25.0	250		91.0	38-132			
Surrogate: n-Nonane	*44.7*		*50.0*		*89.4*	*50-200*			
Matrix Spike (2346121-MS1)				**Source: E311140-03**					Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.4	38-132			
Surrogate: n-Nonane	*46.3*		*50.0*		*92.6*	*50-200*			
Matrix Spike Dup (2346121-MSD1)				**Source: E311140-03**					Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	228	25.0	250	ND	91.2	38-132	1.35	20	
Surrogate: n-Nonane	*45.3*		*50.0*		*90.5*	*50-200*			

QC Summary Data

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

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 (2346124-BLK1)									Prepared: 11/17/23 Analyzed: 11/20/23
Chloride	ND	20.0							
LCS (2346124-BS1)									Prepared: 11/17/23 Analyzed: 11/20/23
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2346124-MS1)				**Source: E311139-04**					Prepared: 11/17/23 Analyzed: 11/20/23
Chloride	5200	200	250	5030	68.8	80-120			M4
Matrix Spike Dup (2346124-MSD1)				**Source: E311139-04**					Prepared: 11/17/23 Analyzed: 11/20/23
Chloride	4920	200	250	5030	NR	80-120	5.58	20	M4

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

Definitions and Notes

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

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

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

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

Project Information

Chain of Custody

Client: Mack Energy
Project: Frack Line Spill D
Project Manager:
Address:
City, State, Zip
Phone:
Email:
Report due by:

Bill To
Attention: ENERGY STAFFING SERVICES
Address: 2724 NW COUNTY RD
City, State, Zip HOBBS, NM 88240
Phone: 575-393-9048
Email: NATALIE@ENERGYSTAFFINGLLC.COM
BRITTNEY@ENERGYSTAFFINGLLC.COM

Lab Use Only
Lab WO# E 311140
Job Number 200460-0001

TAT: 1D | 2D X | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM X | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015; GRO/DRO by 8015; BTEX by 8021; VOC by 8260; Metals 6010; Chloride 300.0; BGDOC NM; BGDOC TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	BGDOC NM	Remarks
	11/15/23	S	1	SW 1 - SURF	1	X	
				SW 2 - SURF	2		
				SW 3 - SURF	3		
				SW 4 - SURF	4		
				SW 5 - SURF	5		
				SW 6 - SURF	6		
				SW 7 - SURF	7		
	11/15/23	S	1	SW 8 - SURF	8	X	

Additional Instructions:

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

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
Andy Tovga	11/15/23		Michelle Gaytan	11-16-23	1200
Michelle Gaytan	11-16-23	1700	Andrew Morales	11.16.23	1800
Andrew Morales	11.16.23	2330	Quentin	11/17/23	7:00

Lab Use Only
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

Envirotech Analytical Laboratory

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

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Mack Energy	Date Received:	11/17/23 07:00	Work Order ID:	E311140
Phone:	(575) 390-6397	Date Logged In:	11/16/23 15:56	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/20/23 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

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

Comments/Resolution

Time sampled not provided on COC per client.

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 Frack Line Spill D
Work Order:	E311141
Job Number:	20046-0001
Received:	11/17/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/20/23

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

Date Reported: 11/20/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Frack Line Spill D
Workorder: E311141
Date Received: 11/17/2023 7:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

Alexa Michaels
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labadmin@envirotech-inc.com

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Client Representative
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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

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

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

Sample Data

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

SP 1- Surface

E311141-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*115 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*98.6 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*115 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*98.6 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/17/23	
Surrogate: n-Nonane		*86.1 %*	*50-200*	*11/17/23*	*11/17/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2346125
Chloride	**9920**	200	10	11/17/23	11/18/23	

Sample Data

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

SP 2- Surface

E311141-02

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

Sample Data

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

SP 3- Surface

E311141-03

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

Sample Data

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

SP 4- Surface

E311141-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*99.5 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*99.5 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/17/23	
Surrogate: n-Nonane		*84.9 %*	*50-200*	*11/17/23*	*11/17/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2346125
Chloride	**2490**	40.0	2	11/17/23	11/18/23	

Sample Data

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

SP 5- Surface

E311141-05

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

Sample Data

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

SP 6- Surface

E311141-06

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

Sample Data

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

SP 7- Surface

E311141-07

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

Sample Data

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

SP 8- Surface

E311141-08

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

Sample Data

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

SP 9- Surface

E311141-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*94.5 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*94.5 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/18/23	
Surrogate: n-Nonane		*88.0 %*	*50-200*	*11/17/23*	*11/18/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2346125
Chloride	**15000**	400	20	11/17/23	11/18/23	

Sample Data

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

SP 10- Surface

E311141-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Benzene	ND	0.0250	1	11/17/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/17/23	11/17/23	
Toluene	ND	0.0250	1	11/17/23	11/17/23	
o-Xylene	ND	0.0250	1	11/17/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/17/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*97.8 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2346116
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/17/23	11/17/23	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: 1,2-Dichloroethane-d4		*97.8 %*	*70-130*	*11/17/23*	*11/17/23*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*11/17/23*	*11/17/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2346121
Diesel Range Organics (C10-C28)	ND	25.0	1	11/17/23	11/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/17/23	11/18/23	
Surrogate: n-Nonane		*89.7 %*	*50-200*	*11/17/23*	*11/18/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2346125
Chloride	**80.6**	20.0	1	11/17/23	11/18/23	

QC Summary Data

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

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 (2346116-BLK1)									Prepared: 11/17/23 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: Bromofluorobenzene	*0.589*		*0.500*		*118*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.537*		*0.500*		*107*	*70-130*			
LCS (2346116-BS1)									Prepared: 11/17/23 Analyzed: 11/17/23
Benzene	2.52	0.0250	2.50		101	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Toluene	2.53	0.0250	2.50		101	70-130			
o-Xylene	2.55	0.0250	2.50		102	70-130			
p,m-Xylene	5.12	0.0500	5.00		102	70-130			
Total Xylenes	7.67	0.0250	7.50		102	70-130			
Surrogate: Bromofluorobenzene	*0.581*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.547*		*0.500*		*109*	*70-130*			
Matrix Spike (2346116-MS1)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Benzene	2.55	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.66	0.0250	2.50	ND	107	45-135			
Toluene	2.58	0.0250	2.50	ND	103	48-130			
o-Xylene	2.59	0.0250	2.50	ND	104	43-135			
p,m-Xylene	5.22	0.0500	5.00	ND	104	43-135			
Total Xylenes	7.81	0.0250	7.50	ND	104	43-135			
Surrogate: Bromofluorobenzene	*0.592*		*0.500*		*118*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.495*		*0.500*		*99.0*	*70-130*			
Surrogate: Toluene-d8	*0.546*		*0.500*		*109*	*70-130*			
Matrix Spike Dup (2346116-MSD1)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Benzene	2.72	0.0250	2.50	ND	109	48-131	6.15	23	
Ethylbenzene	2.84	0.0250	2.50	ND	114	45-135	6.34	27	
Toluene	2.73	0.0250	2.50	ND	109	48-130	5.66	24	
o-Xylene	2.75	0.0250	2.50	ND	110	43-135	5.89	27	
p,m-Xylene	5.53	0.0500	5.00	ND	111	43-135	5.80	27	
Total Xylenes	8.28	0.0250	7.50	ND	110	43-135	5.83	27	
Surrogate: Bromofluorobenzene	*0.580*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.547*		*0.500*		*109*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - GRO

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 (2346116-BLK1)									Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.589*		*0.500*		*118*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.537*		*0.500*		*107*	*70-130*			
LCS (2346116-BS2)									Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	54.3	20.0	50.0		109	70-130			
Surrogate: Bromofluorobenzene	*0.583*		*0.500*		*117*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.483*		*0.500*		*96.5*	*70-130*			
Surrogate: Toluene-d8	*0.552*		*0.500*		*110*	*70-130*			
Matrix Spike (2346116-MS2)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	57.3	20.0	50.0	ND	115	70-130			
Surrogate: Bromofluorobenzene	*0.606*		*0.500*		*121*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.491*		*0.500*		*98.1*	*70-130*			
Surrogate: Toluene-d8	*0.560*		*0.500*		*112*	*70-130*			
Matrix Spike Dup (2346116-MSD2)				**Source: E311140-04**					Prepared: 11/17/23 Analyzed: 11/17/23
Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130	6.77	20	
Surrogate: Bromofluorobenzene	*0.595*		*0.500*		*119*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.489*		*0.500*		*97.8*	*70-130*			
Surrogate: Toluene-d8	*0.562*		*0.500*		*112*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2346121-BLK1)									Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*44.7*		*50.0*		*89.4*	*50-200*			
LCS (2346121-BS1)									Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	227	25.0	250		91.0	38-132			
Surrogate: n-Nonane	*44.7*		*50.0*		*89.4*	*50-200*			
Matrix Spike (2346121-MS1)				**Source: E311140-03**					Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.4	38-132			
Surrogate: n-Nonane	*46.3*		*50.0*		*92.6*	*50-200*			
Matrix Spike Dup (2346121-MSD1)				**Source: E311140-03**					Prepared: 11/17/23 Analyzed: 11/17/23
Diesel Range Organics (C10-C28)	228	25.0	250	ND	91.2	38-132	1.35	20	
Surrogate: n-Nonane	*45.3*		*50.0*		*90.5*	*50-200*			

QC Summary Data

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

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 (2346125-BLK1)									Prepared: 11/17/23 Analyzed: 11/18/23
Chloride	ND	20.0							
LCS (2346125-BS1)									Prepared: 11/17/23 Analyzed: 11/18/23
Chloride	246	20.0	250		98.5	90-110			
Matrix Spike (2346125-MS1)				**Source: E311141-07**					Prepared: 11/17/23 Analyzed: 11/18/23
Chloride	946	20.0	250	684	105	80-120			
Matrix Spike Dup (2346125-MSD1)				**Source: E311141-07**					Prepared: 11/17/23 Analyzed: 11/18/23
Chloride	873	20.0	250	684	75.8	80-120	7.97	20	M2

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

Definitions and Notes

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

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

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

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

Project Information | Chain of Custody | Page 1 of 1

Client: Mack Energy	Bill To
Project: West Mount Frac Line Spill	Attention: ENERGY STAFFING SERVICES
Project Manager:	Address: 2724 NW COUNTY RD
Address:	City, State, Zip HOBBS, NM 88240
City, State, Zip	Phone: 575-393-9048
Phone:	Email: NATALIE@ENERGYSTAFFINGLLC.COM
Email:	BRITTNEY@ENERGYSTAFFINGLLC.COM
Report due by:	

Lab Use Only: Lab WO# E311141 | Job Number 200460-0001

TAT: 1D | 2D X | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM X | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC NM | BGDOC TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	BGDOC NM	BGDOC TX	Remarks
	11/15/23	S	1	Sp1 - Surface	1	X		
				Sp2 - Surface	2			
				Sp3 - Surface	3			
				Sp4 - Surface	4			
				Sp5 - Surface	5			
				Sp6 - Surface	6			
				Sp7 - Surface	7			
				Sp8 - Surface	8			
				Sp9 - Surface	9			
	11/13/23	S	1	Sp10 - 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. Sampled by: Andy Tercero

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
Andy Tercero	11/15/23		Michelle Gaytan	11-16-23	1200
Michelle Gaytan	11-16-23	1700	Andrew Mosso	11.16.23	1800
Andrew Mosso	11.16.23	2330	Jmentre	11/17/23	7:00

Lab Use Only — 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

Envirotech Analytical Laboratory

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

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:	11/17/23 00:00	Work Order ID:	E311141
Phone:	(575) 390-6397	Date Logged In:	11/16/23 15:58	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/20/23 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

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

Comments/Resolution

Time sampled not provided on COC per client.

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 Spill D
Work Order:	E403044
Job Number:	20046-0001
Received:	3/6/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/7/24

Date Reported: 3/7/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill D
Workorder: E403044
Date Received: 3/6/2024 8:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

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

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

Sample Data

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

SP 1 -8'

E403044-01

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

Sample Data

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

SP 2 -8'

E403044-02

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

Sample Data

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

SP 3 -8'

E403044-03

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

Sample Data

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

SP 4 -8'

E403044-04

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

Sample Data

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

SP 5 -8'

E403044-05

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

Sample Data

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

SP 6 -8'

E403044-06

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

QC Summary Data

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

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410063-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.87*		*8.00*		*98.4*	*70-130*			
LCS (2410063-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Benzene	5.21	0.0250	5.00		104	70-130			
Ethylbenzene	5.06	0.0250	5.00		101	70-130			
Toluene	5.20	0.0250	5.00		104	70-130			
o-Xylene	5.14	0.0250	5.00		103	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.5	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.84*		*8.00*		*98.0*	*70-130*			
Matrix Spike (2410063-MS1)				**Source: E403043-02**					Prepared: 03/06/24 Analyzed: 03/06/24
Benzene	5.21	0.0250	5.00	ND	104	54-133			
Ethylbenzene	5.04	0.0250	5.00	ND	101	61-133			
Toluene	5.19	0.0250	5.00	ND	104	61-130			
o-Xylene	5.12	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131			
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.90*		*8.00*		*98.8*	*70-130*			
Matrix Spike Dup (2410063-MSD1)				**Source: E403043-02**					Prepared: 03/06/24 Analyzed: 03/06/24
Benzene	5.54	0.0250	5.00	ND	111	54-133	6.10	20	
Ethylbenzene	5.36	0.0250	5.00	ND	107	61-133	6.10	20	
Toluene	5.52	0.0250	5.00	ND	110	61-130	6.12	20	
o-Xylene	5.46	0.0250	5.00	ND	109	63-131	6.34	20	
p,m-Xylene	10.9	0.0500	10.0	ND	109	63-131	6.08	20	
Total Xylenes	16.4	0.0250	15.0	ND	109	63-131	6.17	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.89*		*8.00*		*98.6*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - GRO

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 (2410063-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.98*		*8.00*		*87.3*	*70-130*			
LCS (2410063-BS2)									Prepared: 03/06/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	46.9	20.0	50.0		93.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.06*		*8.00*		*88.3*	*70-130*			
Matrix Spike (2410063-MS2)				**Source: E403043-02**					Prepared: 03/06/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	45.3	20.0	50.0	ND	90.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.13*		*8.00*		*89.1*	*70-130*			
Matrix Spike Dup (2410063-MSD2)				**Source: E403043-02**					Prepared: 03/06/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	44.3	20.0	50.0	ND	88.6	70-130	2.19	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.16*		*8.00*		*89.6*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410059-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*47.1*		*50.0*		*94.1*	*50-200*			
LCS (2410059-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	269	25.0	250		108	38-132			
Surrogate: n-Nonane	*47.5*		*50.0*		*95.0*	*50-200*			
Matrix Spike (2410059-MS1)				**Source: E403021-03**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132			
Surrogate: n-Nonane	*44.8*		*50.0*		*89.7*	*50-200*			
Matrix Spike Dup (2410059-MSD1)				**Source: E403021-03**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	248	25.0	250	ND	99.4	38-132	1.10	20	
Surrogate: n-Nonane	*43.5*		*50.0*		*87.0*	*50-200*			

QC Summary Data

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

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 (2410065-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410065-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2410065-MS1)				**Source: E403043-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Chloride	811	20.0	250	488	129	80-120			M2
Matrix Spike Dup (2410065-MSD1)				**Source: E403043-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Chloride	677	20.0	250	488	75.7	80-120	18.0	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 Spill D	
7 W. Compress Road	Project Number:	20046-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Natalie Gladden	03/07/24 14:50

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

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

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

Project Information | Chain of Custody | Page 1 of 1

Client: Mack Energy	Bill To
Project: West Mount 58 11 D	Attention: ENERGY STAFFING SERVICES
Project Manager:	Address: 2724 NW COUNTY RD
Address:	City, State, Zip HOBBS, NM 88240
City, State, Zip	Phone: 575-393-9048
Phone:	Email: NATALIE@ENERGYSTAFFINGLLC.COM
Email:	BRITTNEY@ENERGYSTAFFINGLLC.COM
Report due by:	

Lab Use Only: Lab WO# E403044 | Job Number 20046-0001

TAT: 1D | 2D (X) | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM (X) | CO | UT | AZ | TX

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
	03/04	S	1	SP 1 - 8'	1							X		
	(	(	(	SP 2 - 8'	2							(		
				SP 3 - 8'	3									
				SP 4 - 8'	4									
				SP 5 - 8'	5									
	03/04	S	1	SP 6 - 8'	6							X		

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Juan Solis	03/04/24		Michella Cook	3-5-24	1310
Michella Cook	3-5-24	1610	Andrew Mobbs	3.5.24	1700
Andrew Mobbs	3.5.24	2330		3/6/24	0800

Lab Use Only: 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

Envirotech Analytical Laboratory

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

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:	03/06/24 08:00	Work Order ID:	E403044
Phone:	(575) 390-6397	Date Logged In:	03/05/24 16:23	Logged In By:	Angelina Pineda
Email:	Natalie@energystaffingllc.com	Due Date:	03/07/24 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: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	No	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

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

Comments/Resolution

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

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 Spill D
Work Order:	E403053
Job Number:	20046-0001
Received:	3/7/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

Date Reported: 3/8/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill D
Workorder: E403053
Date Received: 3/7/2024 6:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

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

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

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

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

Sample Data

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

SW1-2'

E403053-01

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

Sample Data

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

SW2-2'

E403053-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.9 %*	*70-130*	*03/07/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.7 %*	*70-130*	*03/07/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410076
Chloride	**20.7**	20.0	1	03/07/24	03/07/24	

Sample Data

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

SW3-2'

E403053-03

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

Sample Data

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

SW4-2'

E403053-04

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

Sample Data

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

SW5-2'

E403053-05

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

Sample Data

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

SW6-2'

E403053-06

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

Sample Data

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

SW7-2'

E403053-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.9 %*	*70-130*	*03/07/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.6 %*	*70-130*	*03/07/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	**35.9**	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	**114**	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410076
Chloride	ND	20.0	1	03/07/24	03/07/24	

Sample Data

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

SW8-3'

E403053-08

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

QC Summary Data

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

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410075-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.87*		*8.00*		*98.4*	*70-130*			
LCS (2410075-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	5.11	0.0250	5.00		102	70-130			
Ethylbenzene	4.99	0.0250	5.00		99.9	70-130			
Toluene	5.12	0.0250	5.00		102	70-130			
o-Xylene	5.06	0.0250	5.00		101	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
Total Xylenes	15.3	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.91*		*8.00*		*98.9*	*70-130*			
Matrix Spike (2410075-MS1)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	5.06	0.0250	5.00	ND	101	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	5.06	0.0250	5.00	ND	101	61-130			
o-Xylene	5.01	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.82*		*8.00*		*97.8*	*70-130*			
Matrix Spike Dup (2410075-MSD1)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	5.40	0.0250	5.00	ND	108	54-133	6.56	20	
Ethylbenzene	5.29	0.0250	5.00	ND	106	61-133	6.76	20	
Toluene	5.41	0.0250	5.00	ND	108	61-130	6.72	20	
o-Xylene	5.38	0.0250	5.00	ND	108	63-131	7.16	20	
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131	6.72	20	
Total Xylenes	16.2	0.0250	15.0	ND	108	63-131	6.87	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.87*		*8.00*		*98.4*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - GRO

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 (2410075-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.12*		*8.00*		*89.0*	*70-130*			
LCS (2410075-BS2)									Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2410075-MS2)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	44.6	20.0	50.0	ND	89.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.19*		*8.00*		*89.8*	*70-130*			
Matrix Spike Dup (2410075-MSD2)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	44.8	20.0	50.0	ND	89.6	70-130	0.477	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.20*		*8.00*		*89.9*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410074-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.8*		*50.0*		*102*	*50-200*			
LCS (2410074-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
Surrogate: n-Nonane	*50.5*		*50.0*		*101*	*50-200*			
Matrix Spike (2410074-MS1)				**Source: E403035-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	*47.7*		*50.0*		*95.3*	*50-200*			
Matrix Spike Dup (2410074-MSD1)				**Source: E403035-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	279	25.0	250	ND	111	38-132	0.439	20	
Surrogate: n-Nonane	*51.2*		*50.0*		*102*	*50-200*			

QC Summary Data

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

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
Blank (2410076-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	ND	20.0							
LCS (2410076-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2410076-MS1)				**Source: E403053-04**					Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120			
Matrix Spike Dup (2410076-MSD1)				**Source: E403053-04**					Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120	0.212	20	

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

Definitions and Notes

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

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

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

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

Project Information

Chain of Custody

Page 1 of 1

Client: ARCH Energy
Project: West Mount SPILL D
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# E403053 Job Number 20046-0001

TAT: 1D | 2D X | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM X | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC NM | BGDOC TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	BGDOC NM	Remarks
	03/05	S	1	SW 1 - 2'	1	X	
				SW 2 - 2'	2		
				SW 3 - 2'	3		
				SW 4 - 2'	4		
				SW 5 - 2'	5		
				SW 6 - 2'	6		
				SW 7 - 2'	7		
	03/05	S	1	SW 8 - 3'	8	X	

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Juan Solis	03/05/24		Michelle Cruz	3-6-24	1120
Michelle Cruz	3-6-24	1500	Andrew Hobbs	3.6.24	1700
Andrew Hobbs	3.6.24	2330	Nyah Hall	3-7-24	0630

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

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

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

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

envirotech

Envirotech Analytical Laboratory

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

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:	03/07/24 06:30	Work Order ID:	E403053
Phone:	(575) 390-6397	Date Logged In:	03/06/24 16:47	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	03/08/24 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: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	No	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Project manager and time sampled not documented on COC by client

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received?	Yes
8. If yes, was cooler received in good condition?	Yes
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
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 filteration 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 Spill D
Work Order:	E403054
Job Number:	20046-0001
Received:	3/7/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

Date Reported: 3/8/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill D
Workorder: E403054
Date Received: 3/7/2024 6:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

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

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

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

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

Sample Data

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

SP7-8'

E403054-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/07/24	
Toluene	ND	0.0250	1	03/07/24	03/07/24	
o-Xylene	ND	0.0250	1	03/07/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.0 %*	*70-130*	*03/07/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.8 %*	*70-130*	*03/07/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	**35.1**	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	**109**	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410076
Chloride	**40.7**	20.0	1	03/07/24	03/07/24	

Sample Data

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

SP8-8'

E403054-02

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

Sample Data

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

SP9-8'

E403054-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Benzene	ND	0.0250	1	03/07/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/07/24	03/08/24	
Toluene	ND	0.0250	1	03/07/24	03/08/24	
o-Xylene	ND	0.0250	1	03/07/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/07/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/07/24	03/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.6 %*	*70-130*	*03/07/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410075
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/07/24	03/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.2 %*	*70-130*	*03/07/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	**55.0**	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*106 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410076
Chloride	ND	20.0	1	03/07/24	03/07/24	

Sample Data

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

SP10-8'

E403054-04

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

QC Summary Data

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

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410075-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.87*		*8.00*		*98.4*	*70-130*			
LCS (2410075-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	5.11	0.0250	5.00		102	70-130			
Ethylbenzene	4.99	0.0250	5.00		99.9	70-130			
Toluene	5.12	0.0250	5.00		102	70-130			
o-Xylene	5.06	0.0250	5.00		101	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
Total Xylenes	15.3	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.91*		*8.00*		*98.9*	*70-130*			
Matrix Spike (2410075-MS1)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	5.06	0.0250	5.00	ND	101	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	5.06	0.0250	5.00	ND	101	61-130			
o-Xylene	5.01	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.82*		*8.00*		*97.8*	*70-130*			
Matrix Spike Dup (2410075-MSD1)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Benzene	5.40	0.0250	5.00	ND	108	54-133	6.56	20	
Ethylbenzene	5.29	0.0250	5.00	ND	106	61-133	6.76	20	
Toluene	5.41	0.0250	5.00	ND	108	61-130	6.72	20	
o-Xylene	5.38	0.0250	5.00	ND	108	63-131	7.16	20	
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131	6.72	20	
Total Xylenes	16.2	0.0250	15.0	ND	108	63-131	6.87	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.87*		*8.00*		*98.4*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - GRO

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 (2410075-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.12*		*8.00*		*89.0*	*70-130*			
LCS (2410075-BS2)									Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2410075-MS2)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	44.6	20.0	50.0	ND	89.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.19*		*8.00*		*89.8*	*70-130*			
Matrix Spike Dup (2410075-MSD2)				**Source: E403053-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	44.8	20.0	50.0	ND	89.6	70-130	0.477	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.20*		*8.00*		*89.9*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410074-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.8*		*50.0*		*102*	*50-200*			
LCS (2410074-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
Surrogate: n-Nonane	*50.5*		*50.0*		*101*	*50-200*			
Matrix Spike (2410074-MS1)				**Source: E403035-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	*47.7*		*50.0*		*95.3*	*50-200*			
Matrix Spike Dup (2410074-MSD1)				**Source: E403035-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	279	25.0	250	ND	111	38-132	0.439	20	
Surrogate: n-Nonane	*51.2*		*50.0*		*102*	*50-200*			

QC Summary Data

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

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 (2410076-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	ND	20.0							
LCS (2410076-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2410076-MS1)				**Source: E403053-04**					Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120			
Matrix Spike Dup (2410076-MSD1)				**Source: E403053-04**					Prepared: 03/07/24 Analyzed: 03/07/24
Chloride	264	20.0	250	ND	106	80-120	0.212	20	

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

Definitions and Notes

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

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

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

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

Project Information | Chain of Custody | Page 1 of 1

Client: Mack Energy	Bill To
Project: West Mount Spill D	Attention: ENERGY STAFFING SERVICES
Project Manager:	Address: 2724 NW COUNTY RD
Address:	City, State, Zip HOBBS, NM 88240
City, State, Zip	Phone: 575-393-9048
Phone:	Email: NATALIE@ENERGYSTAFFINGLLC.COM
Email:	BRITTNEY@ENERGYSTAFFINGLLC.COM
Report due by:	

Lab Use Only: Lab WO# E403054 | Job Number 20046-0001

TAT: 1D | 2D (X) | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM (X) | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC NM | BGDOC TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	BGDOC NM	Remarks
	03/05	S	1	SP 7 - 8'	1	X	
	"	"	"	SP 8 - 8'	2	"	
	"	"	"	SP 9 - 8'	3	"	
	03/05	S	1	SP 10 - 8'	4	X	

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Juan Solis	03/05/24		Michelle Gaytan	3-6-24	1120
Michelle Gaytan	3-6-24	1500	Andrew Mebbs	3.6.24	1700
Andrew Mebbs	3.6.24	2330	Kenneth R Hall	3-7-24	0630

Lab Use Only: 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

Envirotech Analytical Laboratory

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

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Mack Energy	Date Received:	03/07/24 06:30	Work Order ID:	E403054
Phone:	(575) 390-6397	Date Logged In:	03/06/24 16:52	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	03/08/24 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: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	No	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	
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 Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
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 filteration 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

Comments/Resolution

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

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 D
Work Order:	E404020
Job Number:	20046-0001
Received:	4/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/5/24

Date Reported: 4/5/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount D
Workorder: E404020
Date Received: 4/4/2024 7:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

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labadmin@envirotech-inc.com

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Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

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

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

Sample Data

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

Sp. 7-12'

E404020-01

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	
Surrogate: 4-Bromochlorobenzene-PID		*94.6 %*	*70-130*	*04/04/24*	*04/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2414050
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.7 %*	*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	
Surrogate: n-Nonane		*112 %*	*50-200*	*04/04/24*	*04/04/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2414060
Chloride	ND	20.0	1	04/04/24	04/04/24	

Sample Data

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

Sp. 8-12'

E404020-02

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	
Surrogate: 4-Bromochlorobenzene-PID		*95.7 %*	*70-130*	*04/04/24*	*04/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2414050
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*89.1 %*	*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	
Surrogate: n-Nonane		*113 %*	*50-200*	*04/04/24*	*04/04/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2414060
Chloride	ND	20.0	1	04/04/24	04/04/24	

Sample Data

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

Sw. 7 -4'

E404020-03

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	
Surrogate: 4-Bromochlorobenzene-PID		*95.4 %*	*70-130*	*04/04/24*	*04/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2414050
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.6 %*	*70-130*	*04/04/24*	*04/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	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	
Surrogate: n-Nonane		*116 %*	*50-200*	*04/04/24*	*04/04/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2414060
Chloride	**47.7**	20.0	1	04/04/24	04/04/24	

Sample Data

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

Sw. 8 -5'

E404020-04

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	
Surrogate: 4-Bromochlorobenzene-PID		*95.2 %*	*70-130*	*04/04/24*	*04/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2414050
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/04/24	04/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.3 %*	*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	
Surrogate: n-Nonane		*116 %*	*50-200*	*04/04/24*	*04/04/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2414060
Chloride	ND	20.0	1	04/04/24	04/04/24	

QC Summary Data

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

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (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 D	**Reported:**
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

Nonhalogenated Organics by EPA 8015D - GRO

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
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 D	**Reported:**
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	4/5/2024 3:14:05PM

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 (2414060-BLK1)									Prepared: 04/04/24 Analyzed: 04/04/24
Chloride	ND	20.0							
LCS (2414060-BS1)									Prepared: 04/04/24 Analyzed: 04/04/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2414060-MS1)				**Source: E404022-02**					Prepared: 04/04/24 Analyzed: 04/04/24
Chloride	441	20.0	250	191	99.6	80-120			
Matrix Spike Dup (2414060-MSD1)				**Source: E404022-02**					Prepared: 04/04/24 Analyzed: 04/04/24
Chloride	425	20.0	250	191	93.5	80-120	3.53	20	

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

Definitions and Notes

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

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

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

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

Project Information | Chain of Custody | Page 1 of 1

Client:	Mack Energy
Project:	West Mount D
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# E404020 | Job Number 20046-0001

TAT: 1D | 2D ✓ | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM ✓ | CO | UT | AZ | TX

Analysis and Method

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
	04/02	S	1	Sp. 7 - 12'	1							✓		
	04/02	S	1	Sp. 8 - 12'	2							✓		
	04/02	S	1	SW. 7 - 4'	3							✓		
	04/02	S	1	SW. 8 - 5'	4							✓		

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
S. Perez	04/02/24		Michelle Cruz	4-3-24	1256
Michelle Cruz	4-3-24	1552	Andrew Ross	4-3-24	1700
				4/4/24	0700

Lab Use Only
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

Envirotech Analytical Laboratory

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

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:	E404020
Phone:	(575) 390-6397	Date Logged In:	04/03/24 16:42	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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	No	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/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 Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
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 filteration 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 D
Work Order:	E406072
Job Number:	20046-0001
Received:	6/10/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/11/24

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

Date Reported: 6/11/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount D
Workorder: E406072
Date Received: 6/10/2024 6:15:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

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Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

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

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

Sample Data

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

SP9 12'

E406072-01

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

QC Summary Data

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

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2424004-BLK1)									Prepared: 06/10/24 Analyzed: 06/10/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	*0.502*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.489*		*0.500*		*97.7*	*70-130*			
Surrogate: Toluene-d8	*0.479*		*0.500*		*95.8*	*70-130*			
LCS (2424004-BS1)									Prepared: 06/10/24 Analyzed: 06/10/24
Benzene	2.45	0.0250	2.50		97.8	70-130			
Ethylbenzene	2.42	0.0250	2.50		96.6	70-130			
Toluene	2.31	0.0250	2.50		92.3	70-130			
o-Xylene	2.51	0.0250	2.50		100	70-130			
p,m-Xylene	5.01	0.0500	5.00		100	70-130			
Total Xylenes	7.52	0.0250	7.50		100	70-130			
Surrogate: Bromofluorobenzene	*0.508*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.483*		*0.500*		*96.6*	*70-130*			
Surrogate: Toluene-d8	*0.489*		*0.500*		*97.8*	*70-130*			
Matrix Spike (2424004-MS1)				**Source: E406068-04**					Prepared: 06/10/24 Analyzed: 06/10/24
Benzene	2.67	0.0250	2.50	ND	107	48-131			
Ethylbenzene	2.64	0.0250	2.50	ND	106	45-135			
Toluene	2.53	0.0250	2.50	ND	101	48-130			
o-Xylene	2.78	0.0250	2.50	ND	111	43-135			
p,m-Xylene	5.53	0.0500	5.00	ND	111	43-135			
Total Xylenes	8.31	0.0250	7.50	ND	111	43-135			
Surrogate: Bromofluorobenzene	*0.508*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.494*		*0.500*		*98.7*	*70-130*			
Surrogate: Toluene-d8	*0.490*		*0.500*		*97.9*	*70-130*			
Matrix Spike Dup (2424004-MSD1)				**Source: E406068-04**					Prepared: 06/10/24 Analyzed: 06/10/24
Benzene	2.44	0.0250	2.50	ND	97.6	48-131	8.96	23	
Ethylbenzene	2.42	0.0250	2.50	ND	96.7	45-135	8.83	27	
Toluene	2.31	0.0250	2.50	ND	92.4	48-130	8.97	24	
o-Xylene	3.06	0.0250	2.50	ND	122	43-135	9.60	27	
p,m-Xylene	6.10	0.0500	5.00	ND	122	43-135	9.77	27	
Total Xylenes	9.16	0.0250	7.50	ND	122	43-135	9.71	27	
Surrogate: Bromofluorobenzene	*0.606*		*0.500*		*121*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.484*		*0.500*		*96.7*	*70-130*			
Surrogate: Toluene-d8	*0.486*		*0.500*		*97.2*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2424004-BLK1)									Prepared: 06/10/24 Analyzed: 06/10/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.502*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.489*		*0.500*		*97.7*	*70-130*			
Surrogate: Toluene-d8	*0.479*		*0.500*		*95.8*	*70-130*			
LCS (2424004-BS2)									Prepared: 06/10/24 Analyzed: 06/10/24
Gasoline Range Organics (C6-C10)	48.0	20.0	50.0		96.0	70-130			
Surrogate: Bromofluorobenzene	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.474*		*0.500*		*94.8*	*70-130*			
Surrogate: Toluene-d8	*0.498*		*0.500*		*99.5*	*70-130*			
Matrix Spike (2424004-MS2)				**Source: E406068-04**					Prepared: 06/10/24 Analyzed: 06/10/24
Gasoline Range Organics (C6-C10)	47.5	20.0	50.0	ND	94.9	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.498*		*0.500*		*99.6*	*70-130*			
Matrix Spike Dup (2424004-MSD2)				**Source: E406068-04**					Prepared: 06/10/24 Analyzed: 06/10/24
Gasoline Range Organics (C6-C10)	46.8	20.0	50.0	ND	93.7	70-130	1.32	20	
Surrogate: Bromofluorobenzene	*0.521*		*0.500*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.470*		*0.500*		*93.9*	*70-130*			
Surrogate: Toluene-d8	*0.499*		*0.500*		*99.8*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2424007-BLK1)									Prepared: 06/10/24 Analyzed: 06/11/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*49.0*		*50.0*		*98.0*	*50-200*			
LCS (2424007-BS1)									Prepared: 06/10/24 Analyzed: 06/11/24
Diesel Range Organics (C10-C28)	248	25.0	250		99.3	38-132			
Surrogate: n-Nonane	*50.2*		*50.0*		*100*	*50-200*			
Matrix Spike (2424007-MS1)				**Source: E406068-04**					Prepared: 06/10/24 Analyzed: 06/11/24
Diesel Range Organics (C10-C28)	263	25.0	250	ND	105	38-132			
Surrogate: n-Nonane	*49.2*		*50.0*		*98.4*	*50-200*			
Matrix Spike Dup (2424007-MSD1)				**Source: E406068-04**					Prepared: 06/10/24 Analyzed: 06/11/24
Diesel Range Organics (C10-C28)	262	25.0	250	ND	105	38-132	0.258	20	
Surrogate: n-Nonane	*50.5*		*50.0*		*101*	*50-200*			

QC Summary Data

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

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 (2424011-BLK1)									Prepared: 06/10/24 Analyzed: 06/10/24
Chloride	ND	20.0							
LCS (2424011-BS1)									Prepared: 06/10/24 Analyzed: 06/10/24
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2424011-MS1)				**Source: E406067-07**					Prepared: 06/10/24 Analyzed: 06/10/24
Chloride	521	20.0	250	273	99.3	80-120			
Matrix Spike Dup (2424011-MSD1)				**Source: E406067-07**					Prepared: 06/10/24 Analyzed: 06/10/24
Chloride	516	20.0	250	273	96.9	80-120	1.13	20	

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

Definitions and Notes

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

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

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

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

Project Information | Chain of Custody | Page 1 of 1

Client: Mack Energy
Project: West Blount D
Project Manager: B.Carroll
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# E406072
Job Number 20046-0001

TAT: 1D | 2D (P) | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM (P) | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC NM (P) | BGDOC TX

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	Remarks
	6/6/24	S	1	SP 9 12'	1	

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: Jose R Alvarez

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
Jose R Alvarez	6/6/24		Michelle Gonzales	6-7-24	1300
Michelle Lee	6-7-24	1800	RO	6.7.24	1800
	6-8-24	700	Raia Lemmons	6/10/24	6:15

Lab Use Only
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

Envirotech Analytical Laboratory

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

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Mack Energy	Date Received:	06/10/24 06:15	Work Order ID:	E406072
Phone:	(575) 390-6397	Date Logged In:	06/10/24 07:04	Logged In By:	Raina Schwanz
Email:	Natalie@energystaffingllc.com	Due Date:	06/11/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Comments/Resolution

Project manager and time sampled not listed on COC. Samples do not have sampler name.

Client Instruction

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

Date

envirotech Inc.

MACK ENERGY: WEST MOUNT SPILL D
DELINEATION SITE PHOTOS


06 Jun 2024 09:04:15 AM
+32.997432,-104.071043
Chaves County
Mack Energy
West Mount (D)
Delineation


DEERE
06 Jun 2024 09:04:40 AM
+32.997432,-104.071043
Chaves County
Mack Energy
West Mount (D)
Delineation


06 Jun 2024 09:04:18 AM
+32.997432,-104.071043
Chaves County
Mack Energy
West Mount (D)
Delineation


06 Jun 2024 09:27:54 AM
+32.997432,-104.071043
Chaves County
Mack Energy
West Mount (D)
Delineation


06 Jun 2024 09:27:58 AM
+32.997503,-104.070927
Mack Energy
West Mount (D)
Delineation


06 Jun 2024 09:28:09 AM
+32.997503,-104.070927
Mack Energy
West Mount (D)
Delineation


06 Jun 2024 07:55:51 AM
+32.997618,-104.070780
Mack Energy
West Mount (D)
Delineation

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, August 19, 2024 2:46 PM
To: Natalie Gladden <natalie@energystaffingllc.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 375250

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

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

The sampling event is expected to take place:

When: 08/21/2024 @ 07:00
Where: N-19-15S-29E 0 FNL 0 FEL (32.997533,-104.070702)

Additional Information: CONTACT NATALIE GLADDEN 575-390-6397

Additional Instructions: CONTACT NATALIE GLADDEN 575-390-6397

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

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.

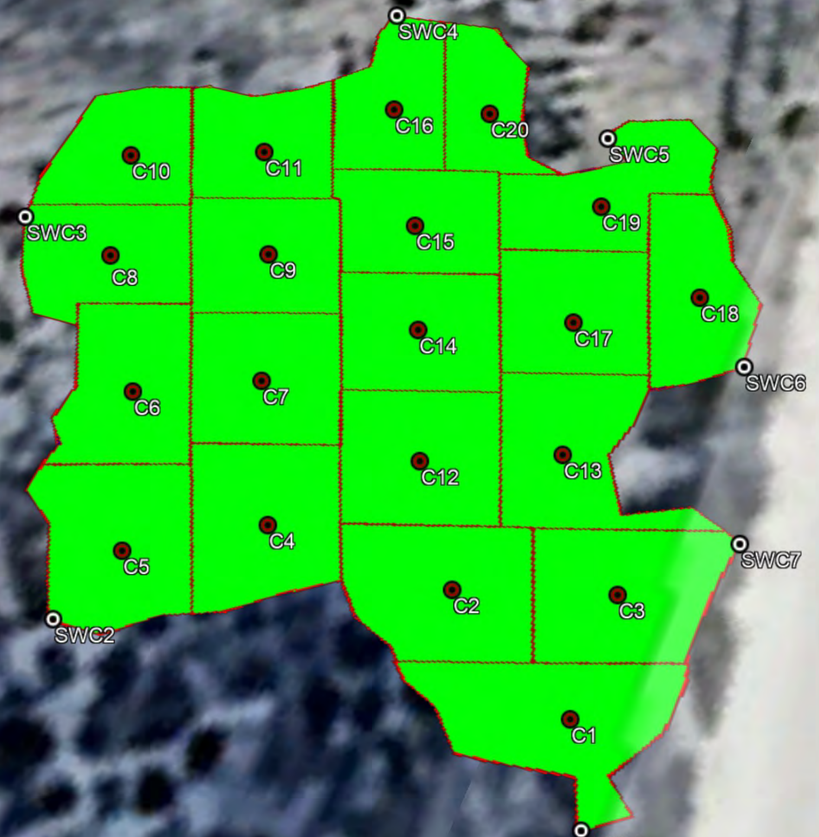
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Mack Energy

Composite Map
West Mount Spill D

Legend

- Side Wall Composite
- Composite



Google Earth

N

20 ft

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

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
COMP1	6	240	L	ND	ND	ND	ND	ND	68.6	8/21/2024
COMP2	6	160	L	ND	ND	ND	ND	ND	ND	8/21/2024
COMP3	6	240	L	ND	ND	ND	ND	ND	28.5	8/21/2024
COMP4	6	240	L	ND	ND	ND	ND	ND	28.7	8/21/2024
COMP5	10	240	L	ND	ND	ND	ND	ND	ND	8/21/2024
COMP6	10	240	L	ND	ND	ND	ND	ND	23.7	8/21/2024
COMP7	10	160	L	ND	ND	ND	ND	ND	27	8/21/2024
COMP8	10	160	L	ND	ND	ND	ND	ND	75.6	8/21/2024
COMP9	10	320	L	ND	ND	ND	ND	ND	ND	8/21/2024
COMP10	10	320	L	ND	ND	ND	ND	ND	ND	8/21/2024
COMP11	10	240	L	ND	ND	ND	ND	ND	24.7	8/21/2024
COMP12	10	160	L	ND	ND	ND	ND	ND	57.6	8/21/2024
COMP13	6	160	L	ND	ND	ND	ND	ND	51.1	8/21/2024
COMP14	6	160	L	ND	ND	ND	ND	ND	48.9	8/21/2024
COMP15	6	160	L	ND	ND	ND	ND	ND	51.9	8/21/2024
COMP16	6	160	L	ND	ND	ND	ND	ND	42.2	8/22/2024
COMP17	6	160	L	ND	ND	ND	ND	ND	55	8/22/2024
COMP18	6	240	L	ND	ND	ND	ND	ND	80.6	8/22/2024
COMP19	6	160	L	ND	ND	ND	ND	ND	ND	8/22/2024
COMP20	6	240	L	ND	ND	ND	ND	ND	67.9	8/22/2024
SWCOMP1	6	160	L	ND	ND	ND	ND	ND	64.1	8/22/2024

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

CLIENTS: MACK ENERGY
LOCATION: WEST MOUNT SPILL D

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

Report to:

Natalie Gladden

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:	West Mount D
Work Order:	E408194
Job Number:	20046-0001
Received:	8/23/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/26/24

Date Reported: 8/26/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount D
Workorder: E408194
Date Received: 8/23/2024 5:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

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Sample Summary

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

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

Sample Data

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

Sp. Comp. 1 - 6'

E408194-01

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

Sample Data

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

Sp. Comp. 2 - 6'

E408194-02

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

Sample Data

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

Sp. Comp. 3 - 6'

E408194-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2434078
Benzene	ND	0.0500	2	08/23/24	08/23/24	
Ethylbenzene	ND	0.0500	2	08/23/24	08/23/24	
Toluene	ND	0.0500	2	08/23/24	08/23/24	
o-Xylene	ND	0.0500	2	08/23/24	08/23/24	
p,m-Xylene	ND	0.100	2	08/23/24	08/23/24	
Total Xylenes	ND	0.0500	2	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.3 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: Toluene-d8		*97.2 %*	*70-130*	*08/23/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.3 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: Toluene-d8		*97.2 %*	*70-130*	*08/23/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/23/24	08/23/24	
Surrogate: n-Nonane		*78.7 %*	*50-200*	*08/23/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434084
Chloride	**28.5**	20.0	1	08/23/24	08/23/24	

Sample Data

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

Sp. Comp. 4 - 6'

E408194-04

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

Sample Data

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

Sp. Comp. 5 - 10'

E408194-05

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

Sample Data

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

Sp. Comp. 6 - 10'

E408194-06

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

Sample Data

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

Sp. Comp. 7 - 10'

E408194-07

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

Sample Data

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

Sp. Comp. 8 - 10'

E408194-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2434078
Benzene	ND	0.0500	2	08/23/24	08/23/24	
Ethylbenzene	ND	0.0500	2	08/23/24	08/23/24	
Toluene	ND	0.0500	2	08/23/24	08/23/24	
o-Xylene	ND	0.0500	2	08/23/24	08/23/24	
p,m-Xylene	ND	0.100	2	08/23/24	08/23/24	
Total Xylenes	ND	0.0500	2	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: Toluene-d8		*98.8 %*	*70-130*	*08/23/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	40.0	2	08/23/24	08/23/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*	*70-130*	*08/23/24*	*08/23/24*	
Surrogate: Toluene-d8		*98.8 %*	*70-130*	*08/23/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/23/24	08/24/24	
Surrogate: n-Nonane		*79.0 %*	*50-200*	*08/23/24*	*08/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434084
Chloride	**75.6**	20.0	1	08/23/24	08/23/24	

Sample Data

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

Sp. Comp. 9 - 10'

E408194-09

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

Sample Data

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

Sp. Comp. 10 - 10'

E408194-10

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

Sample Data

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

Sp. Comp. 11 - 10'

E408194-11

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

Sample Data

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

Sp. Comp. 12 - 10'

E408194-12

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

Sample Data

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

Sp. Comp. 13 - 6'

E408194-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2434078
Benzene	ND	0.0250	1	08/23/24	08/24/24	
Ethylbenzene	ND	0.0250	1	08/23/24	08/24/24	
Toluene	ND	0.0250	1	08/23/24	08/24/24	
o-Xylene	ND	0.0250	1	08/23/24	08/24/24	
p,m-Xylene	ND	0.0500	1	08/23/24	08/24/24	
Total Xylenes	ND	0.0250	1	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*08/23/24*	*08/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.0 %*	*70-130*	*08/23/24*	*08/24/24*	
Surrogate: Toluene-d8		*98.7 %*	*70-130*	*08/23/24*	*08/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2434078
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/23/24	08/24/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*08/23/24*	*08/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.0 %*	*70-130*	*08/23/24*	*08/24/24*	
Surrogate: Toluene-d8		*98.7 %*	*70-130*	*08/23/24*	*08/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2434074
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/23/24	08/24/24	
Surrogate: n-Nonane		*77.3 %*	*50-200*	*08/23/24*	*08/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434084
Chloride	**51.1**	20.0	1	08/23/24	08/23/24	

Sample Data

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

Sp. Comp. 14 - 6'

E408194-14

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

Sample Data

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

Sp. Comp. 15 - 6'

E408194-15

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

QC Summary Data

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

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 (2434078-BLK1)									Prepared: 08/23/24 Analyzed: 08/23/24
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	*0.507*		*0.500*		*101*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.483*		*0.500*		*96.6*	*70-130*			
Surrogate: Toluene-d8	*0.489*		*0.500*		*97.8*	*70-130*			
LCS (2434078-BS1)									Prepared: 08/23/24 Analyzed: 08/23/24
Benzene	2.50	0.0250	2.50		100	70-130			
Ethylbenzene	2.46	0.0250	2.50		98.4	70-130			
Toluene	2.32	0.0250	2.50		92.9	70-130			
o-Xylene	2.43	0.0250	2.50		97.2	70-130			
p,m-Xylene	4.89	0.0500	5.00		97.8	70-130			
Total Xylenes	7.32	0.0250	7.50		97.6	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.489*		*0.500*		*97.7*	*70-130*			
Surrogate: Toluene-d8	*0.489*		*0.500*		*97.8*	*70-130*			
Matrix Spike (2434078-MS1)				**Source: E408194-05**					Prepared: 08/23/24 Analyzed: 08/23/24
Benzene	2.61	0.0250	2.50	ND	104	48-131			
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135			
Toluene	2.44	0.0250	2.50	ND	97.7	48-130			
o-Xylene	2.59	0.0250	2.50	ND	103	43-135			
p,m-Xylene	5.16	0.0500	5.00	ND	103	43-135			
Total Xylenes	7.74	0.0250	7.50	ND	103	43-135			
Surrogate: Bromofluorobenzene	*0.516*		*0.500*		*103*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.469*		*0.500*		*93.7*	*70-130*			
Surrogate: Toluene-d8	*0.491*		*0.500*		*98.1*	*70-130*			
Matrix Spike Dup (2434078-MSD1)				**Source: E408194-05**					Prepared: 08/23/24 Analyzed: 08/23/24
Benzene	2.37	0.0250	2.50	ND	94.8	48-131	9.68	23	
Ethylbenzene	2.32	0.0250	2.50	ND	92.9	45-135	10.5	27	
Toluene	2.20	0.0250	2.50	ND	88.2	48-130	10.3	24	
o-Xylene	2.25	0.0250	2.50	ND	90.1	43-135	13.8	27	
p,m-Xylene	4.50	0.0500	5.00	ND	90.0	43-135	13.6	27	
Total Xylenes	6.75	0.0250	7.50	ND	90.0	43-135	13.7	27	
Surrogate: Bromofluorobenzene	*0.503*		*0.500*		*101*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.493*		*0.500*		*98.5*	*70-130*			
Surrogate: Toluene-d8	*0.485*		*0.500*		*97.0*	*70-130*			

QC Summary Data

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

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 (2434078-BLK1)									Prepared: 08/23/24 Analyzed: 08/23/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.507*		*0.500*		*101*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.483*		*0.500*		*96.6*	*70-130*			
Surrogate: Toluene-d8	*0.489*		*0.500*		*97.8*	*70-130*			
LCS (2434078-BS2)									Prepared: 08/23/24 Analyzed: 08/23/24
Gasoline Range Organics (C6-C10)	44.2	20.0	50.0		88.4	70-130			
Surrogate: Bromofluorobenzene	*0.521*		*0.500*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.477*		*0.500*		*95.4*	*70-130*			
Surrogate: Toluene-d8	*0.502*		*0.500*		*100*	*70-130*			
Matrix Spike (2434078-MS2)				**Source: E408194-05**					Prepared: 08/23/24 Analyzed: 08/23/24
Gasoline Range Organics (C6-C10)	42.5	20.0	50.0	ND	85.0	70-130			
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.502*		*0.500*		*100*	*70-130*			
Matrix Spike Dup (2434078-MSD2)				**Source: E408194-05**					Prepared: 08/23/24 Analyzed: 08/23/24
Gasoline Range Organics (C6-C10)	41.2	20.0	50.0	ND	82.4	70-130	3.05	20	
Surrogate: Bromofluorobenzene	*0.519*		*0.500*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.458*		*0.500*		*91.6*	*70-130*			
Surrogate: Toluene-d8	*0.499*		*0.500*		*99.8*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2434074-BLK1)									Prepared: 08/23/24 Analyzed: 08/23/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*39.0*		*50.0*		*78.0*	*50-200*			
LCS (2434074-BS1)									Prepared: 08/23/24 Analyzed: 08/23/24
Diesel Range Organics (C10-C28)	176	25.0	250		70.4	38-132			
Surrogate: n-Nonane	*35.6*		*50.0*		*71.1*	*50-200*			
Matrix Spike (2434074-MS1)				**Source: E408194-01**					Prepared: 08/23/24 Analyzed: 08/23/24
Diesel Range Organics (C10-C28)	184	25.0	250	ND	73.7	38-132			
Surrogate: n-Nonane	*38.1*		*50.0*		*76.1*	*50-200*			
Matrix Spike Dup (2434074-MSD1)				**Source: E408194-01**					Prepared: 08/23/24 Analyzed: 08/23/24
Diesel Range Organics (C10-C28)	185	25.0	250	ND	73.9	38-132	0.354	20	
Surrogate: n-Nonane	*39.0*		*50.0*		*78.1*	*50-200*			

QC Summary Data

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

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 (2434084-BLK1)									Prepared: 08/23/24 Analyzed: 08/23/24
Chloride	ND	20.0							
LCS (2434084-BS1)									Prepared: 08/23/24 Analyzed: 08/23/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2434084-MS1)				**Source: E408194-02**					Prepared: 08/23/24 Analyzed: 08/23/24
Chloride	270	20.0	250	ND	108	80-120			
Matrix Spike Dup (2434084-MSD1)				**Source: E408194-02**					Prepared: 08/23/24 Analyzed: 08/23/24
Chloride	270	20.0	250	ND	108	80-120	0.0904	20	

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

Definitions and Notes

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

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

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

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

Chain of Custody

Project Information

Client: Matk Energy
Project: West Mavrt CC
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# E408194
Job Number 20046-0001

TAT: 1D | 2D ✓ | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM ✓ | CO | UT | AZ | TX

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
	08/21	S	1	Sp. Comp. 1 -6'	1							✓		
				Sp. Comp. 2 - 6'	2							✓		
				Sp. Comp. 3-6'	3							✓		
				Sp. Comp. 4- 6'	4							✓		
				Sp. Comp. 5- 10'	5							✓		
				Sp. Comp. 6- 10'	6							✓		
				Sp. Comp. 7- 10'	7							✓		
				Sp. Comp. 8- 10'	8							✓		
				Sp. Comp. 9- 10'	9							✓		
	08/21	S	1	Sp. Comp. 10- 10'	10							✓		

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
S Perez	08/21/24			8-22-24	1345
	8.22.24	1630		8.22.24	1630
	8.22.24	2245		8-23-24	0530

Lab Use Only
Received on ice: Y / N 0
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

Chain of Custody

Project Information

Client: Mack Energy
Project: West Mowry CC
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# E408194
Job Number 20046-0001

TAT: 1D | 2D ✓ | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM ✓ | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 4500 | BGDOC NM | BGDOC TX

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	Remarks
	08/21	S	1	Sp. Comp. 11- 10'	11	
	↓	↓	↓	Sp. Comp. 12- 10'	12	
				Sp. Comp. 13- 6'	13	
				Sp. Comp. 14- 6'	14	
	08/21	S	1	Sp Comp 15 6'	15	

Additional Instructions:

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

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
S. Perez	08/21/24			8-22-24	1345
	8-22-24	1630		8.22.24	1630
	8.22.24	2245	Keyleph D Hall	8-23-24	0530

Lab Use Only
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: 8/23/2024 11:28:04AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Mack Energy	Date Received:	08/23/24 05:30	Work Order ID:	E408194
Phone:	(575) 390-6397	Date Logged In:	08/22/24 16:50	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	08/26/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Comments/Resolution

Project manager and time sampled are missing on COC by client. Project name on samples is different than the one on the COC by client.

Client Instruction

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

Date

envirotech Inc.

Page 1 of 2

Chain of Custody

Project Information

Client: Matk Energy
Project: West Mount ~~E~~ D
NS 8/23/24
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# E408194
Job Number 20046-0001

TAT
1D | 2D ✓ | 3D | Standard

EPA Program
CWA | SDWA | RCRA

State
NM ✓ | CO | UT | AZ | TX

Analysis and Method
DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 4500 | BGDOC NM ✓ | BGDOC TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Remarks
	08/21	S	1	Sp Comp. 1 - 6'	1	
				Sp Comp. 2 - 6'	2	
				Sp Comp. 3 - 6'	3	
				Sp Comp 4 - 6'	4	
				Sp Comp 5 - 10'	5	
				Sp Comp. 6 - 10'	6	
				Sp Comp. 7 - 10'	7	
				Sp Comp. 8 - 10'	8	
				Sp Comp 9 - 10'	9	
	08/21	S	1	Sp Comp. 10 - 10'	10	

Additional Instructions: Per Brittney, correct Project name is West Mount D.

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

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
S Perez	08/21/24			8-22-24	1345
	8-22-24	1630		8.22.24	1630
	8.22.24	2245		8-23-24	0530

Lab Use Only
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.

enviro+ech

Project Information

Chain of Custody

Client: Mack Energy
Project: West Mount ~~to~~ D
NS 8-23-24
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# E408194
Job Number 20046-0001

TAT: 1D | 2D ✓ | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM ✓ | CO | UT | AZ | TX

Analysis and Method

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
	08/21	S	1	Sp. Comp. 11- 10'	11							✓		
	↓	↓	↓	Sp. Comp. 12- 10'	12							✓		
				Sp. Comp. 13- 6'	13							✓		
				Sp. Comp. 14- 6'	14							✓		
	08/21	S	1	Sp Comp 15 6'	15							✓		

Additional Instructions: Per Brittney, correct Project name is West Mount D

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

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
S. Perez	08/21/24			8-22-24	1345
	8-22-24	1630		8.22.24	1630
	8.22.24	2245		8-23-24	0530

Lab Use Only
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.

Report to:

Natalie Gladden

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount D

Work Order: E408201

Job Number: 20046-0001

Received: 8/26/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/27/24

Date Reported: 8/27/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount D
Workorder: E408201
Date Received: 8/26/2024 7:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

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

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

Sample Data

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

SP. Comp. 16 - 6'

E408201-01

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

Sample Data

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

SP. Comp. 17 - 6'

E408201-02

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

Sample Data

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

SP. Comp. 18 - 6'

E408201-03

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

Sample Data

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

SP. Comp. 19 - 6'

E408201-04

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

Sample Data

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

SP. Comp. 20 - 6'

E408201-05

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

Sample Data

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

SW. Comp. 1 - 6'

E408201-06

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

Sample Data

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

SW. Comp. 2 - 6'

E408201-07

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

Sample Data

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

SW. Comp. 3 - 6'

E408201-08

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

Sample Data

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

SW. Comp. 4 - 6'

E408201-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: BA			Batch: 2435006
Benzene	ND	0.0250	1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	08/26/24	08/26/24	
Toluene	ND	0.0250	1	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.9 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*08/26/24*	*08/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.9 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*08/26/24*	*08/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	08/26/24	08/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/26/24	08/27/24	
Surrogate: n-Nonane		*86.8 %*	*50-200*	*08/26/24*	*08/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2435004
Chloride	ND	20.0	1	08/26/24	08/26/24	

Sample Data

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

SW. Comp. 5 - 6'

E408201-10

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

Sample Data

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

SW. Comp. 6 - 6'

E408201-11

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

Sample Data

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

SW. Comp. 7 - 6'

E408201-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: BA			Batch: 2435006
Benzene	ND	0.0250	1	08/26/24	08/26/24	
Ethylbenzene	ND	0.0250	1	08/26/24	08/26/24	
Toluene	ND	0.0250	1	08/26/24	08/26/24	
o-Xylene	ND	0.0250	1	08/26/24	08/26/24	
p,m-Xylene	ND	0.0500	1	08/26/24	08/26/24	
Total Xylenes	ND	0.0250	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.7 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*08/26/24*	*08/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2435006
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/26/24	08/26/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.7 %*	*70-130*	*08/26/24*	*08/26/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*08/26/24*	*08/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2435002
Diesel Range Organics (C10-C28)	ND	25.0	1	08/26/24	08/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/26/24	08/27/24	
Surrogate: n-Nonane		*86.9 %*	*50-200*	*08/26/24*	*08/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2435004
Chloride	**63.0**	20.0	1	08/26/24	08/26/24	

QC Summary Data

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

Volatile Organic Compounds by EPA 8260B

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 (2435006-BLK1)									Prepared: 08/26/24 Analyzed: 08/26/24
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: Bromofluorobenzene	*0.525*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.529*		*0.500*		*106*	*70-130*			
LCS (2435006-BS1)									Prepared: 08/26/24 Analyzed: 08/26/24
Benzene	2.33	0.0250	2.50		93.3	70-130			
Ethylbenzene	2.38	0.0250	2.50		95.2	70-130			
Toluene	2.39	0.0250	2.50		95.5	70-130			
o-Xylene	2.24	0.0250	2.50		89.8	70-130			
p,m-Xylene	4.53	0.0500	5.00		90.5	70-130			
Total Xylenes	6.77	0.0250	7.50		90.3	70-130			
Surrogate: Bromofluorobenzene	*0.498*		*0.500*		*99.5*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.484*		*0.500*		*96.8*	*70-130*			
Surrogate: Toluene-d8	*0.528*		*0.500*		*106*	*70-130*			
Matrix Spike (2435006-MS1)				**Source: E408205-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Benzene	2.28	0.0250	2.50	ND	91.2	48-131			
Ethylbenzene	2.32	0.0250	2.50	ND	92.8	45-135			
Toluene	2.32	0.0250	2.50	ND	92.6	48-130			
o-Xylene	2.24	0.0250	2.50	ND	89.8	43-135			
p,m-Xylene	4.54	0.0500	5.00	ND	90.9	43-135			
Total Xylenes	6.79	0.0250	7.50	ND	90.5	43-135			
Surrogate: Bromofluorobenzene	*0.507*		*0.500*		*101*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.470*		*0.500*		*94.0*	*70-130*			
Surrogate: Toluene-d8	*0.522*		*0.500*		*104*	*70-130*			
Matrix Spike Dup (2435006-MSD1)				**Source: E408205-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Benzene	2.28	0.0250	2.50	ND	91.3	48-131	0.110	23	
Ethylbenzene	2.36	0.0250	2.50	ND	94.2	45-135	1.52	27	
Toluene	2.35	0.0250	2.50	ND	93.9	48-130	1.35	24	
o-Xylene	2.30	0.0250	2.50	ND	92.1	43-135	2.62	27	
p,m-Xylene	4.59	0.0500	5.00	ND	91.8	43-135	1.05	27	
Total Xylenes	6.89	0.0250	7.50	ND	91.9	43-135	1.57	27	
Surrogate: Bromofluorobenzene	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.469*		*0.500*		*93.8*	*70-130*			
Surrogate: Toluene-d8	*0.525*		*0.500*		*105*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - GRO

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 (2435006-BLK1)									Prepared: 08/26/24 Analyzed: 08/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.525*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.529*		*0.500*		*106*	*70-130*			
LCS (2435006-BS2)									Prepared: 08/26/24 Analyzed: 08/26/24
Gasoline Range Organics (C6-C10)	51.5	20.0	50.0		103	70-130			
Surrogate: Bromofluorobenzene	*0.518*		*0.500*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.468*		*0.500*		*93.6*	*70-130*			
Surrogate: Toluene-d8	*0.539*		*0.500*		*108*	*70-130*			
Matrix Spike (2435006-MS2)				**Source: E408205-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Gasoline Range Organics (C6-C10)	49.7	20.0	50.0	ND	99.4	70-130			
Surrogate: Bromofluorobenzene	*0.500*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.493*		*0.500*		*98.5*	*70-130*			
Surrogate: Toluene-d8	*0.532*		*0.500*		*106*	*70-130*			
Matrix Spike Dup (2435006-MSD2)				**Source: E408205-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Gasoline Range Organics (C6-C10)	50.1	20.0	50.0	ND	100	70-130	0.705	20	
Surrogate: Bromofluorobenzene	*0.528*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.483*		*0.500*		*96.6*	*70-130*			
Surrogate: Toluene-d8	*0.548*		*0.500*		*110*	*70-130*			

QC Summary Data

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

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2435002-BLK1)									Prepared: 08/26/24 Analyzed: 08/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*36.4*		*50.0*		*72.7*	*50-200*			
LCS (2435002-BS1)									Prepared: 08/26/24 Analyzed: 08/26/24
Diesel Range Organics (C10-C28)	187	25.0	250		74.7	38-132			
Surrogate: n-Nonane	*41.6*		*50.0*		*83.2*	*50-200*			
Matrix Spike (2435002-MS1)				**Source: E408201-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Diesel Range Organics (C10-C28)	181	25.0	250	ND	72.4	38-132			
Surrogate: n-Nonane	*41.7*		*50.0*		*83.3*	*50-200*			
Matrix Spike Dup (2435002-MSD1)				**Source: E408201-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Diesel Range Organics (C10-C28)	191	25.0	250	ND	76.4	38-132	5.44	20	
Surrogate: n-Nonane	*41.7*		*50.0*		*83.4*	*50-200*			

QC Summary Data

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

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 (2435004-BLK1)									Prepared: 08/26/24 Analyzed: 08/26/24
Chloride	ND	20.0							
LCS (2435004-BS1)									Prepared: 08/26/24 Analyzed: 08/26/24
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2435004-MS1)				**Source: E408200-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Chloride	448	20.0	250	174	109	80-120			
Matrix Spike Dup (2435004-MSD1)				**Source: E408200-01**					Prepared: 08/26/24 Analyzed: 08/26/24
Chloride	499	20.0	250	174	130	80-120	10.9	20	M1

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

Definitions and Notes

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

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

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

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

Project Information

Chain of Custody

Client:	Mack Energy
Project:	West Maljamar
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#	Job Number
E408201	20046-0001

TAT: 1D | 2D ✓ | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM ✓ | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 9056 | BGDOC NM ✓ | BGDOC TX

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	Remarks
	08/22	S	1	SP. Comp. 16-6'	1	
				SP. Comp. 17-6'	2	
				SP. Comp. 18-6'	3	
				SP. Comp. 19-6'	4	
				SP. Comp. 20-6'	5	
				SW. Comp. 1-6'	6	
				SW. Comp. 2-6'	7	
				SW. Comp. 3-6'	8	
				SW. Comp. 4-6'	9	
	08/22	S	1	SW. Comp. 5-6'	10	

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
S. Perez	08/22/24		Michelle Gonzales	8.23.24	1400
Michelle Gonzales	8.23.24	1640	A.M.	8.23.24	1700
A.M.	8.23.24	2315	Thaylyn R Hall	8.20.24	0700

Lab Use Only

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.

Project Information

Chain of Custody

Client: Mack Energy
Project: West Mount D
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# E408201
Job Number 20046-0001

TAT: 1D | 2D ✓ | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM ✓ | CO | UT | AZ | TX

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | 8260C NM | 8260C TX

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	Remarks
	08/22	S	1	SW. Comp. 6-6'	11	
	08/22	S	1	SW. Comp. 7-6'	12	

Additional Instructions:

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

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
S Perez	08/22/24		Michelle Gonzales	8.23.24	1400
Michelle Gonzales	8-23-24	1640		8.23.24	1700
	8.23.24	2315	Kayla R Hall	8-24-24	0700

Lab Use Only
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.

enviro+ech

Envirotech Analytical Laboratory

Printed: 8/26/2024 8:02:04AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Mack Energy	Date Received:	08/26/24 07:00	Work Order ID:	E408201
Phone:	(575) 390-6397	Date Logged In:	08/23/24 15:43	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	08/27/24 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: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	No	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

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

Comments/Resolution

Project manager and time sampled are missing on COC by client.

Client Instruction

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

Date

envirotech Inc.

SITE PHOTOS: WEST MOUNT SPILL D

REMEDIATION AND FINAL PHOTOS


8/9/2024 13:31
Altitude 1120.7meter
Speed 0.0km/h
Mack Energy
West Mount "D"
Remediation


8/9/2024 13:33
+32.997459 -104.070923
Altitude 1119.8meter
Speed 1.5km/h
Mack Energy
West Mount "D"
Remediation


8/9/2024 13:34
+32.997417, -104.071297
Altitude 1119.3meter
Speed 0.0km/h
Mack Energy
West Mount "D"
Remediation

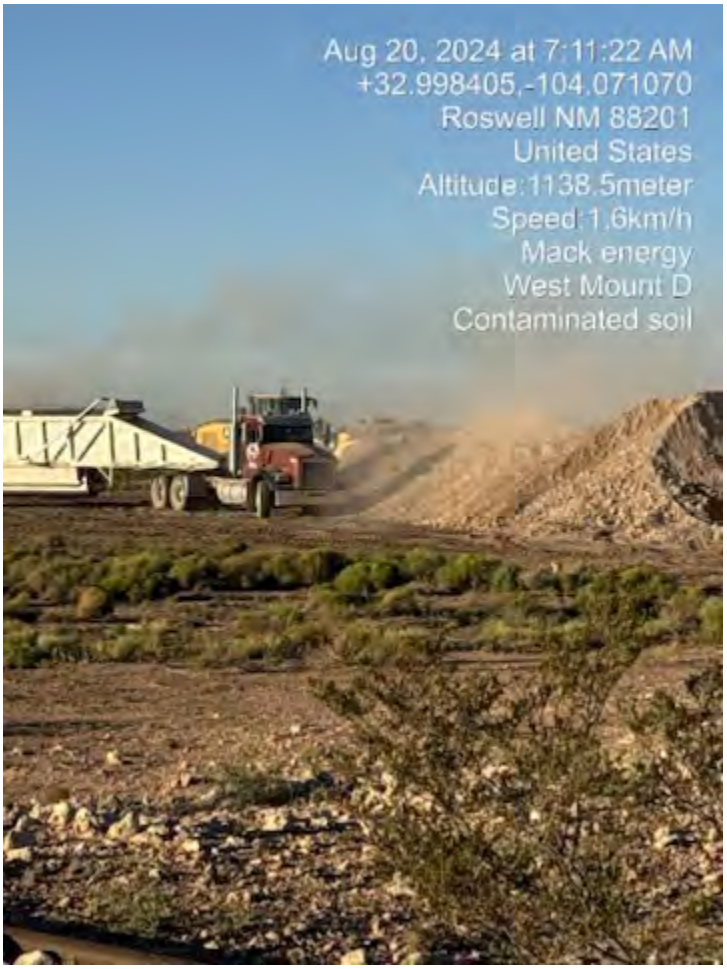

DEERE
8/12/2024 10:08
Mack Energy
West Mount "D"
Remediation

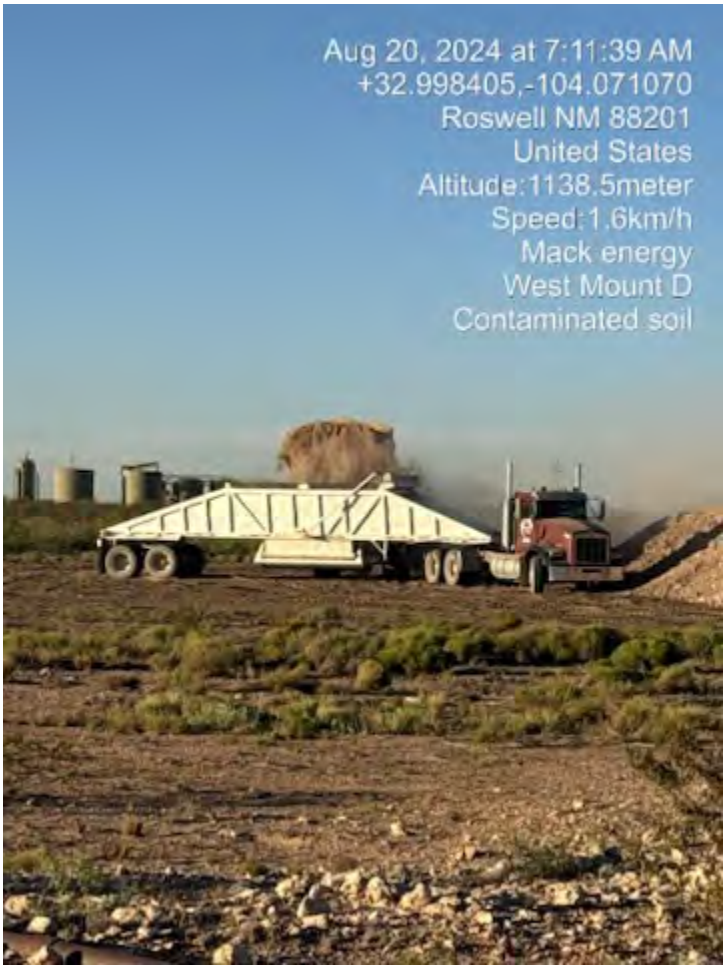

Mack Energy
West Mount "D"
Remediation


8/12/2024 10:09
+32.997628, -104.070727
Altitude 1138.3meter
Speed 0.0km/h
Mack Energy
West Mount "D"
Remediation

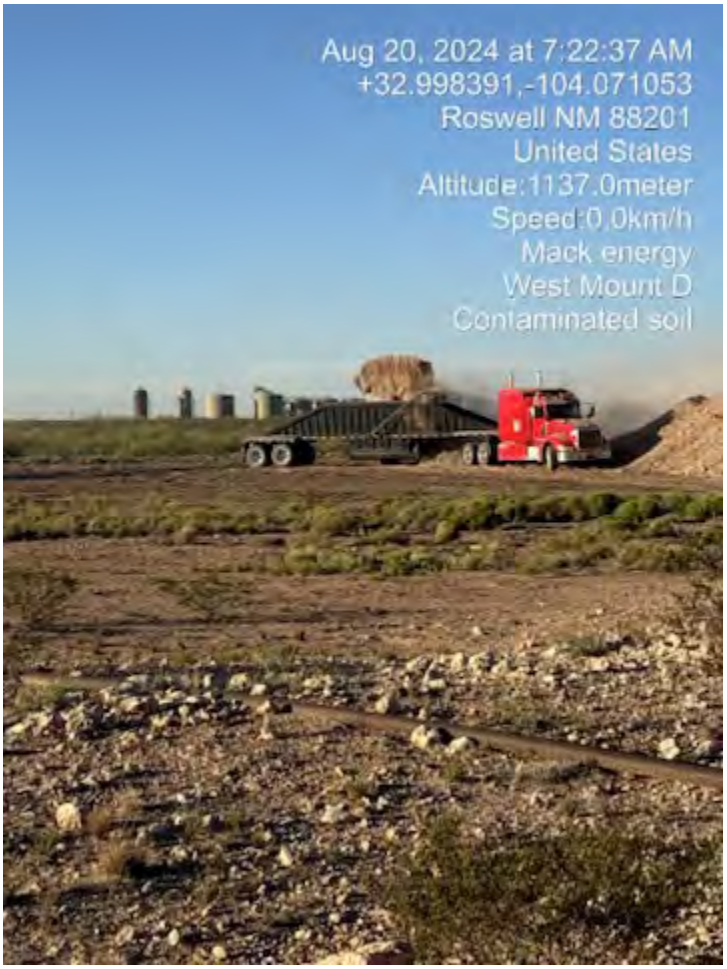

Mack Energy
West Mount "D"
Remediation

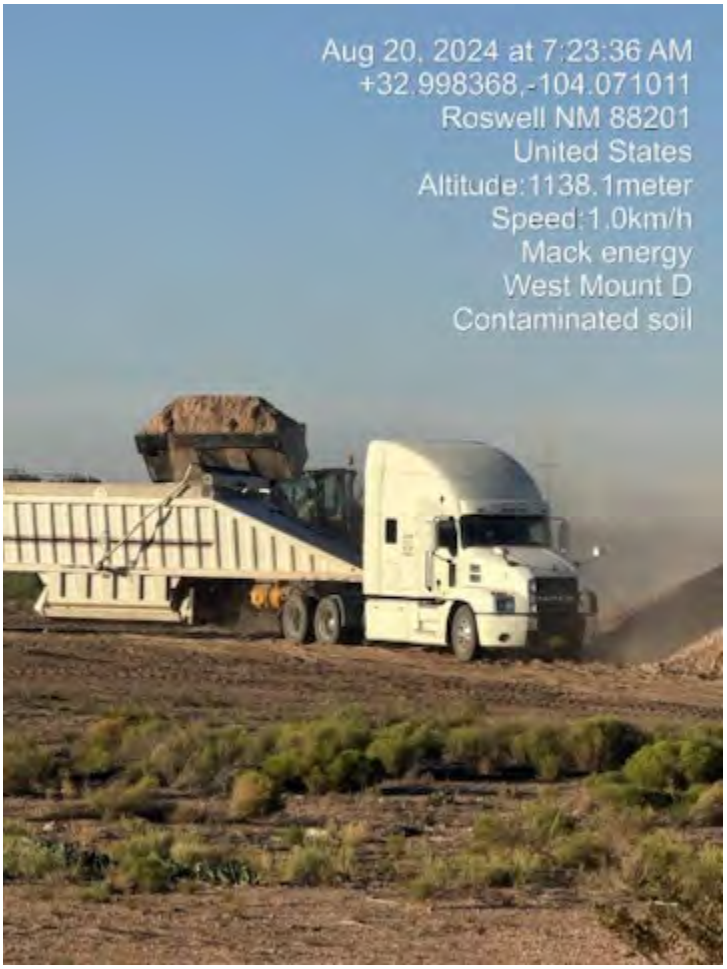

Mack Energy
West Mount "D"
Remediation

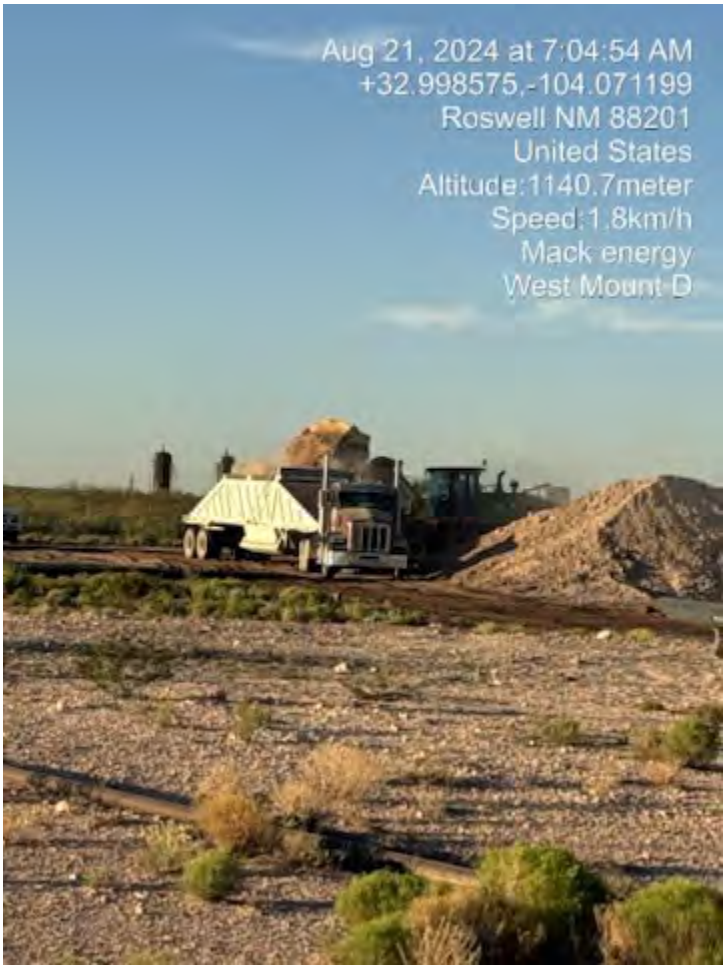

Aug 20, 2024 at 7:11:22 AM
+32.998405,-104.071070
Roswell NM 88201
United States
Altitude:1138.5meter
Speed:1.6km/h
Mack energy
West Mount D
Contaminated soil

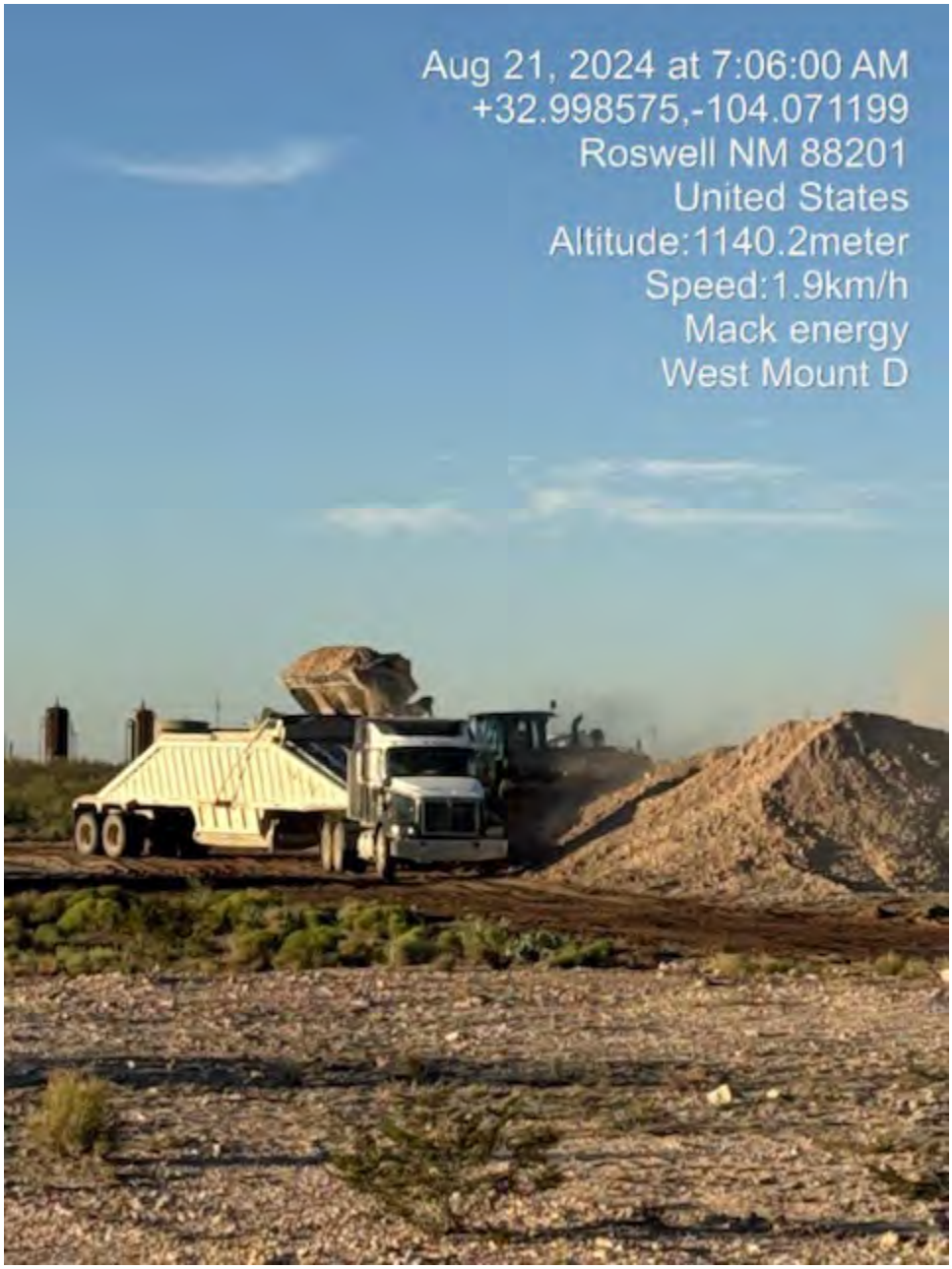

Aug 20, 2024 at 7:11:39 AM
+32.998405,-104.071070
Roswell NM 88201
United States
Altitude:1138.5meter
Speed:1.6km/h
Mack energy
West Mount D
Contaminated soil

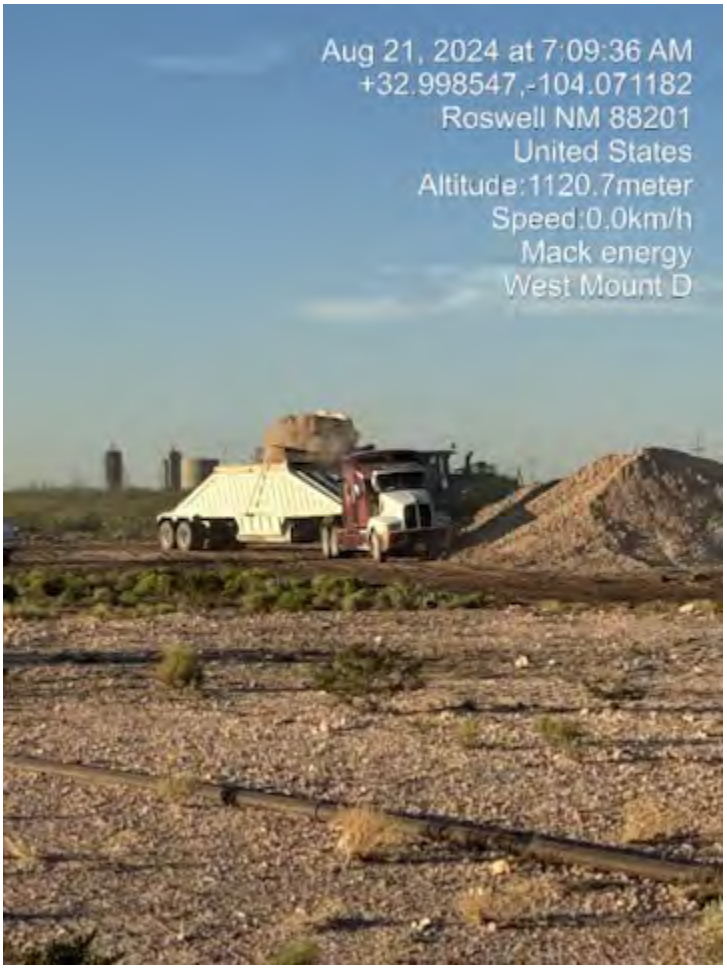

Aug 20, 2024 at 7:18:45 AM
+32.998386,-104.071083
Roswell NM 88201
United States
Altitude:1137.7meter
Speed:0.5km/h
Mack energy
West Mount D
Contaminated soil

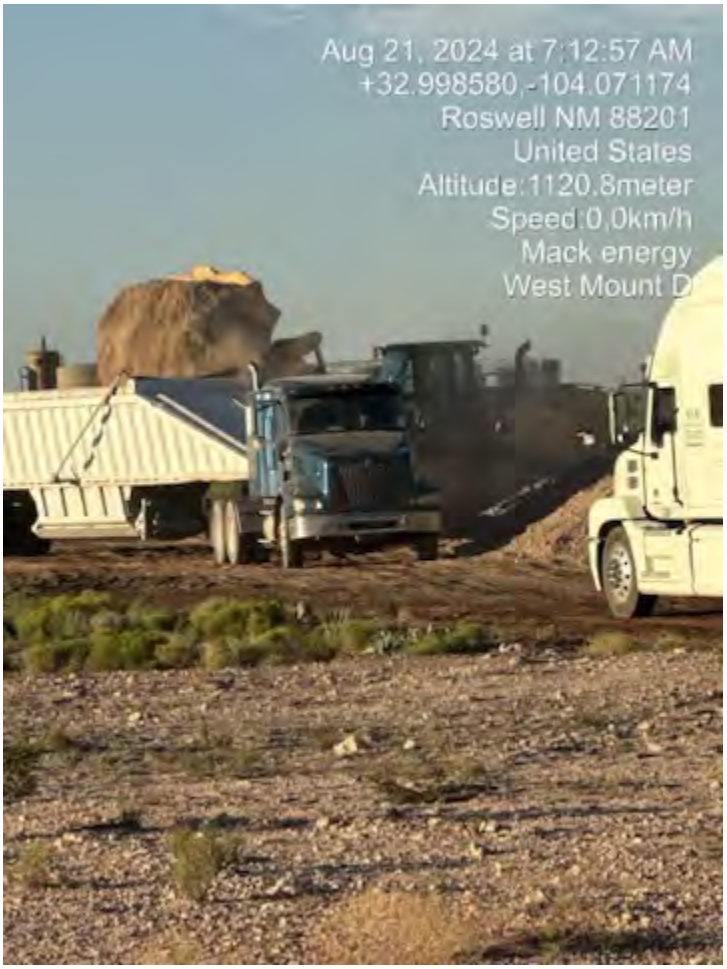

Aug 20, 2024 at 7:22:37 AM
+32.998391,-104.071053
Roswell NM 88201
United States
Altitude:1137.0meter
Speed:0.0km/h
Mack energy
West Mount D
Contaminated soil

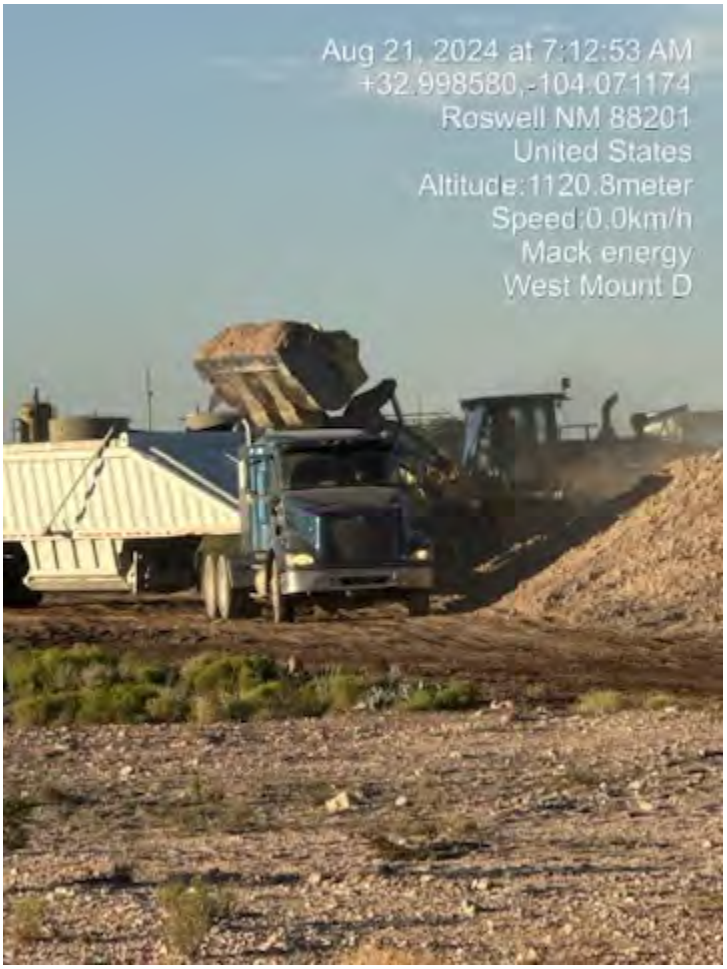

Aug 20, 2024 at 7:23:36 AM
+32.998368,-104.071011
Roswell NM 88201
United States
Altitude:1138.1meter
Speed:1.0km/h
Mack energy
West Mount D
Contaminated soil


Aug 21, 2024 at 7:04:54 AM
+32.998575,-104.071199
Roswell NM 88201
United States
Altitude:1140.7meter
Speed:1.8km/h
Mack energy
West Mount D


Aug 21, 2024 at 7:06:00 AM
+32.998575,-104.071199
Roswell NM 88201
United States
Altitude:1140.2meter
Speed:1.9km/h
Mack energy
West Mount D


Aug 21, 2024 at 7:09:36 AM
+32.998547,-104.071182
Roswell NM 88201
United States
Altitude:1120.7meter
Speed:0.0km/h
Mack energy
West Mount D


Aug 21, 2024 at 7:12:57 AM
+32.998580,-104.071174
Roswell NM 88201
United States
Altitude:1120.8meter
Speed:0,0km/h
Mack energy
West Mount D


Aug 21, 2024 at 7:12:53 AM
+32.998580,-104.071174
Roswell NM 88201
United States
Altitude:1120.8meter
Speed:0.0km/h
Mack energy
West Mount D


DEERE
350G
DEERE
3 sept 2024 11:47:29 a. m.
32.9816396N 104.1211871W
54° NE
Artesia
Condado de Eddy
Nuevo México
Altitud:1084.8m
Velocidad:0.0km/h
Número de índice: 552
Google


DEERE
3 sept 2024 11:48:19 a. m.
32.98167948N 104.12091356W
255° W
Artesia
Condado de Eddy
Nuevo México
Altitud:1085.6m
Velocidad:0.0km/h
Número de índice: 553
Google


DEERE
3 sept 2024 11:51:05 a. m.
260° W
Altitud:1023m
Número de índice: 555


12/11/2024 08:31
+32.997922,-104.070887
Chaves County
Altitude:1136.1meter
Speed:0.0km/h
Mack Energy
West Mount "D"
Completion


12/11/2024 08:34
+32.997434,-104.070736
Chaves County
Altitude:1138.6meter
Speed:2.1km/h
Mack Energy
West Mount "D"
Completion


12/11/2024 08:35
+32.997603,-104.071208
Chaves County
Altitude:1138.6meter
Speed:3.4km/h
Mack Energy
West Mount "D"
Completion


12/11/2024 08:34
+32.997399,-104.070960
Chaves County
Altitude:1138.7meter
Speed:3.3km/h
Mack Energy
West Mount "D"
Completion


Tuesday, January 7, 2025
32.9972° N, 104.0706° W
Chaves County
Altitude:3729.1ft
Speed:1.6mph
MEC West Mount Site D topsoil Finished
Index number:358

MACK ENERGY CORPORATION
WEST MOUNT SPILL D
RECLAMATION EXECUTIVE SUMMARY

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

Reclamation Executive Summary

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

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

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

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

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

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

Sincerely,

Natalie Gladden
COO and Director of Environmental and Regulatory Services
Energy Staffing Services, LLC.
2724 NW County Road
Hobbs, NM 88240
Cell: 575-390-6397
Office: 575-393-9048
Email: natalie@energystaffingllc.com

Curtis and Curtis Seed
SOW GENEROUSLY

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
Sideoats 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	48.97%	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%						
Noxious Weed: None		Texas Permit: 2772					

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

curtisseed.com 4500 North Prince, Clovis, NM 88101 (575) 762-4759


13 ene 2025 1:59:32 p. m.
32.99770911N 104.07090683W
152° SE
Altitud:1117.6m
Velocidad:0.0km/h
West mount spill D
Número de índice: 1182


13 ene 2025 2:04:51 p. m.
32.99770369N 104.07111606W
116° SE
31 County Road 209
Artesia
Eddy County
New Mexico
Altitud:1116.2m
Velocidad:0.8km/h
West mount spill D
Número de índice: 1184
Google


13 ene 2025 2:11:12 p. m.
32.99753257N 104.07107826W
120° SE
Pipeline
Roswell
Chaves County
New Mexico
Altitud:1116.0m
Velocidad:0.0km/h
West mount spill D
Número de índice: 1188
Google

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 526010

QUESTIONS

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

QUESTIONS

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

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

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

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

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 (continued)

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

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 11/12/2025

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

QUESTIONS (continued)

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

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 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	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	15000
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	180.8
GRO+DRO (EPA SW-846 Method 8015M)	180.8
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	08/09/2024
On what date will (or did) the final sampling or liner inspection occur	08/21/2024
On what date will (or was) the remediation complete(d)	01/07/2025
What is the estimated surface area (in square feet) that will be reclaimed	3919
What is the estimated volume (in cubic yards) that will be reclaimed	580.6
What is the estimated surface area (in square feet) that will be remediated	3919
What is the estimated volume (in cubic yards) that will be remediated	1060
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	fEEM0112338393 GANDY MARLEY LANDFARM/LANDFILL
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)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 11/14/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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

QUESTIONS

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

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QUESTIONS (continued)

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

QUESTIONS

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

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all 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	3919
What was the total volume (cubic yards) remediated	1060
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	3919
What was the total volume (in cubic yards) reclaimed	580.6
Summarize any additional remediation activities not included by answers (above)	none

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

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

I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 11/14/2025

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QUESTIONS (continued)

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

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	3919
What was the total volume of replacement material (in cubic yards) for this site	1396
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.	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	01/13/2025
Summarize any additional reclamation activities not included by answers (above)	None
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 reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 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.	
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QUESTIONS (continued)

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	Action Number: 526010
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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CONDITIONS

Action 526010

CONDITIONS

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

CONDITIONS

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