



**WEST MOUNT SPILL C
CLOSURE REQUEST**

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

**DATE OF RELEASE: 09/20/2023
INCIDENT NO. NAPP2327834535**

**August 27, 2025
Prepared by:**



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

August 27, 2025

New Mexico Energy, Mineral & Natural Resources
NMOCD District I
C/O Mike Bratcher and Robert Hamlet
811 S. First Street
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Mack Energy Corporation
11344 Lovington Hwy
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Subject: Closure Report for Mack Energy Corporation- West Mount Spill C

API No. 30-005-64381
Incident No. NAPP2327834535
Unit Letter F, Section 27, Township 15S, Range 28E
Chaves County, New Mexico

To Whom it May Concern:

Introduction

Mack Energy retained Energy Staffing Services, LLC (ESS) to conduct a spill assessment for the West Mount Spill C (hereafter referred to as "*Spill C*") regarding the produced water release that occurred on September 20, 2023.

On September 22, 2023, at 4:12 p.m., ESS provided immediate notification of the release to the New Mexico Oil Conservation Division (NMOCD), District I Office via email (notification attached). On behalf of Mack Energy, ESS subsequently submitted the initial C-141 Release Notification, along with the spill calculator used to determine the release volume, on October 5, 2023. The NMOCD accepted the C-141 as record on October 6, 2023, at 10:34 a.m. The release was assigned Incident No. NAPP2327834535 (notification correspondence attached).

This report provides a detailed summary of the spill assessment, delineation, and remedial activities, and demonstrates that closure criteria established under 19.15.29.12 NMAC (New Mexico Oil Conservation Division, 2018) have been met. All applicable regulatory requirements have been followed.

This document is intended to serve as the final report to obtain NMOCD approval for the closure of Incident No. NAPP2327834535.
the above-mentioned release.

Initial Release Discovery

On September 20, 2023, the water transfer company Well Spring identified a failure in their lay-flat line, which resulted in the release of produced water into the pasture area of Spill C.

Upon notification, Energy Staffing Services (ESS) mobilized to the site to conduct a full environmental site assessment. After measuring the impacted area, it was determined that approximately 30.56 barrels of produced water had been released. No fluid was recoverable at the time of assessment.

Initial site photographs and impact area measurements were documented. Please see the attached initial site photos.

Site Characterization

The Spill C release occurred on State Land, located at latitude 32.988705 and longitude -104.072056, approximately 19.7 miles southeast of Hagerman, New Mexico. The legal description of the site is Unit Letter F, Section 27, Township 15S, Range 28E, situated in Chaves County, New Mexico. A site schematic is attached.

The release originated from production lines near production facilities and well pads, specifically within the pasture area of Spill C. The site elevation is 3,738 feet. Vegetation in the area is historically dominated by black grama, bush muhly, dropseed, creosote bush, and other perennial grasses and forbs. Rangeland and vegetation classification information is attached.

According to the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), the soil type at the release site consists of 100% Tencee-Sotim association (Soil Map attached). The FEMA National Flood Hazard Layer indicates a 0.2% chance of flood hazard, with a 1% chance flood depth averaging one foot in drainage areas less than one square mile (Flood Map attached).

The U.S. Department of the Interior, Bureau of Land Management identifies a low potential for karst geology in the vicinity of Spill C (Karst Map attached).

No surface water features are present near the release. The site is not within one-half mile of any continuously flowing watercourse or lakebed. No other critical or community features were identified (Watercourse Map attached).

The nearest water well, as documented by the New Mexico Office of the State Engineer (NMOSE), is RA12428, drilled in 2016, with a total depth of 170 feet and groundwater depth of 125 feet, located 6,176 yards from the site. Additional nearby wells include:

- RA12429 POD1 – drilled 2016; depth 62 ft; groundwater at 27 ft; located 8,215 yards from site.

- RA10280 – drilled 2003; depth 70 ft; groundwater at 40 ft; located 8,284 yards from site.
- RA09248 – drilled 1996; depth 145 ft; groundwater at 45 ft; located 8,381 yards from site.
- RA09059 – drilled 1996; depth 110 ft; groundwater at 35 ft; distance not specified.

An extended groundwater survey conducted with the OSE POD Location Mapping System identified two additional wells within one-half mile of the Spill C release:

- RA12007 POD1 – no drilling, depth, or groundwater data available.
- RA12006 POD1 – no drilling, depth, or groundwater data available.

Supporting figures, including the NMOSE well data, OSE POD mapping results, and the groundwater map, are attached to this report.

Closure Criteria

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

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

Soil Remediation Action Levels

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

Soil Sampling and Laboratory Analysis

Soil sampling for laboratory analysis was conducted in accordance with NMOCD-approved industry standards. The accepted procedures and methods used are outlined below:

- Samples were collected in airtight glass jars supplied by the laboratory.
- Each sample jar was labeled with site and sample identification information.
- Samples were stored in a cool environment, packed on ice, and maintained under proper preservation conditions.
- Samples were promptly shipped to the laboratory for analysis under strict chain-of-custody procedures.

All bottom-hole (vertical) and sidewall (horizontal) samples were submitted to Envirotech Analytical Laboratory for analysis using the following approved methods:

Volatile Organics (EPA 8021B)

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

Nonhalogenated Organics – EPA 8015D (GRO)

- Gasoline Range Organics (C6–C10)

Nonhalogenated Organics – EPA 8015D (DRO/ORO)

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

Anions – EPA 300.0/9056A

- Chloride

Release Investigation Data

On November 14, 2023, Energy Staffing Services (ESS) mobilized to the Spill C release site to initiate delineation activities. Sample points were established, GPS-located, and surface samples were obtained. Each surface sample was field-tested, logged, and submitted to Envirotech Laboratory for confirmation analysis.

A total of 14 vertical sample points and 19 horizontal sample points were established. Each point was sampled using a backhoe in 1-foot and 2-foot intervals, with bottom-hole samples subsequently submitted to the laboratory for confirmation.

Please see the delineation sample data below (laboratory samples indicated in yellow). Attached to this report are the sample data tables, the delineation sample map, and the laboratory analysis results.

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
SP1	SURF	320	L	ND	ND	ND	ND	ND	331	11/14/2023
	2	160								
	4	320								
	6	320	L	ND	ND	ND	ND	ND	254	2/19/2024
SP2	SURF	1440	L	ND	ND	ND	ND	ND	2030	11/14/2023
	2	240								
	4	480								
	6	400	L	ND	ND	ND	ND	ND	497	2/19/2024
SP3	SURF	2720	L	ND	ND	ND	ND	ND	2630	11/14/2023
	2	640								
	4	640								
	6	400								
	8	400	L	ND	ND	ND	ND	ND	311	2/19/2024
SP4	SURF	1760	L	ND	ND	ND	ND	ND	2060	11/14/2023
	2	240								
	4	400								
	6	320	L	ND	ND	ND	ND	ND	225	2/19/2024
SP5	SURF	>4000	L	ND	ND	ND	ND	ND	19600	11/14/2023
	2	80								
	4	560								
	6	320	L	ND	ND	ND	ND	ND	332	2/19/2024
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	7210	11/14/2023
	2	240								
	4	400								
	6	320	L	ND	ND	ND	ND	ND	229	2/19/2024
SP7	SURF	480	L	ND	ND	ND	ND	ND	832	11/14/2023
	2	320								
	4	480								
	6	320	L	ND	ND	ND	ND	ND	304	2/19/2024
SP8	SURF	2080	L	ND	ND	ND	ND	ND	3480	11/14/2023
	2	400								
	4	640								

	6	400								
	8	480								
	10	480	L	ND	ND	ND	ND	ND	404	2/19/2024
SP9	SURF	3280	L	ND	ND	ND	ND	ND	3410	11/14/2023
	2	400								
	4	480								
	6	400	L	ND	ND	ND	ND	ND	287	2/19/2024
SP10	SURF	1440	L	ND	ND	ND	ND	ND	3990	11/14/2023
	2	160								
	4	400								
	6	320	L	ND	ND	ND	ND	ND	342	2/20/2024
SP11	SURF	3680	L	ND	ND	30.5	63	93.5	1590	11/14/2023
	2	160								
	4	240								
	6	240	L	ND	ND	ND	ND	ND	51.1	2/20/2024
SP12	SURF	160	L	ND	ND	ND	94	94	25.2	11/14/2023
	2	160								
	4	240								
	6	240	L	ND	ND	ND	ND	ND	25.8	2/20/2024
SP13	SURF	1120	H	ND	ND	53.5	194	247.5	1240	11/14/2023
	2	2240								
	4	400								
	6	240								
	8	240								
	10	160								
	12	160	L	ND	ND	ND	ND	ND	22	2/20/2024
SP14	SURF	160	H	ND	ND	34.5	207	241.5	62.2	11/14/2023
	2	1040								
	4	320								
	6	160	L	ND	ND	ND	ND	ND	ND	2/20/2024
SW1	SURF	320	L	ND	ND	ND	ND	ND	252	11/14/2023
	1	640								
	2	240								
	3	160	L	ND	ND	ND	ND	ND	31.3	2/20/2024

SW2	SURF	2400	L	ND	ND	ND	ND	ND	1590	11/14/2023
	1	720								
	2	320								
	3	160	L	ND	ND	ND	ND	ND	36.6	2/20/2024
SW3	SURF	>4000	L	ND	ND	ND	ND	ND	4090	11/14/2023
	1	640								
	2	240								
	3	240	L	ND	ND	ND	ND	ND	147	2/20/2024
SW4	SURF	>4000	L	ND	ND	ND	ND	ND	8800	11/14/2023
	1	560								
	2	240								
	3	240	L	ND	ND	ND	ND	ND	228	2/20/2024
SW5	SURF	3200	L	ND	ND	ND	ND	ND	4680	11/14/2023
	1	720								
	2	160								
	3	160	L	ND	ND	ND	ND	ND	76.1	2/20/2024
SW6	SURF	3520	L	ND	ND	ND	ND	ND	2120	11/14/2023
	1	1040								
	2	1200								
	3	1280								
	4	880								
	5	240								
	6	160	L	ND	ND	ND	ND	ND	63.8	2/20/2024
SW7	SURF	>4000	L	ND	ND	ND	ND	ND	878	11/14/2023
	1	>4000								
	2	2320								
	3	1120								
	4	640								
	5	320								
	6	160	L	ND	ND	ND	ND	ND	52.6	2/20/2024
SW8	SURF	800	L	ND	ND	ND	ND	ND	10400	11/14/2023
	1	640								
	2	320								
	3	240	L	ND	ND	ND	ND	ND	88.1	2/21/2024

SW9	SURF	240	L	ND	ND	ND	ND	ND	ND	11/14/2023
	1	880								
	2	240								
	3	240	L	ND	ND	ND	ND	ND	119	2/21/2024
SW10	SURF	2800	L	ND	ND	ND	ND	ND	4300	11/14/2023
	1	640								
	2	240								
	3	160	L	ND	ND	ND	ND	ND	ND	2/21/2024
SW11	SURF	1440	L	ND	ND	ND	ND	ND	1400	11/14/2023
	1	720								
	2	320								
	3	160	L	ND	ND	ND	ND	ND	102	2/21/2024
SW12	SURF	640	L	ND	ND	ND	ND	ND	534	11/14/2023
	1	560								
	2	240								
	3	240	L	ND	ND	ND	ND	ND	ND	2/21/2024
SW13	SURF	160	L	ND	ND	ND	ND	ND	72.5	11/14/2023
	1	720								
	2	320								
	3	240	L	ND	ND	ND	ND	ND	ND	2/21/2024
SW14	SURF	>4000	L	ND	ND	ND	ND	ND	5160	11/14/2023
	1	960								
	2	400								
	3	160	L	ND	ND	ND	ND	ND	68.2	2/21/2024
SW15	SURF	>4000	L	ND	ND	ND	ND	ND	13400	11/14/2023
	1	960								
	2	640								
	3	480								
	4	1760								
	5	720								
	6	720								
	7	320								
	8	160	L	ND	ND	ND	ND	ND	103	2/21/2024

SW16	SURF	320	L	ND	ND	ND	ND	ND	82.6	11/14/2023
	1	800								
	2	240								
	3	160	L	ND	ND	ND	ND	ND	ND	2/21/2024
SW17	SURF	160	L	ND	ND	ND	ND	ND	ND	11/14/2023
	1	640								
	2	160								
	3	160	L	ND	ND	ND	ND	ND	106	2/21/2024
SW18	SURF	>4000	H	ND	ND	28.2	88	116.2	7060	11/14/2023
	1	880								
	2	320								
	3	160	L	ND	ND	ND	ND	ND	74.3	2/21/2024
SW19	SURF	>4000	L	ND	ND	ND	ND	ND	18100	11/14/2023
	1	800								
	2	1040								
	3	640								
	4	640								
	5	320								
	6	160	L	ND	ND	ND	ND	ND	66.4	2/21/2024

Please see the delineation photos attached to this report.

Composite Sampling Summary

On October 7, 2024, Energy Staffing Services (ESS) submitted the official notification to the NMOCD for the composite phase of the Spill C release. On the same date, the NMOCD received and accepted this notification (see attached email correspondence).

On October 11, 2024, field crews began obtaining 200-square-foot composite samples from the excavation area of the Spill C release. A total of 50 bottom-hole composites were collected, field-tested, and submitted to Envirotech Laboratory for confirmation analysis.

The composite sample data are provided below and are also attached to this report, followed by the laboratory confirmation results.

SP ID	Depth	Titr	PID	L- BTEX	L- GRO	L- DRO	L- ORO	L- TPH	L- CHL	Dates
COMP1	4	400	L	ND	ND	ND	ND	ND	415	10/11/2024
COMP2	4	400	L	ND	ND	ND	ND	ND	433	10/11/2024
COMP3	4	400	L	ND	ND	ND	ND	ND	417	10/11/2024
COMP4	4	400	L	ND	ND	ND	ND	ND	431	10/11/2024
COMP5	4	320	L	ND	ND	ND	ND	ND	327	10/11/2024
COMP6	4	320	L	ND	ND	ND	ND	ND	358	10/11/2024
COMP7	4	320	L	ND	ND	ND	ND	ND	365	10/11/2024
COMP8	4	320	L	ND	ND	ND	ND	ND	364	10/11/2024
COMP9	4	320	L	ND	ND	ND	ND	ND	381	10/11/2024
COMP10	4	320	L	ND	ND	ND	ND	ND	388	10/11/2024
COMP11	4	320	L	ND	ND	ND	ND	ND	412	10/11/2024
COMP12	8	320	L	ND	ND	ND	ND	ND	414	10/11/2024
COMP13	8	240	L	ND	ND	ND	ND	ND	282	10/14/2024
COMP14	8	240	L	ND	ND	ND	ND	ND	187	10/14/2024
COMP15	8	160	L	ND	ND	ND	ND	ND	104	10/14/2024
COMP16	8	160	L	ND	ND	ND	ND	ND	70.2	10/14/2024
COMP17	4	160	L	ND	ND	ND	ND	ND	123	10/14/2024
COMP18	4	160	L	ND	ND	ND	ND	ND	66.2	10/14/2024
COMP19	4	320	L	ND	ND	ND	ND	ND	312	10/14/2024
COMP20	4	160	L	ND	ND	ND	ND	ND	79.2	10/14/2024

COMP21	4	240	L	ND	ND	ND	ND	ND	195	10/14/2024
COMP22	4	240	L	ND	ND	ND	ND	ND	200	10/14/2024
COMP23	10	240	L	ND	ND	ND	ND	ND	241	10/14/2024
COMP24	10	160	L	ND	ND	ND	ND	ND	40.3	10/14/2024
COMP25	10	320	L	ND	ND	ND	ND	ND	372	10/14/2024
COMP26	10	320	L	ND	ND	ND	ND	ND	224	10/14/2024
COMP27	10	320	L	ND	ND	ND	ND	ND	380	10/14/2024
COMP28	4	240	L	ND	ND	ND	ND	ND	306	10/15/2024
COMP29	4	320	L	ND	ND	ND	ND	ND	291	10/15/2024
COMP30	8	400	L	ND	ND	25.6	ND	25.6	399	10/15/2024
COMP31	8	160	L	ND	ND	ND	ND	ND	389	10/15/2024
COMP32	4	400	L	ND	ND	ND	ND	ND	415	10/15/2024
COMP33	4	160	L	ND	ND	ND	ND	ND	73.8	10/15/2024
COMP34	4	240	L	ND	ND	ND	ND	ND	227	10/15/2024
COMP35	4	320	L	ND	ND	ND	ND	ND	275	10/15/2024
COMP36	4	400	L	ND	ND	ND	ND	ND	425	10/15/2024
COMP37	4	320	L	ND	ND	ND	ND	ND	187	10/15/2024
COMP38	4	160	L	ND	ND	ND	ND	ND	ND	10/16/2024
COMP39	4	160	L	ND	ND	ND	ND	ND	127	10/16/2024
COMP40	4	160	L	ND	ND	ND	ND	ND	118	10/16/2024

SWCOMP1	4	240	L	ND	ND	ND	ND	ND	325	10/16/2024
SWCOMP2	4	240	L	ND	ND	ND	ND	ND	340	10/16/2024
SWCOMP3	6	240	L	ND	ND	ND	ND	ND	327	10/16/2024
SWCOMP4	4	240	L	ND	ND	ND	ND	ND	317	10/16/2024
SWCOMP5	4	240	L	ND	ND	ND	ND	ND	78.3	10/16/2024
SWCOMP6	4	320	L	ND	ND	ND	ND	ND	215	10/16/2024
SWCOMP7	8	320	L	ND	ND	ND	ND	ND	212	10/16/2024
SWCOMP8	4	320	L	ND	ND	ND	ND	ND	230	10/16/2024
SWCOMP9	4	320	L	ND	ND	ND	ND	ND	219	10/16/2024
SWCOMP10	4	320	L	ND	ND	ND	ND	ND	219	10/16/2024

Remediation Summary

Please find the remediation photos attached herein.

The impacted area of the Spill C release measured 4,312 square feet. During remediation, a total of 1,760 cubic yards of contaminated soil was excavated and transported to Gandy's Disposal. For backfilling, 2,040 cubic yards of caliche were pushed up and hauled from Gandy's Disposal to the location, along with 240 cubic yards of topsoil sourced from the Macks Bogel's Pit. The site was contoured and sloped back to its natural grade, then seeded. Backfilling and seeding were completed on January 13, 2025.

Attached to this report are the final site photos, the backfill composite map, and the laboratory analysis results.

Closure Request

On behalf of Mack Energy, Energy Staffing Services, LLC respectfully requests closure of incident **NAPP2327834535** related to the produced water release that occurred in the pasture area of the **West Mount Spill C**.

Mack Energy and ESS hereby certify that all information contained in and attached to this report is true and correct. Both parties further certify that all applicable closure requirements for the West Mount Spill C release have been fully satisfied in accordance with regulatory standards. Should you have any questions or require additional information regarding this closure request, please contact the undersigned at **(575) 390-6397 or (575) 393-9048, or by email at natalie@energystaffingllc.com**.

Sincerely,



Natalie Gladden

Director of Environmental and Regulatory Services

Energy Staffing Services, LLC.

2724 NW County Road

Hobbs, NM 88240

Cell: 575-390-6397

Office: 575-393-9048

Email: natalie@energystaffingllc.com



Attachments

- Spill Notification
- Initial C141 and Spill Calculator Form
- Impact Map
- Initial Site Photos
- Site Map
- Rangeland and Vegetation Classification
- Soil Map
- FEMA National Flood Hazard Layer Map
- Karst Geology Map
- Watercourse Water Map
- Groundwater Information
- Groundwater Map

OSE POD Map
Delineation Sample Data
Delineation Sample Map and GPS Log
Lab Analysis for Delineation
Delineation Site Photos
Composite Notification
Composite Sample Data
Composite Sample Map and GPS Log
Lab analysis for Remediation
Remediation and Final Photos
Backfill map and Lab Analysis
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	NAPP2327834535
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 **32.988705**

Longitude **-104.072056**

(NAD 83 in decimal degrees to 5 decimal places)

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

Unit Letter	Section	Township	Range	County
F	30	15S	29E	CHAVES

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 30.56	Volume Recovered (bbls) 0BBLs
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

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

Form C-141

State of New Mexico

Page 2

Oil Conservation Division

Incident ID	NAPP2327834535
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?

☒ Yes ☐ No

If YES, for what reason(s) does the responsible party consider this a major release?
DUE TO VOLUME OF RELEASE

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

Initial Response

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


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

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

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

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

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

Signature:  Date: 10/5/23

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

OCD Only

Received by: Shelly Wells Date: 10/6/2023

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

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

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

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

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

CONDITIONS

Action 272802

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 272802
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	10/6/2023

MACK ENERGY - WEST MOUNT SPILL C

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	292.19	28.28	0.083	685.84006	30.56	Medium Sand
Coarse Sand	0.26	10	10	0.083	8.3	0.38	Coarse Sand
Gravelly Sand	0.26	10	10	0.083	8.3	0.38	Gravelly Sand
Fine Gravel	0.26	10	10	0.083	8.3	0.38	Fine Gravel
Medium Gravel	0.20	10	10	0.083	8.3	0.30	Medium Gravel
Coarse Gravel	0.18	10	10	0.083	8.3	0.27	Coarse Gravel
Sandstone	0.25	10	10	0.083	8.3	0.37	Sandstone
Siltstone	0.18	10	10	0.083	8.3	0.27	Siltstone
Shale	0.05	10	10	0.083	8.3	0.07	Shale
Limestone	0.13	10	10	0.083	8.3	0.19	Limestone
Basalt	0.19	10	10	0.083	8.3	0.28	Basalt
Volcanic Tuff	0.20	10	10	0.083	8.3	0.30	Volcanic Tuff
Standing Liquids	X	10	10	0.083	8.3	1.48	Standing Liquids

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

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

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

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



Cubic Feet = L x W x D

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

MACK ENERGY

WEST MOUNT SPILL C
IMPACT MAP

Legend

-  Mack Energy. WestMount#1\u2026Frac line spill\u2026C-4312 SQFT
-  WEST MOUNT SPILL C



MACK ENERGY: WEST MOUNT SPILL C INITIAL SITE PHOTOS











MACK ENERGY

WEST MOUNT SPILL C
SITE MAP

Legend

 WEST MOUNT SPILL C

 WEST MOUNT SPILL C



800 ft

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition

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

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

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

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

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

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

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

Reference:

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

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

WEST MOUNT SPILL C

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



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

2/19/2025
Page 3 of 6

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

WEST MOUNT SPILL C

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition—Chaves County, New Mexico, Southern Part								
Map unit symbol and soil name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition		
		Favorable year	Normal year	Unfavorable year			Rangeland	Forest understory
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct dry wt</i>	<i>Pct dry wt</i>	
TS—Tencee-Sotim association								



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

2/19/2025
Page 4 of 6

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

WEST MOUNT SPILL C

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	
Tencee	Shallow (R070BC025NM)	500	375	125	black grama	20		
					bush muhly	20		
					creosotebush	10		
					other perennial forbs	10		
					other perennial grasses	10		
					broom snakeweed	5		
					Eriogonum	5		
					low woollygrass	5		
					mariola	5		
					rabo de ardilla	5		
					sand dropseed	5		
					crown of thorns	3		
					fourwing saltbush	3		
					javelina brush	2		
					Nevada jointfir	2		
Sotim	Sandy (R070BD004NM)	1,200	—	600	black grama	35		
					dropseed	15		
					other perennial forbs	10		
					blue grama	5		
					bush muhly	5		
					little bluestem	5		
					other shrubs	5		
					other perennial grasses	5		
					plains lovegrass	5		
					threeawn	5		
					yucca	5		
USDA Natural Resources Conservation Service			Web Soil Survey National Cooperative Soil Survey					2/19/2025 Page 5 of 6

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

WEST MOUNT SPILL C

Data Source Information

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

Survey Area Data: Version 19, Sep 3, 2024



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

2/19/2025
Page 6 of 6


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



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

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 19, Sep 3, 2024

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	1.0	100.0%
Totals for Area of Interest		1.0	100.0%

National Flood Hazard Layer FIRMette



104°4'38"W 33°0'10"N



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

1:6,000

104°4'W 32°59'39"N

Released to Imaging: 10/9/2025 11:41:44 AM

Basemap Imagery Source: USGS National Map 2023

Legend

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

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



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

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


The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/20/2025 at 8:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

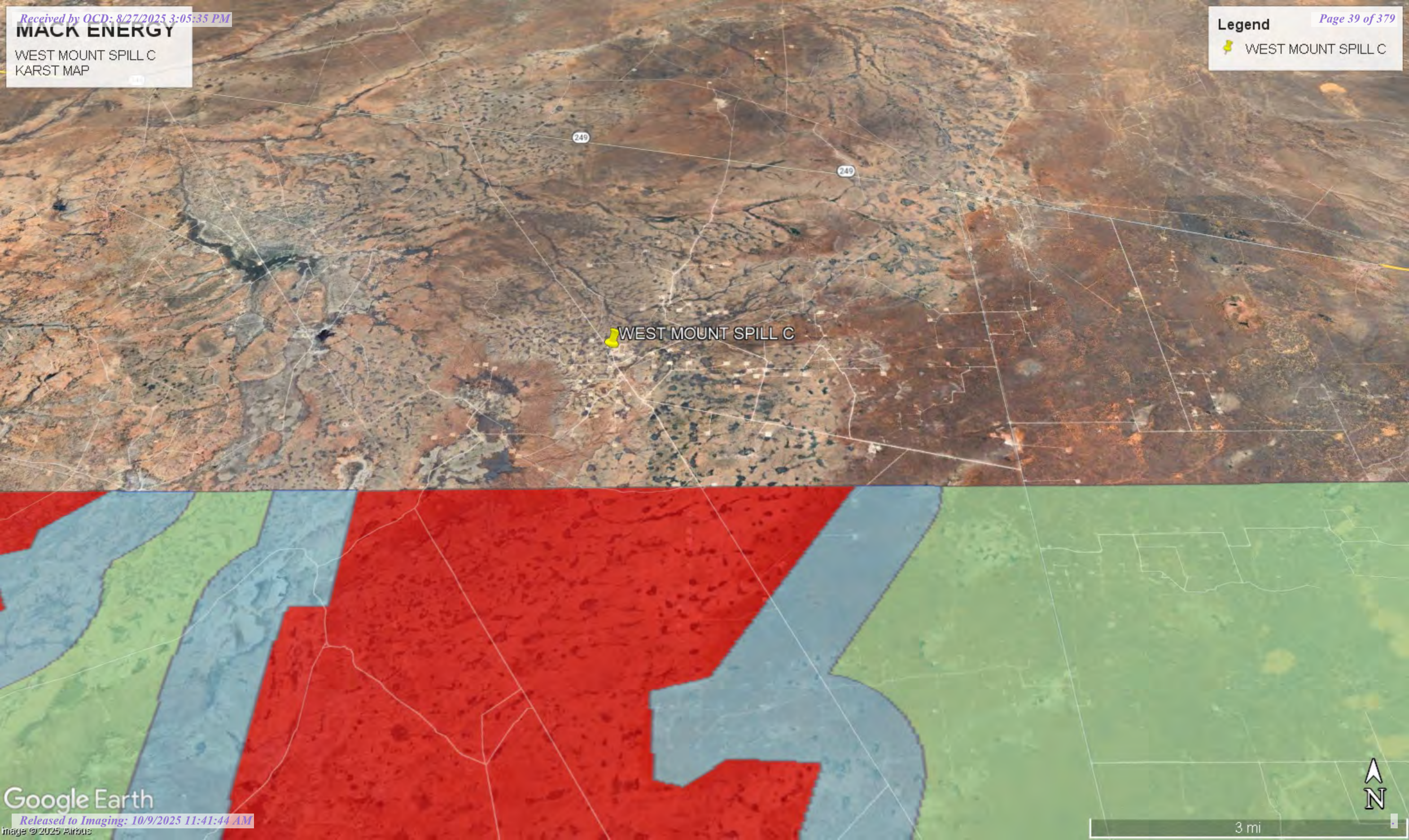
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

MACK ENERGY

WEST MOUNT SPILL C
KARST MAP

Legend

 WEST MOUNT SPILL C



MACK ENERGY

WEST MOUNT SPILL C
WETLANDS MAP

Legend


- PEM
- RIVERINE
- WEST MOUNT SPILL C



MACK ENERGY

WEST MOUNT SPILL C
WATERCOURSE MAP

Legend

 WEST MOUNT SPILL C

 WEST MOUNT SPILL C

Google Earth



1 mi



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No report data available.

UTM Filters (in meters):

Easting: 586701.071

Northing: 3651500.652

Radius: 1000

* UTM location was derived from PLSS - see Help

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



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No report data available.

UTM Filters (in meters):

Easting: 586701.071

Northing: 3651500.652

Radius: 5000

* UTM location was derived from PLSS - see Help

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



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

(quarters are smallest to largest)

(meters)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
RA 12428		RA	CH	SE	NE	NW	21	15S	28E	580579.1	3652317.4		6176	170	125	45
RA 12429 POD1		RA	CH	NW	NW	SE	32	15S	28E	579092.6	3648401.3		8215	62	27	35
RA 10280	O	RA	CH	SE	SW	SW	17	15S	28E	578501.0	3652680.0 *		8284	70	40	30
RA 09248		RA	CH	SE	NW	SW	17	15S	28E	578482.5	3653143.9		8381	145	45	100
RA 09059	O	RA	CH	NE	SE	SE	18	15S	28E	578099.0	3652875.0 *		8711	110	35	75
L 14514 POD1		L	LE	NE	NE	NW	32	15S	36E	595493.7	3649622.7		8990	208	77	131

Average Depth to Water: 58 feet

Minimum Depth: 27 feet

Maximum Depth: 125 feet

Record Count: 6

UTM Filters (in meters):

Easting: 586701.071

Northing: 3651500.652

Radius: 10000


* UTM location was derived from PLSS - see Help

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

Point of Diversion Summary

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

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
	RA 12428	SE	NE	NW	21	15S	28E	580579.1	3652317.4	

* UTM location was derived from PLSS - see Help

Driller License:	1058	Driller Company:	KEY'S DRILLING & PUMP SERVICE		
Driller Name:	DONALD KUEHN III				
Drill Start Date:	2016-07-28	Drill Finish Date:	2016-08-04	Plug Date:	
Log File Date:	2016-08-08	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	15
Casing Size:	4.50	Depth Well:	170	Depth Water:	125

Water Bearing Stratifications:

Top	Bottom	Description
125	140	Sandstone/Gravel/Conglomerate
140	160	Sandstone/Gravel/Conglomerate
160	170	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
125	170

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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 12429 POD1	NW	NW	SE	32	15S	28E	579092.6	3648401.3	

* UTM location was derived from PLSS - see Help

Driller License:	1044	Driller Company:	EADES WELL DRILLING & PUMP SERVICE		
Driller Name:	EADES, ALAN				
Drill Start Date:	2016-11-17	Drill Finish Date:	2016-11-17		Plug Date:
Log File Date:	2016-11-28	PCW Rcv Date:			Source: Shallow
Pump Type:	Pipe Discharge Size:		Estimated Yield:		
Casing Size:	5.13	Depth Well:	62	Depth Water:	27

Water Bearing Stratifications:

Top	Bottom	Description
27	33	Sandstone/Gravel/Conglomerate
33	62	Sandstone/Gravel/Conglomerate

Casing Perforations:


Top	Bottom
22	62

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Point of Diversion Summary

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

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
	RA 10280	SE	SW	SW	17	15S	28E	578501.0	3652680.0 *	

* UTM location was derived from PLSS - see Help

Driller License:	1490	Driller Company:	FERNANDO'S WATER WELL		
Driller Name:	CARREON, FERNANDO				
Drill Start Date:	2002-06-20	Drill Finish Date:	2002-07-15	Plug Date:	
Log File Date:	2003-04-23	PCW Rcv Date:		Source:	Shallow
Pump Type:	SUBMER	Pipe Discharge Size:	1.25	Estimated Yield:	10
Casing Size:	5.00	Depth Well:	70	Depth Water:	40

Water Bearing Stratifications:

Top	Bottom	Description
1	70	Sandstone/Gravel/Conglomerate

Casing Perforations:


Top	Bottom
40	70

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Point of Diversion Summary

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

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
NA	RA 09248	SE	NW	SW	17	15S	28E	578482.5	3653143.9	

* UTM location was derived from PLSS - see Help

Driller License:	1344	Driller Company:	ANDERSON, RAYMOND		
Driller Name:	RAYMOND ANDERSON				
Drill Start Date:	1996-07-10	Drill Finish Date:	1996-07-13	Plug Date:	
Log File Date:	1996-07-25	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	2
Casing Size:	4.50	Depth Well:	145	Depth Water:	45

Water Bearing Stratifications:

Top	Bottom	Description
50	60	Sandstone/Gravel/Conglomerate

Casing Perforations:


Top	Bottom
45	100

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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 09059	NE	SE	SE	18	15S	28E	578099.0	3652875.0 *	

* UTM location was derived from PLSS - see Help

Driller License:	1344	Driller Company:	ANDERSON, RAYMOND		
Driller Name:	RAYMOND ANDERSON				
Drill Start Date:	1995-11-13	Drill Finish Date:	1996-01-15	Plug Date:	
Log File Date:	1997-02-08	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:	4.50	Depth Well:	110	Depth Water:	35

Water Bearing Stratifications:

Top	Bottom	Description
60	65	Sandstone/Gravel/Conglomerate

Casing Perforations:


Top	Bottom
30	90

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Point of Diversion Summary

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

NAD83 UTM in meters

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

* UTM location was derived from PLSS - see Help

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:


Depth Water:

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

Point of Diversion Summary

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

NAD83 UTM in meters

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

* UTM location was derived from PLSS - see Help

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

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

MACK ENERGY

WEST MOUNT SPILL C
GROUNDWATER MAP

Legend

- RA09059- 8,711 M- 35 DGW
- RA09248- 8,381 M- 45 DGW
- RA10280- 8,284 M- 40 DGW
- RA12006 POD1- NO DGW INFO
- RA12007 POD1- NO DGW INFO
- RA12428- 6,176 M- 125 DGW
- RA12429 POD1- 8,215 M- 27 DGW
- WEST MOUNT SPILL C

RA09248- 8,381 M- 45 DGW

RA09059- 8,711 M- 35 DGW

RA10280- 8,284 M- 40 DGW

RA12428- 6,176 M- 125 DGW

RA12006 POD1- NO DGW INFO

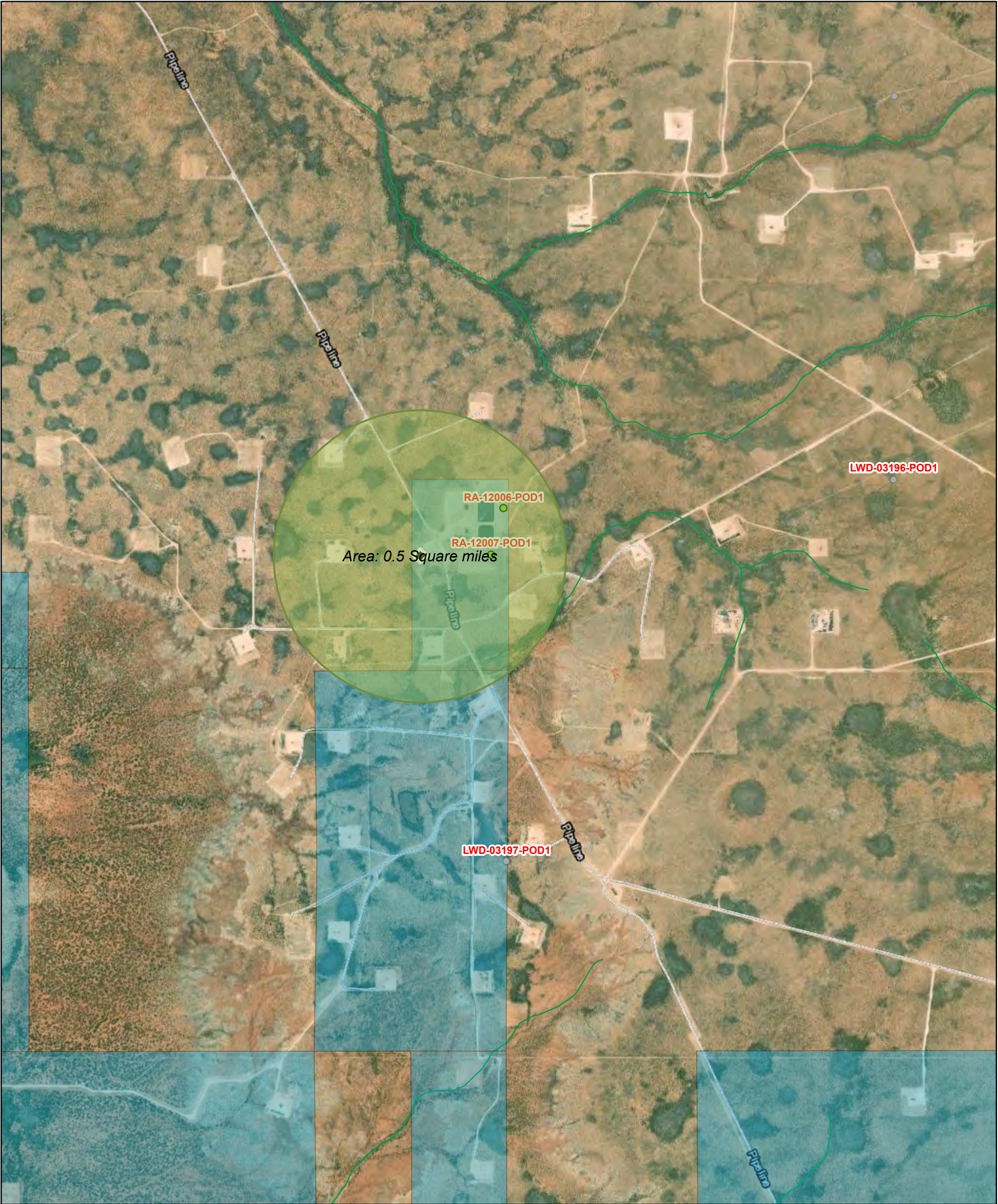
WEST MOUNT SPILL C

RA12007 POD1- NO DGW INFO

RA12429 POD1- 8,215 M- 27 DGW



OSE POD Location Map



2/19/2025, 10:28:18 AM

Override 1

GIS WATERS PODs

Pending

OSE District Boundary

New Mexico State Trust Lands

Both Estates

NHD Flowlines

Artificial Path

Stream River

1:18,056

00.170.350.7 mi

00.280.551.1 km

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

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

Release Date:

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Soil	Notes
SP1	SURF	320	L	ND	ND	ND	ND	ND	331		
	2	160									
	4	320									
	6	320	L	ND	ND	ND	ND	ND	254		
SP2	SURF	1440	L	ND	ND	ND	ND	ND	2030		
	2	240									
	4	480									
	6	400	L	ND	ND	ND	ND	ND	497		
SP3	SURF	2720	L	ND	ND	ND	ND	ND	2630		
	2	640									
	4	640									
	6	400									
	8	400	L	ND	ND	ND	ND	ND	311		
SP4	SURF	1760	L	ND	ND	ND	ND	ND	2060		
	2	240									
	4	400									
	6	320	L	ND	ND	ND	ND	ND	225		
SP5	SURF	>4000	L	ND	ND	ND	ND	ND	19600		
	2	80									
	4	560									
	6	320	L	ND	ND	ND	ND	ND	332		
SP6	SURF	>4000	L	ND	ND	ND	ND	ND	7210		
	2	240									
	4	400									
	6	320	L	ND	ND	ND	ND	ND	229		

SP7	SURF	480	L	ND	ND	ND	ND	ND	832		
	2	320									
	4	480									
	6	320	L	ND	ND	ND	ND	ND	304		
SP8	SURF	2080	L	ND	ND	ND	ND	ND	3480		
	2	400									
	4	640									
	6	400									
	8	480									
	10	480	L	ND	ND	ND	ND	ND	404		
SP9	SURF	3280	L	ND	ND	ND	ND	ND	3410		
	2	400									
	4	480									
	6	400	L	ND	ND	ND	ND	ND	287		
SP10	SURF	1440	L	ND	ND	ND	ND	ND	3990		
	2	160									
	4	400									
	6	320	L	ND	ND	ND	ND	ND	342		
SP11	SURF	3680	L	ND	ND	30.5	63	93.5	1590		
	2	160									
	4	240									
	6	240	L	ND	ND	ND	ND	ND	51.1		
SP12	SURF	160	L	ND	ND	ND	94	94	25.2		
	2	160									
	4	240									
	6	240	L	ND	ND	ND	ND	ND	25.8		
SP13	SURF	1120	H	ND	ND	53.5	194	247.5	1240		
	2	2240									

	4	400									
	6	240									
	8	240									
	10	160									
	12	160	L	ND	ND	ND	ND	ND	22		
SP14	SURF	160	H	ND	ND	34.5	207	241.5	62.2		
	2	1040									
	4	320									
	6	160	L	ND	ND	ND	ND	ND	ND		
SW1	SURF	320	L	ND	ND	ND	ND	ND	252		
	1	640									
	2	240									
	3	160	L	ND	ND	ND	ND	ND	31.3		
SW2	SURF	2400	L	ND	ND	ND	ND	ND	1590		
	1	720									
	2	320									
	3	160	L	ND	ND	ND	ND	ND	36.6		
SW3	SURF	>4000	L	ND	ND	ND	ND	ND	4090		
	1	640									
	2	240									
	3	240	L	ND	ND	ND	ND	ND	147		
SW4	SURF	>4000	L	ND	ND	ND	ND	ND	8800		
	1	560									
	2	240									
	3	240	L	ND	ND	ND	ND	ND	228		
SW5	SURF	3200	L	ND	ND	ND	ND	ND	4680		
	1	720									
	2	160									

	3	160	L	ND	ND	ND	ND	ND	76.1		
SW6	SURF	3520	L	ND	ND	ND	ND	ND	2120		
	1	1040									
	2	1200									
	3	1280									
	4	880									
	5	240									
	6	160	L	ND	ND	ND	ND	ND	63.8		
SW7	SURF	>4000	L	ND	ND	ND	ND	ND	878		
	1	>4000									
	2	2320									
	3	1120									
	4	640									
	5	320									
	6	160	L	ND	ND	ND	ND	ND	52.6		
SW8	SURF	800	L	ND	ND	ND	ND	ND	10400		
	1	640									
	2	320									
	3	240	L	ND	ND	ND	ND	ND	88.1		
SW9	SURF	240	L	ND	ND	ND	ND	ND	ND		
	1	880									
	2	240									
	3	240	L	ND	ND	ND	ND	ND	119		
SW10	SURF	2800	L	ND	ND	ND	ND	ND	4300		
	1	640									
	2	240									
	3	160	L	ND	ND	ND	ND	ND	ND		
SW11	SURF	1440	L	ND	ND	ND	ND	ND	1400		

	1	720									
	2	320									
	3	160	L	ND	ND	ND	ND	ND	102		
SW12	SURF	640	L	ND	ND	ND	ND	ND	534		
	1	560									
	2	240									
	3	240	L	ND	ND	ND	ND	ND	ND		
SW13	SURF	160	L	ND	ND	ND	ND	ND	72.5		
	1	720									
	2	320									
	3	240	L	ND	ND	ND	ND	ND	ND		
SW14	SURF	>4000	L	ND	ND	ND	ND	ND	5160		
	1	960									
	2	400									
	3	160	L	ND	ND	ND	ND	ND	68.2		
SW15	SURF	>4000	L	ND	ND	ND	ND	ND	13400		
	1	960									
	2	640									
	3	480									
	4	1760									
	5	720									
	6	720									
	7	320									
	8	160	L	ND	ND	ND	ND	ND	103		
SW16	SURF	320	L	ND	ND	ND	ND	ND	82.6		
	1	800									
	2	240									
	3	160	L	ND	ND	ND	ND	ND	ND		

SW17	SURF	160	L	ND	ND	ND	ND	ND	ND		
	1	640									
	2	160									
	3	160	L	ND	ND	ND	ND	ND	106		
SW18	SURF	>4000	H	ND	ND	28.2	88	116.2	7060		
	1	880									
	2	320									
	3	160	L	ND	ND	ND	ND	ND	74.3		
SW19	SURF	>4000	L	ND	ND	ND	ND	ND	18100		
	1	800									
	2	1040									
	3	640									
	4	640									
	5	320									
	6	160	L	ND	ND	ND	ND	ND	66.4		

MACK ENERGY

WEST MOUNT SPILL C
DELINEATION MAP

Legend

- HORIZONTAL SAMPLE POINTS
- VERTICAL SAMPLE POINTS
- █ WEST MOUNT SPILL C



COMPANY: MACK ENERGY**LOCATION: WEST MOUNT SPILL C**

POINT	LATITUDE	LONGITUDE
SP1	32.998632°	-104.072039°
SP2	32.998564°	-104.071996°
SP3	32.998493°	-104.071946°
SP4	32.998428°	-104.071914°
SP5	32.998403°	-104.071856°
SP6	32.998342°	-104.071853°
SP7	32.998263°	-104.071819°
SP8	32.998176°	-104.071775°
SP9	32.998124°	-104.071731°
SP10	32.998109°	-104.071665°
SP11	32.998065°	-104.071693°
SP12	32.998048°	-104.071646°
SP13	32.998010°	-104.071687°
SP14	32.997947°	-104.071726°
SW1	32.998756°	-104.072121°
SW2	32.998603°	-104.072050°
SW3	32.998606°	-104.071992°
SW4	32.998491°	-104.071978°
SW5	32.998494°	-104.071895°
SW6	32.998397°	-104.071912°
SW7	32.998414°	-104.071835°
SW8	32.998322°	-104.071856°
SW9	32.998317°	-104.071825°
SW10	32.998244°	-104.071828°
SW11	32.998235°	-104.071796°
SW12	32.998125°	-104.071772°
SW13	32.998150°	-104.071734°
SW14	32.998058°	-104.071709°
SW15	32.998126°	-104.071654°
SW16	32.998038°	-104.071636°
SW17	32.997985°	-104.071703°
SW18	32.997975°	-104.071721°
SW19	32.997924°	-104.071749°

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: Frac Line Spill C.

Work Order: E311125

Job Number: 20046-0001

Received: 11/16/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/17/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 11/17/23

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: Frac Line Spill C.
Workorder: E311125
Date Received: 11/16/2023 9:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill C. Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/23 17:20
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1-SURF	E311125-01A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP2-SURF	E311125-02A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP3-SURF	E311125-03A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP4-SURF	E311125-04A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP5-SURF	E311125-05A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP6-SURF	E311125-06A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP7-SURF	E311125-07A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP8-SURF	E311125-08A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP9-SURF	E311125-09A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP10-SURF	E311125-10A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP11-SURF	E311125-11A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP12-SURF	E311125-12A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP13-SURF	E311125-13A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SP14-SURF	E311125-14A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill C. Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/2023 5:20:52PM
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SP1-SURF

E311125-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.6 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	89.9 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346076	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>	101 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346086	
Chloride	331	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP2-SURF

E311125-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.6 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.3 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	99.3 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	2030	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported: 11/17/2023 5:20:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP3-SURF

E311125-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.9 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	89.5 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346076	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>	91.5 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346086	
Chloride	2630	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP4-SURF

E311125-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.9 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.2 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	2060	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP5-SURF

E311125-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.7 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.7 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>						
	86.6 %	50-200		11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	19600	400	20	11/16/23	11/16/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported: 11/17/2023 5:20:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP6-SURF

E311125-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	96.3 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	90.0 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346076	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>	93.0 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346086	
Chloride	7210	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported: 11/17/2023 5:20:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP7-SURF

E311125-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	96.5 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	90.2 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346076	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>	99.3 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346086	
Chloride	832	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported: 11/17/2023 5:20:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP8-SURF

E311125-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	97.6 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	91.5 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346076	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>	91.0 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346086	
Chloride	3480	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP9-SURF

E311125-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.9 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.2 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	90.8 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	3410	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP10-SURF

E311125-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.7 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	93.5 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	3990	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP11-SURF

E311125-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
Surrogate: 4-Bromochlorobenzene-PID	95.4 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	89.3 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	30.5	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	63.0	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane	95.6 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	1590	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported: 11/17/2023 5:20:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP12-SURF

E311125-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.0 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346081	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	90.5 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346076	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	94.4	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>	99.5 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346086	
Chloride	25.2	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP13-SURF

E311125-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.8 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.3 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	53.5	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	194	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	95.5 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	1240	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 5:20:52PM

SP14-SURF

E311125-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.2 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346081
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.7 %	70-130		11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346076
Diesel Range Organics (C10-C28)	34.5	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	207	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>						
	97.8 %	50-200		11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346086
Chloride	62.2	20.0	1	11/16/23	11/16/23	



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:20:52PM

Volatile Organics by EPA 8021B

Analyst: RAS

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

Blank (2346081-BLK1) Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.79		8.00		97.4	70-130			

LCS (2346081-BS1) Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	4.80	0.0250	5.00		96.0	70-130			
Ethylbenzene	4.64	0.0250	5.00		92.9	70-130			
Toluene	4.82	0.0250	5.00		96.4	70-130			
o-Xylene	4.77	0.0250	5.00		95.5	70-130			
p,m-Xylene	9.62	0.0500	10.0		96.2	70-130			
Total Xylenes	14.4	0.0250	15.0		95.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.86		8.00		98.2	70-130			

Matrix Spike (2346081-MS1) Source: E311125-04 Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	5.04	0.0250	5.00	ND	101	54-133			
Ethylbenzene	4.87	0.0250	5.00	ND	97.5	61-133			
Toluene	5.05	0.0250	5.00	ND	101	61-130			
o-Xylene	5.00	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	100	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.81		8.00		97.6	70-130			

Matrix Spike Dup (2346081-MSD1) Source: E311125-04 Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	5.18	0.0250	5.00	ND	104	54-133	2.62	20	
Ethylbenzene	5.00	0.0250	5.00	ND	99.9	61-133	2.50	20	
Toluene	5.19	0.0250	5.00	ND	104	61-130	2.57	20	
o-Xylene	5.12	0.0250	5.00	ND	102	63-131	2.44	20	
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131	2.56	20	
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131	2.52	20	
Surrogate: 4-Bromochlorobenzene-PID	7.82		8.00		97.8	70-130			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:20:52PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2346081-BLK1) Prepared: 11/16/23 Analyzed: 11/16/23

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

LCS (2346081-BS2) Prepared: 11/16/23 Analyzed: 11/16/23

Gasoline Range Organics (C6-C10)	43.0	20.0	50.0		86.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.31		8.00		91.4	70-130			

Matrix Spike (2346081-MS2) Source: E311125-04 Prepared: 11/16/23 Analyzed: 11/16/23

Gasoline Range Organics (C6-C10)	44.4	20.0	50.0	ND	88.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.34		8.00		91.8	70-130			

Matrix Spike Dup (2346081-MSD2) Source: E311125-04 Prepared: 11/16/23 Analyzed: 11/16/23

Gasoline Range Organics (C6-C10)	44.0	20.0	50.0	ND	88.0	70-130	0.928	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.36		8.00		92.0	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill C. Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/2023 5:20:52PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2346076-BLK1)

Prepared: 11/16/23 Analyzed: 11/16/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.3		50.0		107	50-200			

LCS (2346076-BS1)

Prepared: 11/16/23 Analyzed: 11/16/23

Diesel Range Organics (C10-C28)	287	25.0	250		115	38-132			
Surrogate: n-Nonane	58.2		50.0		116	50-200			

Matrix Spike (2346076-MS1)

Source: E311101-03

Prepared: 11/16/23 Analyzed: 11/16/23

Diesel Range Organics (C10-C28)	262	25.0	250	ND	105	38-132			
Surrogate: n-Nonane	52.9		50.0		106	50-200			

Matrix Spike Dup (2346076-MSD1)

Source: E311101-03

Prepared: 11/16/23 Analyzed: 11/16/23

Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	2.21	20	
Surrogate: n-Nonane	53.0		50.0		106	50-200			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 5:20:52PM

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 (2346086-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	ND	20.0							
LCS (2346086-BS1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	247	20.0	250		98.6	90-110			
Matrix Spike (2346086-MS1)					Source: E311125-08		Prepared: 11/16/23 Analyzed: 11/16/23		
Chloride	3560	40.0	250	3480	34.5	80-120			M4
Matrix Spike Dup (2346086-MSD1)					Source: E311125-08		Prepared: 11/16/23 Analyzed: 11/16/23		
Chloride	3560	40.0	250	3480	34.9	80-120	0.0306	20	M4

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



Definitions and Notes

Mack Energy	Project Name:	Frac Line Spill C.	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/23 17:20

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

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

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



Project Information

Chain of Custody

Page 1 of 2

Client: <u>Mack Energy</u> Project: <u>Leak Line Spill</u> Project Manager: <u>Natalie Gadden</u> Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Report due by: _____				Bill To Attention: ENERGY STAFFING SERVICES Address: 2724 NW COUNTY RD City, State, Zip: HOBBS, NM 88240 Phone: 575-393-9048 Email: NATALIE@ENERGYSTAFFINGLLC.COM BRITTNEY@ENERGYSTAFFINGLLC.COM				Lab Use Only Lab WO# <u>E311125</u> Job Number <u>200460001</u> Analysis and Method				TAT 1D <input checked="" type="checkbox"/> 2D <input type="checkbox"/> 3D <input type="checkbox"/> Standard <input type="checkbox"/>				EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
								State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>									
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks			
	11/14/23	S	1	SP1 - Surf	1												
				SP2 - Surf	2												
				SP3 - Surf	3												
				SP4 - Surf	4												
				SP5 - Surf	5												
				SP6 - Surf	6												
				SP7 - Surf	7												
				SP8 - Surf	8												
				SP9 - Surf	9												
	11/14/23	S	1	SP10 - Surf	10												
Additional Instructions: I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: <u>Joe K. Shantz</u> Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.																	
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N					
<u>Joe K. Shantz</u>		11/14/23		1730		<u>Michelle Eyle</u>		11-15-23		1430		T1 _____ T2 _____ T3 _____					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>					
<u>Michelle Eyle</u>		11-15-23		1730		<u>Michelle Eyle</u>		11-16-23		900							
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time							
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA							
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																	



Envirotech Analytical Laboratory

Printed: 11/16/2023 10:47:04AM

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:	11/16/23 09:00	Work Order ID:	E311125
Phone:	(575) 390-6397	Date Logged In:	11/15/23 15:25	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/17/23 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: Courier**Comments/Resolution**

Time sampled not provided on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: Frac Line Spill C.

Work Order: E311128

Job Number: 20046-0001

Received: 11/16/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/17/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 11/17/23



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: Frac Line Spill C.
Workorder: E311128
Date Received: 11/16/2023 9:00:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill C. Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/23 15:32
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1-SURFACE	E311128-01A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW2-SURFACE	E311128-02A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW3-SURFACE	E311128-03A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW4-SURFACE	E311128-04A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW5-SURFACE	E311128-05A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW6-SURFACE	E311128-06A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW7-SURFACE	E311128-07A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW8-SURFACE	E311128-08A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW9-SURFACE	E311128-09A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW10-SURFACE	E311128-10A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW11-SURFACE	E311128-11A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW12-SURFACE	E311128-12A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW13-SURFACE	E311128-13A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW14-SURFACE	E311128-14A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW15-SURFACE	E311128-15A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW16-SURFACE	E311128-16A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW17-SURFACE	E311128-17A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW18-SURFACE	E311128-18A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.
SW19-SURFACE	E311128-19A	Soil	11/14/23	11/16/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: Frac Line Spill C. Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 11/17/2023 3:32:22PM
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SW1-SURFACE

E311128-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
<i>Surrogate: Bromofluorobenzene</i>		109 %	70-130	11/16/23	11/16/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.2 %	70-130	11/16/23	11/16/23	
<i>Surrogate: Toluene-d8</i>		99.3 %	70-130	11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
<i>Surrogate: Bromofluorobenzene</i>		109 %	70-130	11/16/23	11/16/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.2 %	70-130	11/16/23	11/16/23	
<i>Surrogate: Toluene-d8</i>		99.3 %	70-130	11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
<i>Surrogate: n-Nonane</i>		102 %	50-200	11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	252	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW2-SURFACE

E311128-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/16/23	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130	11/16/23	11/16/23	
Surrogate: Toluene-d8		97.5 %	70-130	11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/16/23	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130	11/16/23	11/16/23	
Surrogate: Toluene-d8		97.5 %	70-130	11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
Surrogate: n-Nonane		99.6 %	50-200	11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	1590	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW3-SURFACE

E311128-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/16/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/16/23	
Toluene	ND	0.0250	1	11/16/23	11/16/23	
o-Xylene	ND	0.0250	1	11/16/23	11/16/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/16/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/16/23	
Surrogate: Bromofluorobenzene		109 %	70-130	11/16/23	11/16/23	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	11/16/23	11/16/23	
Surrogate: Toluene-d8		98.8 %	70-130	11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/16/23	
Surrogate: Bromofluorobenzene		109 %	70-130	11/16/23	11/16/23	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	11/16/23	11/16/23	
Surrogate: Toluene-d8		98.8 %	70-130	11/16/23	11/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
Surrogate: n-Nonane		100 %	50-200	11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	4090	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW4-SURFACE

E311128-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		98.0 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		98.0 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
Surrogate: n-Nonane		88.4 %	50-200	11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	8800	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW5-SURFACE

E311128-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.4 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.1 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.4 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.1 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
Surrogate: n-Nonane		109 %	50-200	11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	4680	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported: 11/17/2023 3:32:22PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW6-SURFACE

E311128-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.3 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.3 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
Surrogate: n-Nonane		105 %	50-200	11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	2120	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW7-SURFACE

E311128-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.6 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.0 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		99.6 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.0 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/16/23	
Surrogate: n-Nonane		101 %	50-200	11/16/23	11/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	878	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW8-SURFACE

E311128-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		98.7 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		98.7 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		101 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	10400	200	10	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW9-SURFACE

E311128-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.9 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.9 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		103 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	ND	20.0	1	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW10-SURFACE

E311128-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		90.0 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.9 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		90.0 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.9 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		92.8 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	4300	40.0	2	11/16/23	11/16/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW11-SURFACE

E311128-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.4 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.4 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		104 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	1400	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW12-SURFACE

E311128-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.6 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		108 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.6 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		111 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	534	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW13-SURFACE

E311128-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		110 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.7 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.4 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		110 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		94.7 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.4 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		104 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	72.5	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW14-SURFACE

E311128-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.3 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.3 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		86.4 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	5160	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported: 11/17/2023 3:32:22PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW15-SURFACE

E311128-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS		Batch: 2346084	
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
<i>Surrogate: Bromofluorobenzene</i>		109 %	70-130	11/16/23	11/17/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.6 %	70-130	11/16/23	11/17/23	
<i>Surrogate: Toluene-d8</i>		96.7 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2346084	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
<i>Surrogate: Bromofluorobenzene</i>		109 %	70-130	11/16/23	11/17/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.6 %	70-130	11/16/23	11/17/23	
<i>Surrogate: Toluene-d8</i>		96.7 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2346079	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
<i>Surrogate: n-Nonane</i>		101 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2346089	
Chloride	13400	400	20	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW16-SURFACE

E311128-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.7 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.7 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		108 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	82.6	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW17-SURFACE

E311128-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		91.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.3 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		91.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		97.3 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		109 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	ND	20.0	1	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW18-SURFACE

E311128-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		109 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		92.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		98.6 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		109 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		92.5 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		98.6 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	28.2	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	88.0	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		106 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	7060	200	10	11/16/23	11/17/23	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
11/17/2023 3:32:22PM

SW19-SURFACE

E311128-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Benzene	ND	0.0250	1	11/16/23	11/17/23	
Ethylbenzene	ND	0.0250	1	11/16/23	11/17/23	
Toluene	ND	0.0250	1	11/16/23	11/17/23	
o-Xylene	ND	0.0250	1	11/16/23	11/17/23	
p,m-Xylene	ND	0.0500	1	11/16/23	11/17/23	
Total Xylenes	ND	0.0250	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.5 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2346084
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/16/23	11/17/23	
Surrogate: Bromofluorobenzene		107 %	70-130	11/16/23	11/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	11/16/23	11/17/23	
Surrogate: Toluene-d8		96.5 %	70-130	11/16/23	11/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2346079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/16/23	11/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/16/23	11/17/23	
Surrogate: n-Nonane		101 %	50-200	11/16/23	11/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2346089
Chloride	18100	200	10	11/16/23	11/17/23	



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 3:32:22PM

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 (2346084-BLK1)

Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.488		0.500		97.5	70-130			

LCS (2346084-BS1)

Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	2.74	0.0250	2.50		110	70-130			
Ethylbenzene	2.62	0.0250	2.50		105	70-130			
Toluene	2.53	0.0250	2.50		101	70-130			
o-Xylene	2.67	0.0250	2.50		107	70-130			
p,m-Xylene	5.24	0.0500	5.00		105	70-130			
Total Xylenes	7.92	0.0250	7.50		106	70-130			
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.491		0.500		98.1	70-130			

Matrix Spike (2346084-MS1)

Source: E311128-01

Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	2.59	0.0250	2.50	ND	104	48-131			
Ethylbenzene	2.43	0.0250	2.50	ND	97.3	45-135			
Toluene	2.34	0.0250	2.50	ND	93.8	48-130			
o-Xylene	2.46	0.0250	2.50	ND	98.3	43-135			
p,m-Xylene	4.84	0.0500	5.00	ND	96.8	43-135			
Total Xylenes	7.30	0.0250	7.50	ND	97.3	43-135			
Surrogate: Bromofluorobenzene	0.539		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

Matrix Spike Dup (2346084-MSD1)

Source: E311128-01

Prepared: 11/16/23 Analyzed: 11/16/23

Benzene	2.51	0.0250	2.50	ND	101	48-131	2.94	23	
Ethylbenzene	2.42	0.0250	2.50	ND	96.7	45-135	0.639	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	0.749	24	
o-Xylene	2.52	0.0250	2.50	ND	101	43-135	2.67	27	
p,m-Xylene	4.93	0.0500	5.00	ND	98.6	43-135	1.87	27	
Total Xylenes	7.46	0.0250	7.50	ND	99.4	43-135	2.14	27	
Surrogate: Bromofluorobenzene	0.553		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.482		0.500		96.3	70-130			
Surrogate: Toluene-d8	0.487		0.500		97.3	70-130			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 3:32:22PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2346084-BLK1)

Prepared: 11/16/23 Analyzed: 11/16/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.488		0.500		97.5	70-130			

LCS (2346084-BS2)

Prepared: 11/16/23 Analyzed: 11/16/23

Gasoline Range Organics (C6-C10)	47.2	20.0	50.0		94.5	70-130			
Surrogate: Bromofluorobenzene	0.553		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.1	70-130			

Matrix Spike (2346084-MS2)

Source: E311128-01

Prepared: 11/16/23 Analyzed: 11/16/23

Gasoline Range Organics (C6-C10)	51.0	20.0	50.0	ND	102	70-130			
Surrogate: Bromofluorobenzene	0.555		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.469		0.500		93.8	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			

Matrix Spike Dup (2346084-MSD2)

Source: E311128-01

Prepared: 11/16/23 Analyzed: 11/16/23

Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.5	70-130	9.86	20	
Surrogate: Bromofluorobenzene	0.545		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.2	70-130			
Surrogate: Toluene-d8	0.497		0.500		99.4	70-130			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 3:32:22PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2346079-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.3		50.0		109	50-200			

LCS (2346079-BS1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Diesel Range Organics (C10-C28)	300	25.0	250		120	38-132			
Surrogate: n-Nonane	59.0		50.0		118	50-200			

Matrix Spike (2346079-MS1)					Source: E311128-03		Prepared: 11/16/23 Analyzed: 11/16/23		
Diesel Range Organics (C10-C28)	308	25.0	250	ND	123	38-132			
Surrogate: n-Nonane	59.9		50.0		120	50-200			

Matrix Spike Dup (2346079-MSD1)					Source: E311128-03		Prepared: 11/16/23 Analyzed: 11/16/23		
Diesel Range Organics (C10-C28)	301	25.0	250	ND	120	38-132	2.50	20	
Surrogate: n-Nonane	56.8		50.0		114	50-200			



QC Summary Data

Mack Energy	Project Name:	Frac Line Spill C.	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/2023 3:32:22PM

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 (2346089-BLK1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	ND	20.0							
LCS (2346089-BS1)					Prepared: 11/16/23 Analyzed: 11/16/23				
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2346089-MS1)					Source: E311128-03		Prepared: 11/16/23 Analyzed: 11/17/23		
Chloride	4230	20.0	250	4090	54.5	80-120			M4
Matrix Spike Dup (2346089-MSD1)					Source: E311128-03		Prepared: 11/16/23 Analyzed: 11/17/23		
Chloride	4250	20.0	250	4090	64.5	80-120	0.587	20	M4

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



Definitions and Notes

Mack Energy	Project Name:	Frac Line Spill C.	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	11/17/23 15:32

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

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

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





Project Information

Chain of Custody

Page 2 of 2

Client: <u>Macle Energy</u>					Bill To					Lab Use Only					TAT				EPA Program																											
Project: <u>Frac Line Spill # C</u>					Attention: ENERGY STAFFING SERVICES					Lab WO# <u>E311128</u>					Job Number <u>200460001</u>				1D	2D	3D	Standard	CWA	SDWA																						
Project Manager: <u>Natalie Gadden</u>					Address: 2724 NW COUNTY RD					Analysis and Method									RCRA																											
Address:					City, State, Zip <u>HOBBS, NM 88240</u>																																									
City, State, Zip					Phone: 575-393-9048					DRO/ORO by 8015					GRO/DRO by 8015				BTEX by 8021				VOC by 8260				Metals 6010				Chloride 300.0				BGDOC NM				BGDOC TX				State			
Phone:					Email: NATALIE@ENERGYSTAFFINGLLC.COM																																									
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM					NM					CO				UT				AZ				TX																			
Report due by:																																														
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Remarks																																								
	11/14/23	S	1	SW11 - surface	11																																									
				SW12 - surface	12																																									
				SW13 - surface	13																																									
				SW14 - surface	14																																									
				SW15 - surface	15																																									
				SW16 - surface	16																																									
				SW17 - surface	17																																									
				SW18 - surface	18																																									
	11/14/23	S	1	SW19 - surface	19																																									
Additional Instructions:																																														
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.																																				
Relinquished by: (Signature) <u>Andy Toruga</u>					Date <u>11-15-23</u> Time <u>1430</u>					Received on ice: <u>Y</u> N																																				
Relinquished by: (Signature) <u>Natalie Gadden</u>					Date <u>11-15-23</u> Time <u>1730</u>					T1 _____ T2 _____ T3 _____																																				
Relinquished by: (Signature) _____					Date _____ Time _____					AVG Temp °C <u>4</u>																																				
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																																				
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																																														

Envirotech Analytical Laboratory

Printed: 11/16/2023 10:48:28AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	11/16/23 09:00	Work Order ID:	E311128
Phone:	(575) 390-6397	Date Logged In:	11/15/23 15:35	Logged In By:	Jordan Montano
Email:	Natalie@energystaffingllc.com	Due Date:	11/17/23 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: Courier**Comments/Resolution**

Time sampled not provided on COC by client.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill C

Work Order: E402183

Job Number: 20046-0001

Received: 2/21/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/22/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 2/22/24



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill C
Workorder: E402183
Date Received: 2/21/2024 5:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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Sample Summary

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/22/24 17:23

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 1-6'	E402183-01A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 2-6'	E402183-02A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 3-8'	E402183-03A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 4-6'	E402183-04A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 5-6'	E402183-05A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 6-6'	E402183-06A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 7-6'	E402183-07A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 8-10'	E402183-08A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.
SP 9-6'	E402183-09A	Soil	02/19/24	02/21/24	Glass Jar, 2 oz.

Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill C Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 2/22/2024 5:23:57PM
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SP 1-6'
E402183-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS		Batch: 2408049	
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		101 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.9 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS		Batch: 2408049	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		101 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.9 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2408048	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		88.0 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2408056	
Chloride	254	40.0	2	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 2-6'

E402183-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.5 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.5 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		90.9 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	497	40.0	2	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 3-8'

E402183-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.8 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		103 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		89.8 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		89.1 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	311	40.0	2	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 4-6'

E402183-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		102 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		86.1 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		102 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		86.1 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		84.2 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	225	20.0	1	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 5-6'

E402183-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		101 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		90.0 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		101 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		90.0 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		91.3 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	332	20.0	1	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 6-6'

E402183-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		100 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		96.0 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		100 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		96.0 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		88.1 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	229	20.0	1	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 7-6'

E402183-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		101 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		90.7 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		101 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		90.7 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		90.8 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	304	20.0	1	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 8-10'

E402183-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		102 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		84.6 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene		102 %	70-130	02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/21/24	02/21/24	
Surrogate: Toluene-d8		84.6 %	70-130	02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane		84.0 %	50-200	02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	404	40.0	2	02/21/24	02/21/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/22/2024 5:23:57PM

SP 9-6'

E402183-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Benzene	ND	0.0250	1	02/21/24	02/21/24	
Ethylbenzene	ND	0.0250	1	02/21/24	02/21/24	
Toluene	ND	0.0250	1	02/21/24	02/21/24	
o-Xylene	ND	0.0250	1	02/21/24	02/21/24	
p,m-Xylene	ND	0.0500	1	02/21/24	02/21/24	
Total Xylenes	ND	0.0250	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene	94.4 %	70-130		02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		02/21/24	02/21/24	
Surrogate: Toluene-d8	90.8 %	70-130		02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2408049
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/21/24	02/21/24	
Surrogate: Bromofluorobenzene	94.4 %	70-130		02/21/24	02/21/24	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		02/21/24	02/21/24	
Surrogate: Toluene-d8	90.8 %	70-130		02/21/24	02/21/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408048
Diesel Range Organics (C10-C28)	ND	25.0	1	02/21/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/21/24	02/22/24	
Surrogate: n-Nonane	86.8 %	50-200		02/21/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408056
Chloride	287	20.0	1	02/21/24	02/21/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:23:57PM

Volatile Organic Compounds by EPA 8260B

Analyst: RAS

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

Blank (2408049-BLK1) Prepared: 02/21/24 Analyzed: 02/21/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.512		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.448		0.500		89.6	70-130			

LCS (2408049-BS1) Prepared: 02/21/24 Analyzed: 02/21/24

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

Matrix Spike (2408049-MS1) Source: E402182-01 Prepared: 02/21/24 Analyzed: 02/21/24

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

Matrix Spike Dup (2408049-MSD1) Source: E402182-01 Prepared: 02/21/24 Analyzed: 02/21/24

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:23:57PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408049-BLK1)

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

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

LCS (2408049-BS2)

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

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

Matrix Spike (2408049-MS2)

Source: E402182-01

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

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

Matrix Spike Dup (2408049-MSD2)

Source: E402182-01

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:23:57PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408048-BLK1)					Prepared: 02/21/24 Analyzed: 02/21/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.8		50.0		91.5	50-200			

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/22/2024 5:23:57PM

Anions by EPA 300.0/9056A

Analyst: DT

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

Blank (2408056-BLK1)					Prepared: 02/21/24 Analyzed: 02/21/24				
Chloride	ND	20.0							
LCS (2408056-BS1)					Prepared: 02/21/24 Analyzed: 02/21/24				
Chloride	263	20.0	250		105	90-110			
Matrix Spike (2408056-MS1)					Source: E402177-03		Prepared: 02/21/24 Analyzed: 02/21/24		
Chloride	380	20.0	250	123	102	80-120			
Matrix Spike Dup (2408056-MSD1)					Source: E402177-03		Prepared: 02/21/24 Analyzed: 02/21/24		
Chloride	388	20.0	250	123	106	80-120	2.27	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 C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/22/24 17:23

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

Project Information

Chain of Custody

Client: <u>Rock Energy</u> Project: <u>West Mont Spill C</u> Project Manager: Address: City, State, Zip Phone: Email: Report due by:				Bill To Attention: <u>ENERGY STAFFING SERVICES</u> Address: <u>2724 NW COUNTY RD</u> City, State, Zip <u>HOBBS, NM 88240</u> Phone: <u>575-393-9048</u> Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u> <u>BRITTNEY@ENERGYSTAFFINGLLC.COM</u>				Lab Use Only		TAT		EPA Program			
								Lab WO#	Job Number	1D	2D	3D	Standard	CWA	SDWA
								<u>E 402183</u>	<u>20046-0001</u>		<u>X</u>				
								Analysis and Method							RCRA
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	State	Remarks
	<u>02/19</u>	<u>S</u>	<u>1</u>	<u>SP 1 - 6'</u>	<u>1</u>							<u>X</u>		<u>NM</u>	
				<u>SP 2 - 6'</u>	<u>2</u>									<u>CO</u>	
				<u>SP 3 - 8'</u>	<u>3</u>									<u>UT</u>	
				<u>SP 4 - 6'</u>	<u>4</u>									<u>AZ</u>	
				<u>SP 5 - 6'</u>	<u>5</u>									<u>TX</u>	
				<u>SP 6 - 6'</u>	<u>6</u>										
				<u>SP 7 - 6'</u>	<u>7</u>										
				<u>SP 8 - 10'</u>	<u>8</u>										
	<u>02/19</u>	<u>S</u>	<u>1</u>	<u>SP 9 - 6</u>	<u>9</u>							<u>X</u>			
Additional Instructions:															
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												Samples requiring thermal preservation must be received on ice the day they are sampled or received, packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.			
Relinquished by: (Signature) <u>Juan Solis</u> Date <u>02/19/24</u> Time <u></u>												Received by: (Signature) <u>Miguel Angel</u> Date <u>2-20-24</u> Time <u>1300</u>			
Relinquished by: (Signature) <u>Miguel Angel</u> Date <u>2-20-24</u> Time <u>1615</u>												Received by: (Signature) <u>Andrew</u> Date <u>2-20-24</u> Time <u>1700</u>			
Relinquished by: (Signature) <u>Andrew</u> Date <u>2-20-24</u> Time <u>2400</u>												Received by: (Signature) <u>Heather R. Hill</u> Date <u>2-21-24</u> Time <u>0530</u>			
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA			
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.															

Envirotech Analytical Laboratory

Printed: 2/21/2024 8:13:42AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	02/21/24 05:30	Work Order ID:	E402183
Phone:	(575) 390-6397	Date Logged In:	02/20/24 15:48	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	02/22/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

Sample Turn Around Time (TAT)

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

Sample Cooler

- | | |
|--|-----|
| 7. Was a sample cooler received? | Yes |
| 8. If yes, was cooler received in good condition? | Yes |
| 9. Was the sample(s) received intact, i.e., not broken? | Yes |
| 10. Were custody/security seals present? | No |
| 11. If yes, were custody/security seals intact? | NA |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C | Yes |
- Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling
13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

- | | |
|---|-----|
| 20. Were field sample labels filled out with the minimum information: | |
| Sample ID? | Yes |
| Date/Time Collected? | Yes |
| Collectors name? | Yes |

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client InstructionComments/Resolution

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

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill C

Work Order: E402193

Job Number: 20046-0001

Received: 2/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/23/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 2/23/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount Spill C
Workorder: E402193
Date Received: 2/22/2024 5:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

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Sample Summary

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/23/24 11:52

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 1-3'	E402193-01A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SW 2-3'	E402193-02A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SW 3-3'	E402193-03A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SW 4-3'	E402193-04A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SW 5-3'	E402193-05A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SW 6-6'	E402193-06A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SW 7-6'	E402193-07A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill C Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 2/23/2024 11:52:37AM
--	--	--

SW 1-3'

E402193-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	94.7 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	95.5 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2408068	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/22/24	
<i>Surrogate: n-Nonane</i>	114 %	50-200		02/22/24	02/22/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2408071	
Chloride	31.3	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:52:37AM

SW 2-3'

E402193-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0500	2	02/22/24	02/22/24	
Ethylbenzene	ND	0.0500	2	02/22/24	02/22/24	
Toluene	ND	0.0500	2	02/22/24	02/22/24	
o-Xylene	ND	0.0500	2	02/22/24	02/22/24	
p,m-Xylene	ND	0.100	2	02/22/24	02/22/24	
Total Xylenes	ND	0.0500	2	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.8 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	40.0	2	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/22/24	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		02/22/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	36.6	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:52:37AM

SW 3-3'

E402193-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.4 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/22/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		02/22/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	147	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:52:37AM

SW 4-3'

E402193-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.2 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.3 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/22/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		02/22/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	228	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:52:37AM

SW 5-3'

E402193-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.0 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/22/24	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		02/22/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	76.1	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:52:37AM

SW 6-6'

E402193-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.0 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.9 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/22/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		02/22/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	63.8	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:52:37AM

SW 7-6'

E402193-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.3 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.9 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/22/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		02/22/24	02/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	52.6	20.0	1	02/22/24	02/22/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:52:37AM

Volatile Organics by EPA 8021B

Analyst: RKS

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

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

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

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

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

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

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:52:37AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408069-BLK1) Prepared: 02/22/24 Analyzed: 02/22/24

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

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

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

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

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:52:37AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408068-BLK1) Prepared: 02/22/24 Analyzed: 02/22/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.3		50.0		111	50-200			

LCS (2408068-BS1) Prepared: 02/22/24 Analyzed: 02/22/24

Diesel Range Organics (C10-C28)	241	25.0	250		96.5	38-132			
Surrogate: n-Nonane	53.0		50.0		106	50-200			

Matrix Spike (2408068-MS1) Source: E402193-03 Prepared: 02/22/24 Analyzed: 02/22/24

Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	54.2		50.0		108	50-200			

Matrix Spike Dup (2408068-MSD1) Source: E402193-03 Prepared: 02/22/24 Analyzed: 02/22/24

Diesel Range Organics (C10-C28)	258	25.0	250	ND	103	38-132	2.36	20	
Surrogate: n-Nonane	55.3		50.0		111	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:52:37AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408071-BLK1)						Prepared: 02/22/24 Analyzed: 02/22/24			
Chloride	ND	20.0							
LCS (2408071-BS1)						Prepared: 02/22/24 Analyzed: 02/22/24			
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2408071-MS1)				Source: E402192-02		Prepared: 02/22/24 Analyzed: 02/22/24			
Chloride	285	20.0	250	32.0	101	80-120			
Matrix Spike Dup (2408071-MSD1)				Source: E402192-02		Prepared: 02/22/24 Analyzed: 02/22/24			
Chloride	280	20.0	250	32.0	99.2	80-120	1.69	20	

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/23/24 11:52

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



Project Information

Chain of Custody

Client: Mobil Energy Project: West Mount Spill C Project Manager: Address: City, State, Zip Phone: Email:				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# 402193 Job Number 20046-0001 Analysis and Method DRO/DRO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC NM BGDOC TX				TAT 1D 2D 3D Standard X			EPA Program CWA SDWA RCRA State NM CO UT AZ TX X		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number												Remarks
	02/20	S	1	SW 1 - 3'	1									X			
				SW 2 - 3'	2												
				SW 3 - 3'	3												
				SW 4 - 3'	4												
				SW 5 - 3'	5												
				SW 6 - 6'	6												
	02/20	S	1	SW 7 - 6'	7									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

Relinquished by: (Signature) Juan Solis	Date 02/20/24	Time 1405	Received by: (Signature) Michelle Cough	Date 2-21-24	Time 1700
Relinquished by: (Signature) Michelle Cough	Date 2-21-24	Time 1645	Received by: (Signature) Andrew MBB	Date 2-21-24	Time 0530
Relinquished by: (Signature) Andrew MBB	Date 2-21-24	Time 2300	Received by: (Signature) Kymberly R Hall	Date 2-22-24	Time 0530

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 Analytical Laboratory

Printed: 2/22/2024 9:15:08AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	02/22/24 05:30	Work Order ID:	E402193
Phone:	(575) 390-6397	Date Logged In:	02/21/24 16:00	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	02/23/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierSample Turn Around Time (TAT)

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

Sample Cooler

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

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

- | |
|--|
| 13. If no visible ice, record the temperature. Actual sample temperature: <u>4°C</u> |
|--|

Sample Container

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

Field Label

- | | |
|---|-----|
| 20. Were field sample labels filled out with the minimum information: | |
| Sample ID? | Yes |
| Date/Time Collected? | Yes |
| Collectors name? | Yes |

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client InstructionComments/Resolution

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

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill C

Work Order: E402195

Job Number: 20046-0001

Received: 2/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/23/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 2/23/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount Spill C
Workorder: E402195
Date Received: 2/22/2024 5:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

Raina Schwanz
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Sample Summary

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/23/24 11:48

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 10-6'	E402195-01A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SP 11-6'	E402195-02A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SP 12-6'	E402195-03A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SP 13-12'	E402195-04A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.
SP 14-6'	E402195-05A	Soil	02/20/24	02/22/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill C Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 2/23/2024 11:48:12AM
--	--	--

SP 10-6'

E402195-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
Surrogate: 4-Bromochlorobenzene-PID	92.5 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.9 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2408068	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
Surrogate: n-Nonane	109 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2408071	
Chloride	342	40.0	2	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:48:12AM

SP 11-6'

E402195-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.7 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	51.1	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:48:12AM

SP 12-6'

E402195-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.0 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.1 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	25.8	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/23/2024 11:48:12AM

SP 13-12'

E402195-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Benzene	ND	0.0250	1	02/22/24	02/22/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/22/24	
Toluene	ND	0.0250	1	02/22/24	02/22/24	
o-Xylene	ND	0.0250	1	02/22/24	02/22/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/22/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.7 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2408069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.2 %	70-130		02/22/24	02/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2408068
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2408071
Chloride	22.0	20.0	1	02/22/24	02/22/24	



Sample Data

Mack Energy	Project Name:	West Mount Spill C	Reported: 2/23/2024 11:48:12AM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP 14-6'

E402195-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Benzene	ND	0.0250	1	02/22/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/22/24	02/23/24	
Toluene	ND	0.0250	1	02/22/24	02/23/24	
o-Xylene	ND	0.0250	1	02/22/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/22/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/22/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.4 %	70-130		02/22/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2408069	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/22/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	96.9 %	70-130		02/22/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2408068	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/22/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/22/24	02/23/24	
<i>Surrogate: n-Nonane</i>	110 %	50-200		02/22/24	02/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2408071	
Chloride	ND	20.0	1	02/22/24	02/22/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:48:12AM

Volatile Organics by EPA 8021B

Analyst: RKS

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

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

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

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

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

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

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:48:12AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408069-BLK1) Prepared: 02/22/24 Analyzed: 02/22/24

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

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

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

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

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:48:12AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408068-BLK1)					Prepared: 02/22/24 Analyzed: 02/22/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.3		50.0		111	50-200			

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/23/2024 11:48:12AM

Anions by EPA 300.0/9056A

Analyst: DT

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

Blank (2408071-BLK1)					Prepared: 02/22/24 Analyzed: 02/22/24				
Chloride	ND	20.0							
LCS (2408071-BS1)					Prepared: 02/22/24 Analyzed: 02/22/24				
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2408071-MS1)					Source: E402192-02		Prepared: 02/22/24 Analyzed: 02/22/24		
Chloride	285	20.0	250	32.0	101	80-120			
Matrix Spike Dup (2408071-MSD1)					Source: E402192-02		Prepared: 02/22/24 Analyzed: 02/22/24		
Chloride	280	20.0	250	32.0	99.2	80-120	1.69	20	

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/23/24 11:48

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



Page 1 of 1

Chain of Custody

Project Information

Client: MCK Energy Project: West Mount 3811 C Project Manager: Address: City, State, Zip Phone: Email:				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# 402195 Job Number 20046-0001				TAT 1D 2D 3D Standard				EPA Program CWA SDWA RCRA	
Report due by:				Analysis and Method				State NM CO UT AZ TX				Remarks					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 3000	BGDOC NM	BGDOC TX				
	02/20	S	1	SP 10 - 6'	1							X					
				SP 11 - 6'	2												
				SP 12 - 6'	3												
				SP 13 - 12'	4												
	02/20	S	1	SP 14 - 6'	5							X					

Additional Instructions:

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

Sampled by: John Solis

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

Relinquished by: (Signature) <u>John Solis</u>	Date 02/20/24	Time	Received by: (Signature) <u>Michelle Gayle</u>	Date 2-21-24	Time 1405	Lab Use Only Received on ice: <input checked="" type="checkbox"/> N
Relinquished by: (Signature) <u>Michelle Gayle</u>	Date 2-21-24	Time 1645	Received by: (Signature) <u>Andrew Mello</u>	Date 2-21-24	Time 1700	T1 _____ T2 _____ T3 _____
Relinquished by: (Signature) <u>Andrew Mello</u>	Date 2-21-24	Time 2300	Received by: (Signature) <u>Keygha R. Hall</u>	Date 2-22-24	Time 0530	AVG Temp °C <u>4</u>
Sample Matrix: S - Soil, Sc - Solid, Sg - Sludge, A - Aqueous, O - Other						
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.						

Envirotech Analytical Laboratory

Printed: 2/22/2024 2:37:30PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	02/22/24 05:30	Work Order ID:	E402195
Phone:	(575) 390-6397	Date Logged In:	02/21/24 16:11	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	02/23/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/Resolution

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill C

Work Order: E402209

Job Number: 20046-0001

Received: 2/23/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/26/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 2/26/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount Spill C
Workorder: E402209
Date Received: 2/23/2024 5:30:00AM

Natalie Gladden,

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

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

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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mgonzales@envirotech-inc.com

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill C Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 02/26/24 14:02
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW 8-3'	E402209-01A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 9-3'	E402209-02A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 10-3'	E402209-03A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 11-3'	E402209-04A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 12-3'	E402209-05A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 13-3'	E402209-06A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 14-3'	E402209-07A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 15-8'	E402209-08A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 16-3'	E402209-09A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 17-3'	E402209-10A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 18-3'	E402209-11A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.
SW 19-6'	E402209-12A	Soil	02/21/24	02/23/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 8-3'

E402209-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
Surrogate: 4-Bromochlorobenzene-PID	95.9 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.3 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408077
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
Surrogate: n-Nonane	113 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2408082
Chloride	88.1	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 9-3'

E402209-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.7 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.5 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	119	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 10-3'

E402209-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.5 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2408078
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2408077
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	117 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2408082
Chloride	ND	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 11-3'

E402209-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.0 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	116 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	102	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 12-3'

E402209-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.0 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	117 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	ND	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 13-3'

E402209-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.2 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	ND	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 14-3'

E402209-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.0 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	68.2	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy	Project Name:	West Mount Spill C	Reported: 2/26/2024 2:02:43PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW 15-8'

E402209-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.9 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	103	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy	Project Name:	West Mount Spill C	Reported: 2/26/2024 2:02:43PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW 16-3'

E402209-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.6 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.3 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	ND	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 17-3'

E402209-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.6 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.9 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	106	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 18-3'

E402209-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.8 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.0 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	74.3	20.0	1	02/23/24	02/23/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
2/26/2024 2:02:43PM

SW 19-6'

E402209-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Benzene	ND	0.0250	1	02/23/24	02/23/24	
Ethylbenzene	ND	0.0250	1	02/23/24	02/23/24	
Toluene	ND	0.0250	1	02/23/24	02/23/24	
o-Xylene	ND	0.0250	1	02/23/24	02/23/24	
p,m-Xylene	ND	0.0500	1	02/23/24	02/23/24	
Total Xylenes	ND	0.0250	1	02/23/24	02/23/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.1 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2408078	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/23/24	02/23/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.8 %	70-130		02/23/24	02/23/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2408077	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/23/24	02/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/23/24	02/23/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		02/23/24	02/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2408082	
Chloride	66.4	20.0	1	02/23/24	02/23/24	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:02:43PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408078-BLK1) Prepared: 02/23/24 Analyzed: 02/23/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	6.96		8.00		87.0	70-130			

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

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

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

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:02:43PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408078-BLK1) Prepared: 02/23/24 Analyzed: 02/23/24

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

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

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

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

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

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

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



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:02:43PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2408077-BLK1) Prepared: 02/23/24 Analyzed: 02/23/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	59.1		50.0		118	50-200			

LCS (2408077-BS1) Prepared: 02/23/24 Analyzed: 02/23/24

Diesel Range Organics (C10-C28)	259	25.0	250		103	38-132			
Surrogate: n-Nonane	61.6		50.0		123	50-200			

Matrix Spike (2408077-MS1) Source: E402208-03 Prepared: 02/23/24 Analyzed: 02/23/24

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	63.4		50.0		127	50-200			

Matrix Spike Dup (2408077-MSD1) Source: E402208-03 Prepared: 02/23/24 Analyzed: 02/23/24

Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132	14.2	20	
Surrogate: n-Nonane	61.2		50.0		122	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	2/26/2024 2:02:43PM

Anions by EPA 300.0/9056A

Analyst: IY

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

Blank (2408082-BLK1)					Prepared: 02/23/24 Analyzed: 02/23/24				
Chloride	ND	20.0							
LCS (2408082-BS1)					Prepared: 02/23/24 Analyzed: 02/23/24				
Chloride	251	20.0	250		101	90-110			
Matrix Spike (2408082-MS1)					Source: E402208-03		Prepared: 02/23/24 Analyzed: 02/23/24		
Chloride	597	20.0	250	346	100	80-120			
Matrix Spike Dup (2408082-MSD1)					Source: E402208-03		Prepared: 02/23/24 Analyzed: 02/23/24		
Chloride	596	20.0	250	346	100	80-120	0.105	20	

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	02/26/24 14:02

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



Project Information

Chain of Custody

Page 1 of 2

Client: <u>Mac Energy</u>					Bill To					Lab Use Only					TAT				EPA Program	
Project: <u>West Mount Spill C</u>					Attention: <u>ENERGY STAFFING SERVICES</u>					Lab WO# <u>E 402209</u> Job Number <u>20046-0001</u>					1D <input checked="" type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard <input type="checkbox"/>				CWA <input type="checkbox"/> SDWA <input type="checkbox"/>	
Project Manager:					Address: <u>2724 NW COUNTY RD</u>					Analysis and Method									RCRA <input type="checkbox"/>	
Address:					City, State, Zip <u>HOBBS, NM 88240</u>															
City, State, Zip					Phone: <u>575-393-9048</u>															
Phone:					Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>															
Email:					BRITTNEY@ENERGYSTAFFINGLLC.COM															
Report due by:																				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/GRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 3000	BDOC NM	BDOC TX	State				Remarks		
	02/21	S	1	Sw 8 - 3'	1							X		NM CO UT AZ TX						
				Sw 9 - 3'	2															
				Sw 10 - 3'	3															
				Sw 11 - 3'	4															
				Sw 12 - 3'	5															
				Sw 13 - 3'	6															
				Sw 14 - 3'	7															
				Sw 15 - 8'	8															
				Sw 16 - 3'	9															
	02/21	S	1	Sw 17 - 3'	10							X								
Additional Instructions:																				
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.								
Relinquished by: (Signature) <u>John Solis</u> Date <u>02/21/24</u> Time <u>12:44</u>												Received by: (Signature) <u>Michelle Cough</u> Date <u>2-22-24</u> Time <u>1244</u>								
Relinquished by: (Signature) <u>Andrew Messo</u> Date <u>2-22-24</u> Time <u>1730</u>												Received by: (Signature) <u>Andrew Messo</u> Date <u>2-22-24</u> Time <u>1730</u>								
Relinquished by: (Signature) <u>Andrew Messo</u> Date <u>2-22-24</u> Time <u>2400</u>												Received by: (Signature) <u>Kynga R Hall</u> Date <u>2-23-24</u> Time <u>0530</u>								
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA								
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				

Chain of Custody

Project Information

[illegible]

Envirotech Analytical Laboratory

Printed: 2/23/2024 8:44:37AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	02/23/24 05:30	Work Order ID:	E402209
Phone:	(575) 390-6397	Date Logged In:	02/22/24 18:12	Logged In By:	Alexa Michaels
Email:	Natalie@energystaffingllc.com	Due Date:	02/26/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

Sample Turn Around Time (TAT)

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

Sample Cooler

- | | |
|---|-----|
| 7. Was a sample cooler received? | Yes |
| 8. If yes, was cooler received in good condition? | Yes |
| 9. Was the sample(s) received intact, i.e., not broken? | Yes |
| 10. Were custody/security seals present? | No |
| 11. If yes, were custody/security seals intact? | NA |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6±2°C | Yes |
- Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling
13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

- | | |
|---|-----|
| 20. Were field sample labels filled out with the minimum information: | |
| Sample ID? | Yes |
| Date/Time Collected? | Yes |
| Collectors name? | Yes |

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction**Comments/Resolution**

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

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

Date



envirotech Inc.

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









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

Sent: Monday, October 7, 2024 1:25 PM

To: Natalie Gladden <natalie@energystaffingllc.com>

Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 390458

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#) nAPP2327834535.

The sampling event is expected to take place:

When: 10/09/2024 @ 07:00

Where: F-30-15S-29E 0 FNL 0 FEL (32.988705,-104.072056)

Additional Information: NATALIE GLADDEN 575-390-6397

Additional Instructions: 32.988708 -104.072056

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

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

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

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

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

Company Name: MACK ENERGY**Location Name: WEST MOUNT SPILL C****Release Date:**

SP ID	Depth	Titre	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Soil
COMP1	4	400	L	ND	ND	ND	ND	ND	415	
COMP2	4	400	L	ND	ND	ND	ND	ND	433	
COMP3	4	400	L	ND	ND	ND	ND	ND	417	
COMP4	4	400	L	ND	ND	ND	ND	ND	431	
COMP5	4	320	L	ND	ND	ND	ND	ND	327	
COMP6	4	320	L	ND	ND	ND	ND	ND	358	
COMP7	4	320	L	ND	ND	ND	ND	ND	365	
COMP8	4	320	L	ND	ND	ND	ND	ND	364	
COMP9	4	320	L	ND	ND	ND	ND	ND	381	
COMP10	4	320	L	ND	ND	ND	ND	ND	388	
COMP11	4	320	L	ND	ND	ND	ND	ND	412	
COMP12	8	320	L	ND	ND	ND	ND	ND	414	
COMP13	8	240	L	ND	ND	ND	ND	ND	282	
COMP14	8	240	L	ND	ND	ND	ND	ND	187	
COMP15	8	160	L	ND	ND	ND	ND	ND	104	
COMP16	8	160	L	ND	ND	ND	ND	ND	70.2	

COMP17	4	160	L	ND	ND	ND	ND	ND	123	
COMP18	4	160	L	ND	ND	ND	ND	ND	66.2	
COMP19	4	320	L	ND	ND	ND	ND	ND	312	
COMP20	4	160	L	ND	ND	ND	ND	ND	79.2	
COMP21	4	240	L	ND	ND	ND	ND	ND	195	
COMP22	4	240	L	ND	ND	ND	ND	ND	200	
COMP23	10	240	L	ND	ND	ND	ND	ND	241	
COMP24	10	160	L	ND	ND	ND	ND	ND	40.3	
COMP25	10	320	L	ND	ND	ND	ND	ND	372	
COMP26	10	320	L	ND	ND	ND	ND	ND	224	
COMP27	10	320	L	ND	ND	ND	ND	ND	380	
COMP28	4	240	L	ND	ND	ND	ND	ND	306	
COMP29	4	320	L	ND	ND	ND	ND	ND	291	
COMP30	8	400	L	ND	ND	25.6	ND	25.6	399	
COMP31	8	160	L	ND	ND	ND	ND	ND	389	
COMP32	4	400	L	ND	ND	ND	ND	ND	415	
COMP33	4	160	L	ND	ND	ND	ND	ND	73.8	

COMP34	4	240	L	ND	ND	ND	ND	ND	227	
COMP35	4	320	L	ND	ND	ND	ND	ND	275	
COMP36	4	400	L	ND	ND	ND	ND	ND	425	
COMP37	4	320	L	ND	ND	ND	ND	ND	187	
COMP38	4	160	L	ND	ND	ND	ND	ND	ND	
COMP39	4	160	L	ND	ND	ND	ND	ND	127	
COMP40	4	160	L	ND	ND	ND	ND	ND	118	
SWCOMP1	4	240	L	ND	ND	ND	ND	ND	325	
SWCOMP2	4	240	L	ND	ND	ND	ND	ND	340	
SWCOMP3	6	240	L	ND	ND	ND	ND	ND	327	
SWCOMP4	4	240	L	ND	ND	ND	ND	ND	317	
SWCOMP5	4	240	L	ND	ND	ND	ND	ND	78.3	
SWCOMP6	4	320	L	ND	ND	ND	ND	ND	215	
SWCOMP7	8	320	L	ND	ND	ND	ND	ND	212	
SWCOMP8	4	320	L	ND	ND	ND	ND	ND	230	
SWCOMP9	4	320	L	ND	ND	ND	ND	ND	219	
SWCOMP10	4	320	L	ND	ND	ND	ND	ND	219	

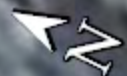
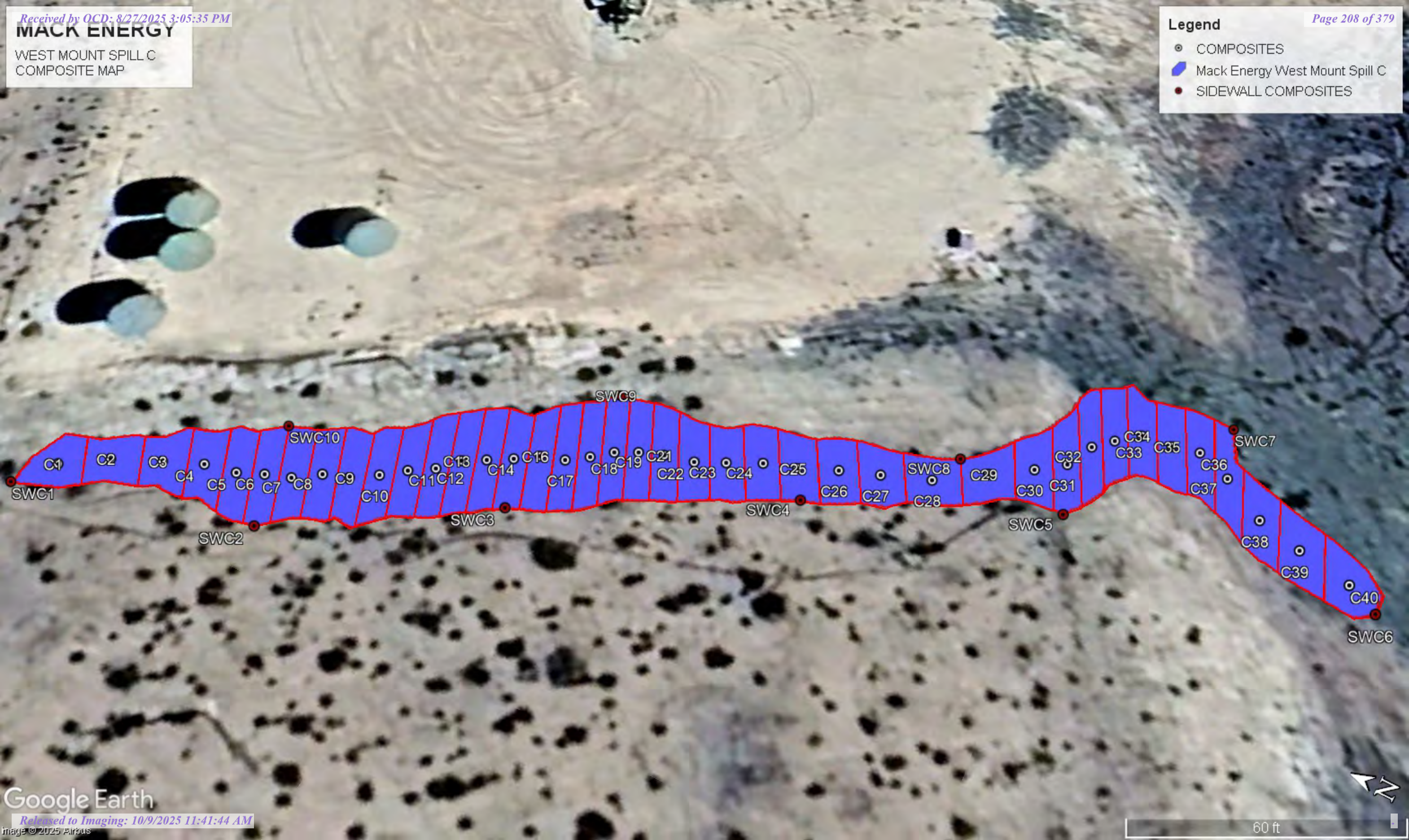
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MACK ENERGY

WEST MOUNT SPILL C
COMPOSITE MAP

Legend

- COMPOSITES
- Mack Energy West Mount Spill C
- SIDEWALL COMPOSITES



COMPANY: MACK ENERGY**LOCATION: WEST MOUNT SPILL C**

POINT	LATITUDE	LONGITUDE
C1	32.998748°	-104.072104°
C2	32.998719°	-104.072081°
C3	32.998686°	-104.072064°
C4	32.998659°	-104.072051°
C5	32.998635°	-104.072046°
C6	32.998617°	-104.072037°
C7	32.998599°	-104.072030°
C8	32.998582°	-104.072016°
C9	32.998564°	-104.072009°
C10	32.998547°	-104.071996°
C11	32.998532°	-104.071982°
C12	32.998516°	-104.071970°
C13	32.998504°	-104.071954°
C14	32.998489°	-104.071944°
C15	32.998473°	-104.071933°
C16	32.998458°	-104.071921°
C17	32.998441°	-104.071915°
C18	32.998427°	-104.071903°
C19	32.998414°	-104.071890°
C20	32.998399°	-104.071881°
C21	32.998382°	-104.071874°
C22	32.998361°	-104.071869°
C23	32.998341°	-104.071858°
C24	32.998318°	-104.071845°
C25	32.998295°	-104.071837°
C26	32.998269°	-104.071824°
C27	32.998242°	-104.071813°
C28	32.998209°	-104.071799°
C29	32.998176°	-104.071773°
C30	32.998149°	-104.071752°
C31	32.998130°	-104.071735°
C32	32.998119°	-104.071709°
C33	32.998106°	-104.071694°
C34	32.998090°	-104.071678°
C35	32.998069°	-104.071677°
C36	32.998050°	-104.071672°
C37	32.998028°	-104.071687°
C38	32.998001°	-104.071714°
C39	32.997972°	-104.071726°
C40	32.997937°	-104.071737°
SWC1	32.998766°	-104.072134°

SWC2	32.998597°	-104.072080°
SWC3	32.998457°	-104.071977°
SWC4	32.998283°	-104.071864°
SWC5	32.998121°	-104.071783°
SWC6	32.997918°	-104.071753°
SWC7	32.998033°	-104.071634°
SWC8	32.998197°	-104.071769°
SWC9	32.998434°	-104.071836°
SWC10	32.998628°	-104.071989°

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount C

Work Order: E410139

Job Number: 20046-0001

Received: 10/15/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/16/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 10/16/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount C
Workorder: E410139
Date Received: 10/15/2024 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/15/2024 8:00:00AM, under the Project Name: West Mount C.

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

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

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

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

Respectfully,

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount C Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 10/16/24 15:17
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sp Comp 1 - 4	E410139-01A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 2 - 4	E410139-02A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 3 - 4	E410139-03A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 4 - 4	E410139-04A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 5 - 4	E410139-05A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 6 - 4	E410139-06A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 7 - 4	E410139-07A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 8 - 4	E410139-08A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 9 - 4	E410139-09A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 10 - 4	E410139-10A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 11 - 4	E410139-11A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
Sp Comp 12 - 4	E410139-12A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 1 - 4

E410139-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.1 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.0 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>	98.0 %	50-200		10/15/24	10/15/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM		Batch: 2442057	
Chloride	415	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 2 - 4

E410139-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	97.6 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	93.8 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>	106 %	50-200		10/15/24	10/15/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM		Batch: 2442057	
Chloride	433	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 3 - 4

E410139-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.4 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>						
		103 %	50-200	10/15/24	10/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2442057	
Chloride	417	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/16/2024 3:17:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sp Comp 4 - 4
E410139-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
Surrogate: 4-Bromochlorobenzene-PID	97.7 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.7 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
Surrogate: n-Nonane	97.9 %	50-200		10/15/24	10/15/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM		Batch: 2442057	
Chloride	431	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 5 - 4

E410139-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.6 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>						
	95.5 %	50-200		10/15/24	10/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2442057	
Chloride	327	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 6 - 4

E410139-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.7 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.1 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		10/15/24	10/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2442057	
Chloride	358	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 7 - 4

E410139-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	100 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.6 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/16/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		10/15/24	10/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442057	
Chloride	365	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 8 - 4

E410139-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.6 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/16/24	
<i>Surrogate: n-Nonane</i>						
		106 %	50-200	10/15/24	10/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442057	
Chloride	364	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 9 - 4

E410139-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.2 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/16/24	
<i>Surrogate: n-Nonane</i>						
		99.5 %	50-200	10/15/24	10/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442057	
Chloride	381	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/16/2024 3:17:52PM

Sp Comp 10 - 4

E410139-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2442051
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2442051
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.4 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442056
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/16/24	
<i>Surrogate: n-Nonane</i>						
		97.1 %	50-200	10/15/24	10/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442057
Chloride	388	20.0	1	10/15/24	10/16/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/16/2024 3:17:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sp Comp 11 - 4
E410139-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.5 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/16/24	
<i>Surrogate: n-Nonane</i>		95.5 %	50-200	10/15/24	10/16/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442057	
Chloride	412	40.0	2	10/15/24	10/16/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/16/2024 3:17:52PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Sp Comp 12 - 4
E410139-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Benzene	ND	0.0500	2	10/15/24	10/15/24	
Ethylbenzene	ND	0.0500	2	10/15/24	10/15/24	
Toluene	ND	0.0500	2	10/15/24	10/15/24	
o-Xylene	ND	0.0500	2	10/15/24	10/15/24	
p,m-Xylene	ND	0.100	2	10/15/24	10/15/24	
Total Xylenes	ND	0.0500	2	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442051	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.9 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442056	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/16/24	
<i>Surrogate: n-Nonane</i>		97.4 %	50-200	10/15/24	10/16/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442057	
Chloride	414	40.0	2	10/15/24	10/16/24	



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/16/2024 3:17:52PM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442051-BLK1) Prepared: 10/15/24 Analyzed: 10/15/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.09		8.00		101	70-130			

LCS (2442051-BS1) Prepared: 10/15/24 Analyzed: 10/15/24

Benzene	5.55	0.0250	5.00		111	70-130			
Ethylbenzene	5.44	0.0250	5.00		109	70-130			
Toluene	5.52	0.0250	5.00		110	70-130			
o-Xylene	5.45	0.0250	5.00		109	70-130			
p,m-Xylene	11.1	0.0500	10.0		111	70-130			
Total Xylenes	16.5	0.0250	15.0		110	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.04		8.00		101	70-130			

Matrix Spike (2442051-MS1) Source: E410139-03 Prepared: 10/15/24 Analyzed: 10/15/24

Benzene	11.5	0.0500	10.0	ND	115	54-133			
Ethylbenzene	11.3	0.0500	10.0	ND	113	61-133			
Toluene	11.5	0.0500	10.0	ND	115	61-130			
o-Xylene	11.3	0.0500	10.0	ND	113	63-131			
p,m-Xylene	23.0	0.100	20.0	ND	115	63-131			
Total Xylenes	34.3	0.0500	30.0	ND	114	63-131			
Surrogate: 4-Bromochlorobenzene-PID	16.1		16.0		101	70-130			

Matrix Spike Dup (2442051-MSD1) Source: E410139-03 Prepared: 10/15/24 Analyzed: 10/15/24

Benzene	10.9	0.0500	10.0	ND	109	54-133	5.61	20	
Ethylbenzene	10.7	0.0500	10.0	ND	107	61-133	5.37	20	
Toluene	10.9	0.0500	10.0	ND	109	61-130	5.57	20	
o-Xylene	10.7	0.0500	10.0	ND	107	63-131	5.43	20	
p,m-Xylene	21.8	0.100	20.0	ND	109	63-131	5.47	20	
Total Xylenes	32.5	0.0500	30.0	ND	108	63-131	5.46	20	
Surrogate: 4-Bromochlorobenzene-PID	16.1		16.0		101	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/16/2024 3:17:52PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442051-BLK1) Prepared: 10/15/24 Analyzed: 10/15/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.2	70-130			

LCS (2442051-BS2) Prepared: 10/15/24 Analyzed: 10/15/24

Gasoline Range Organics (C6-C10)	49.2	20.0	50.0		98.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.76		8.00		97.0	70-130			

Matrix Spike (2442051-MS2) Source: E410139-03 Prepared: 10/15/24 Analyzed: 10/15/24

Gasoline Range Organics (C6-C10)	96.0	40.0	100	ND	96.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.3		16.0		95.6	70-130			

Matrix Spike Dup (2442051-MSD2) Source: E410139-03 Prepared: 10/15/24 Analyzed: 10/15/24

Gasoline Range Organics (C6-C10)	99.1	40.0	100	ND	99.1	70-130	3.18	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.3		16.0		95.8	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/16/2024 3:17:52PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442056-BLK1)					Prepared: 10/15/24 Analyzed: 10/15/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.6		50.0		91.3	50-200			

LCS (2442056-BS1)					Prepared: 10/15/24 Analyzed: 10/15/24				
Diesel Range Organics (C10-C28)	245	25.0	250		97.8	38-132			
Surrogate: n-Nonane	46.9		50.0		93.8	50-200			

Matrix Spike (2442056-MS1)					Source: E410139-01		Prepared: 10/15/24 Analyzed: 10/15/24		
Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	49.5		50.0		99.0	50-200			

Matrix Spike Dup (2442056-MSD1)					Source: E410139-01		Prepared: 10/15/24 Analyzed: 10/15/24		
Diesel Range Organics (C10-C28)	259	25.0	250	ND	104	38-132	2.45	20	
Surrogate: n-Nonane	49.1		50.0		98.2	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/16/2024 3:17:52PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442057-BLK1)					Prepared: 10/15/24 Analyzed: 10/16/24				
Chloride	ND	20.0							
LCS (2442057-BS1)					Prepared: 10/15/24 Analyzed: 10/16/24				
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2442057-MS1)					Source: E410139-02		Prepared: 10/15/24 Analyzed: 10/16/24		
Chloride	714	20.0	250	433	112	80-120			
Matrix Spike Dup (2442057-MSD1)					Source: E410139-02		Prepared: 10/15/24 Analyzed: 10/16/24		
Chloride	697	20.0	250	433	106	80-120	2.44	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 C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/16/24 15:17

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



Project Information

Chain of Custody

Page 1 of 2

Client: <u>West Energy</u>				Bill To				Lab Use Only				TAT				EPA Program					
Project: <u>Westman</u>				Attention: ENERGY STAFFING SERVICES				Lab WO# <u>E410139</u>				Job Number <u>20046.0001</u>				1D	2D	3D	Standard	CWA	SDWA
Project Manager:				Address: 2724 NW COUNTY RD				Analysis and Method								RCRA					
Address:				City, State, Zip HOBBS, NM 88240																	
City, State, Zip				Phone: 575-393-9048																	
Phone:				Email: NATALIE@ENERGYSTAFFINGLLC.COM																	
Email:				BRITTNEY@ENERGYSTAFFINGLLC.COM																	
Report due by:																					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BDOC NM	BDOC TX	State							
														NM	CO	UT	AZ	TX			
Remarks																					
	10/11	S	1	Spcomp 1-4	1																
				Spcomp 2-4	2																
				Spcomp 3-4	3																
				Spcomp 4-4	4																
				Spcomp 5-4	5																
				Spcomp 6-4	6																
				Spcomp 7-4	7																
				Spcomp 8-4	8																
				Spcomp 9-4	9																
	10/11	S	1	Spcomp 10-4	10																
Additional Instructions:																					
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.									
Sampled by: <u>Andy Torregga</u>																					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only									
<u>Andy Torregga</u>		10/14				<u>Michelle Gonzales</u>		10.14.24		1315		Received on ice: <u>Y</u> / N									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 T2 T3									
<u>Michelle Gonzales</u>		10.14.24		1640		<u>L.H.</u>		10.14.24		1646											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C									
<u>L.H.</u>		10.14.24		2245		<u>Cathy Mar</u>		10.15.24		8:00		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: 10/15/2024 10:06:14AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	10/15/24 08:00	Work Order ID:	E410139
Phone:	(575) 390-6397	Date Logged In:	10/14/24 15:18	Logged In By:	Noe Soto
Email:	Natalie@energystaffingllc.com	Due Date:	10/16/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/Resolution

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount C

Work Order: E410152

Job Number: 20046-0001

Received: 10/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/17/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 10/17/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount C
Workorder: E410152
Date Received: 10/16/2024 7:45:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/16/2024 7:45:00AM, under the Project Name: West Mount C.

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

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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Sample Summary

Mack Energy	Project Name:	West Mount C	Reported: 10/17/24 14:47
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 13-8	E410152-01A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 14-8	E410152-02A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 15-8	E410152-03A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 16-8	E410152-04A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 17-4	E410152-05A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 18-4	E410152-06A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 19-4	E410152-07A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 20-4	E410152-08A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp Comp 21-4	E410152-09A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 22-4	E410152-10A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 23-10	E410152-11A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 24-10	E410152-12A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 25-10	E410152-13A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 26-10	E410152-14A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.
SP Comp 27-4	E410152-15A	Soil	10/14/24	10/16/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 13-8

E410152-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	89.0 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	98.8 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>	97.2 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	282	40.0	2	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 14-8

E410152-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.7 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	187	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 15-8

E410152-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0250	1	10/16/24	10/16/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/16/24	
Toluene	ND	0.0250	1	10/16/24	10/16/24	
o-Xylene	ND	0.0250	1	10/16/24	10/16/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/16/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.2 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.9 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	104	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 16-8

E410152-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0250	1	10/16/24	10/16/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/16/24	
Toluene	ND	0.0250	1	10/16/24	10/16/24	
o-Xylene	ND	0.0250	1	10/16/24	10/16/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/16/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.2 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	100 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	97.7 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	70.2	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 17-4

E410152-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0250	1	10/16/24	10/16/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/16/24	
Toluene	ND	0.0250	1	10/16/24	10/16/24	
o-Xylene	ND	0.0250	1	10/16/24	10/16/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/16/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.6 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.6 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	96.9 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	123	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/17/2024 2:47:56PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 18-4
E410152-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0250	1	10/16/24	10/16/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/16/24	
Toluene	ND	0.0250	1	10/16/24	10/16/24	
o-Xylene	ND	0.0250	1	10/16/24	10/16/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/16/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/16/24	
Surrogate: 4-Bromochlorobenzene-PID	89.4 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/16/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.5 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
Surrogate: n-Nonane	99.9 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	66.2	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 19-4

E410152-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.6 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.9 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	312	100	5	10/16/24	10/16/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/17/2024 2:47:56PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 20-4
E410152-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0250	1	10/16/24	10/16/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/16/24	
Toluene	ND	0.0250	1	10/16/24	10/16/24	
o-Xylene	ND	0.0250	1	10/16/24	10/16/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/16/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/16/24	
Surrogate: 4-Bromochlorobenzene-PID	91.5 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/16/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	101 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
Surrogate: n-Nonane	99.6 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	79.2	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp Comp 21-4

E410152-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.4 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	195	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 22-4

E410152-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.8 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.3 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	200	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/17/2024 2:47:56PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 23-10
E410152-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0250	1	10/16/24	10/16/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/16/24	
Toluene	ND	0.0250	1	10/16/24	10/16/24	
o-Xylene	ND	0.0250	1	10/16/24	10/16/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/16/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/16/24	
Surrogate: 4-Bromochlorobenzene-PID	91.2 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/16/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.1 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
Surrogate: n-Nonane	104 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	241	40.0	2	10/16/24	10/16/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/17/2024 2:47:56PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 24-10
E410152-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0250	1	10/16/24	10/16/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/16/24	
Toluene	ND	0.0250	1	10/16/24	10/16/24	
o-Xylene	ND	0.0250	1	10/16/24	10/16/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/16/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/16/24	
Surrogate: 4-Bromochlorobenzene-PID	90.9 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/16/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.6 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
Surrogate: n-Nonane	103 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	40.3	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 25-10

E410152-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.4 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.9 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	372	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 26-10

E410152-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	87.5 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	98.7 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>	97.3 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	224	20.0	1	10/16/24	10/16/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/17/2024 2:47:56PM

SP Comp 27-4

E410152-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Benzene	ND	0.0500	2	10/16/24	10/16/24	
Ethylbenzene	ND	0.0500	2	10/16/24	10/16/24	
Toluene	ND	0.0500	2	10/16/24	10/16/24	
o-Xylene	ND	0.0500	2	10/16/24	10/16/24	
p,m-Xylene	ND	0.100	2	10/16/24	10/16/24	
Total Xylenes	ND	0.0500	2	10/16/24	10/16/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442097	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/16/24	10/16/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.8 %	70-130		10/16/24	10/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442096	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442093	
Chloride	380	20.0	1	10/16/24	10/16/24	



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/17/2024 2:47:56PM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442097-BLK1) Prepared: 10/16/24 Analyzed: 10/16/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							

Surrogate: 4-Bromochlorobenzene-PID 7.03 8.00 87.9 70-130

LCS (2442097-BS1) Prepared: 10/16/24 Analyzed: 10/16/24

Benzene	5.07	0.0250	5.00		101	70-130			
Ethylbenzene	4.95	0.0250	5.00		99.0	70-130			
Toluene	5.04	0.0250	5.00		101	70-130			
o-Xylene	4.94	0.0250	5.00		98.8	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	15.0	0.0250	15.0		99.9	70-130			

Surrogate: 4-Bromochlorobenzene-PID 7.11 8.00 88.8 70-130

Matrix Spike (2442097-MS1) Source: E410152-14 Prepared: 10/16/24 Analyzed: 10/16/24

Benzene	10.1	0.0500	10.0	ND	101	54-133			
Ethylbenzene	9.86	0.0500	10.0	ND	98.6	61-133			
Toluene	10.0	0.0500	10.0	ND	100	61-130			
o-Xylene	9.82	0.0500	10.0	ND	98.2	63-131			
p,m-Xylene	20.0	0.100	20.0	ND	99.9	63-131			
Total Xylenes	29.8	0.0500	30.0	ND	99.3	63-131			

Surrogate: 4-Bromochlorobenzene-PID 14.2 16.0 88.8 70-130

Matrix Spike Dup (2442097-MSD1) Source: E410152-14 Prepared: 10/16/24 Analyzed: 10/16/24

Benzene	10.3	0.0500	10.0	ND	103	54-133	1.60	20	
Ethylbenzene	9.96	0.0500	10.0	ND	99.6	61-133	1.08	20	
Toluene	10.2	0.0500	10.0	ND	102	61-130	1.34	20	
o-Xylene	9.93	0.0500	10.0	ND	99.3	63-131	1.13	20	
p,m-Xylene	20.2	0.100	20.0	ND	101	63-131	1.11	20	
Total Xylenes	30.1	0.0500	30.0	ND	100	63-131	1.12	20	

Surrogate: 4-Bromochlorobenzene-PID 14.1 16.0 88.1 70-130



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/17/2024 2:47:56PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442097-BLK1) Prepared: 10/16/24 Analyzed: 10/16/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.84		8.00		98.0	70-130			

LCS (2442097-BS2) Prepared: 10/16/24 Analyzed: 10/16/24

Gasoline Range Organics (C6-C10)	45.4	20.0	50.0		90.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.93		8.00		99.1	70-130			

Matrix Spike (2442097-MS2) Source: E410152-14 Prepared: 10/16/24 Analyzed: 10/16/24

Gasoline Range Organics (C6-C10)	92.0	40.0	100	ND	92.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	16.0		16.0		100	70-130			

Matrix Spike Dup (2442097-MSD2) Source: E410152-14 Prepared: 10/16/24 Analyzed: 10/16/24

Gasoline Range Organics (C6-C10)	89.0	40.0	100	ND	89.0	70-130	3.30	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.8		16.0		98.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/17/2024 2:47:56PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442096-BLK1)					Prepared: 10/16/24 Analyzed: 10/16/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.2		50.0		96.4	50-200			

LCS (2442096-BS1)					Prepared: 10/16/24 Analyzed: 10/16/24				
Diesel Range Organics (C10-C28)	234	25.0	250		93.8	38-132			
Surrogate: n-Nonane	50.0		50.0		100	50-200			

Matrix Spike (2442096-MS1)					Source: E410152-01		Prepared: 10/16/24 Analyzed: 10/17/24		
Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	52.1		50.0		104	50-200			

Matrix Spike Dup (2442096-MSD1)					Source: E410152-01		Prepared: 10/16/24 Analyzed: 10/17/24		
Diesel Range Organics (C10-C28)	267	25.0	250	ND	107	38-132	0.503	20	
Surrogate: n-Nonane	53.1		50.0		106	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/17/2024 2:47:56PM

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 (2442093-BLK1)					Prepared: 10/16/24 Analyzed: 10/16/24				
Chloride	ND	20.0							
LCS (2442093-BS1)					Prepared: 10/16/24 Analyzed: 10/16/24				
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2442093-MS1)					Source: E410152-05		Prepared: 10/16/24 Analyzed: 10/16/24		
Chloride	389	20.0	250	123	106	80-120			
Matrix Spike Dup (2442093-MSD1)					Source: E410152-05		Prepared: 10/16/24 Analyzed: 10/16/24		
Chloride	386	20.0	250	123	105	80-120	0.845	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 C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/17/24 14:47

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



Project Information

Chain of Custody

Page 1 of 2

Client: Mack Energy						Bill To ENERGY STATING SERVICES						Lab Use Only						TAT						EPA Program											
Project: Westmount C						Attention: ENERGY STATING SERVICES						Lab WO# E40152						Job Number 20046-0001						ID 2D 3D Standard						CWA SDWA					
Project Manager:						Address: 7724 NW COUNTY RD																													
Address:						City, State, Zip HOHRS, NM 88240																													
City, State, Zip						Phone: 575-393-9048																													
Phone:						Email: NATALIE@ENERGYSSTATING.COM																													
Email:						BRITNEY@ENERGYSSTATING.COM																													
Report due by																																			
Time Sampled	Date	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRC by 8015	GRO/DRC by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Urbane 8000	SGDOC NM	SGDOC IA	NM CO UT AZ TX	State	Remarks																			
	10/14	S	1	SPcomp 13-8	1							X																							
				SPcomp 14-8	2																														
				SPcomp 15-8	3																														
				SPcomp 16-8	4																														
				SPcomp 17-4	5																														
				SPcomp 18-4	6																														
				SPcomp 19-4	7																														
				SPcomp 20-4	8																														
				SPcomp comp 21-4	9																														
	10/14	S	1	SPcomp 22-4	10																														
Additional Instructions:																																			
I, (field sample), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																																			
Retrieved by: Andy Tongue																																			
Received by: Michelle Gougeon																																			
Date: 10/14 Time: 1345																																			
Date: 10/15/24 Time: 1615																																			
Date: 10/15/24 Time: 0745																																			
Avg Temp °C 4																																			
Lab Use Only																																			
Received on site: 01 N																																			
T1 T2 T3																																			
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client at the client's expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																																			

Project Information

Chain of Custody

Page 2 of 2

Client: <u>Mace Energy</u> Project: <u>Westmount C</u> Project Manager: Address: City, State, Zip Phone: Email: Report due by:					Bill To Attention: ENERGY STAFFING SERVICES Address: 2724 NW COUNTY RD City, State, Zip HOBBS, NM 88240 Phone: 575-393-9048 Email: NATALIE@ENERGYSTAFFINGLLC.COM BRITTNEY@ENERGYSTAFFINGLLC.COM					Lab Use Only Lab WO# <u>E 410152</u> Job Number <u>20046-0001</u>					TAT 1D <input checked="" type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard				EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
Analysis and Method										State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks						
	10/14/24	S	1	Spcomp 23-10	11							X								
				Spcomp 24-10	12															
				Spcomp 25-10	13															
				Spcomp 26-10	14															
	10/14/24	S	1	Spcomp 27-4	15							X								
					+ NS 10-16-24															

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 Torrey

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

Relinquished by: (Signature) <u>Andy Torrey</u>	Date <u>10/14/24</u>	Time <u>1345</u>	Received by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-15-24</u>	Time <u>1345</u>
Relinquished by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-15-24</u>	Time <u>1615</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>10-15-24</u>	Time <u>1615</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>10-15-24</u>	Time <u>2230</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>10-16-24</u>	Time <u>0745</u>

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: 10/16/2024 8:58:20AM

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:	10/16/24 07:45	Work Order ID:	E410152
Phone:	(575) 390-6397	Date Logged In:	10/15/24 15:11	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	10/17/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC per client.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Work Order: E410166

Job Number: 20046-0001

Received: 10/17/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/18/24

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.
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 10/18/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount C
Workorder: E410166
Date Received: 10/17/2024 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/17/2024 8:00:00AM, under the Project Name: West Mount C.

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

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

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

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

Respectfully,

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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount C Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 10/18/24 14:08
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 28-4	E410166-01A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 29-4	E410166-02A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 30-8	E410166-03A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 31-8	E410166-04A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 32-4	E410166-05A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 33-4	E410166-06A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 34-4	E410166-07A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 35-4	E410166-08A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 36-4	E410166-09A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.
SP Comp 37-4	E410166-10A	Soil	10/15/24	10/17/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/18/2024 2:08:55PM

SP Comp 28-4

E410166-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0500	2	10/17/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/17/24	10/18/24	
Toluene	ND	0.0500	2	10/17/24	10/18/24	
o-Xylene	ND	0.0500	2	10/17/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/17/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		90.7 %	70-130	10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		98.8 %	70-130	10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>		96.3 %	50-200	10/17/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	306	40.0	2	10/17/24	10/17/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/18/2024 2:08:55PM

SP Comp 29-4

E410166-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0250	1	10/17/24	10/18/24	
Ethylbenzene	ND	0.0250	1	10/17/24	10/18/24	
Toluene	ND	0.0250	1	10/17/24	10/18/24	
o-Xylene	ND	0.0250	1	10/17/24	10/18/24	
p,m-Xylene	ND	0.0500	1	10/17/24	10/18/24	
Total Xylenes	ND	0.0250	1	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.9 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.5 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	93.7 %	50-200		10/17/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	291	20.0	1	10/17/24	10/17/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/18/2024 2:08:55PM

SP Comp 30-8

E410166-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0500	2	10/17/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/17/24	10/18/24	
Toluene	ND	0.0500	2	10/17/24	10/18/24	
o-Xylene	ND	0.0500	2	10/17/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/17/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.9 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.0 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	25.6	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	93.8 %	50-200		10/17/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	399	40.0	2	10/17/24	10/17/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/18/2024 2:08:55PM

SP Comp 31-8

E410166-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0500	2	10/17/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/17/24	10/18/24	
Toluene	ND	0.0500	2	10/17/24	10/18/24	
o-Xylene	ND	0.0500	2	10/17/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/17/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.4 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.2 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	97.1 %	50-200		10/17/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	389	40.0	2	10/17/24	10/17/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/18/2024 2:08:55PM

SP Comp 32-4

E410166-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0500	2	10/17/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/17/24	10/18/24	
Toluene	ND	0.0500	2	10/17/24	10/18/24	
o-Xylene	ND	0.0500	2	10/17/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/17/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.0 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.9 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	95.7 %	50-200		10/17/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	415	40.0	2	10/17/24	10/17/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/18/2024 2:08:55PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 33-4
E410166-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0250	1	10/17/24	10/17/24	
Ethylbenzene	ND	0.0250	1	10/17/24	10/17/24	
Toluene	ND	0.0250	1	10/17/24	10/17/24	
o-Xylene	ND	0.0250	1	10/17/24	10/17/24	
p,m-Xylene	ND	0.0500	1	10/17/24	10/17/24	
Total Xylenes	ND	0.0250	1	10/17/24	10/17/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		10/17/24	10/17/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/17/24	10/17/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.7 %	70-130		10/17/24	10/17/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	95.0 %	50-200		10/17/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	73.8	20.0	1	10/17/24	10/17/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/18/2024 2:08:55PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 34-4
E410166-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0500	2	10/17/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/17/24	10/18/24	
Toluene	ND	0.0500	2	10/17/24	10/18/24	
o-Xylene	ND	0.0500	2	10/17/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/17/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.1 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.4 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	94.3 %	50-200		10/17/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	227	20.0	1	10/17/24	10/17/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/18/2024 2:08:55PM

SP Comp 35-4

E410166-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: CG		Batch: 2442122
Benzene	ND	0.0500	2	10/17/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/17/24	10/18/24	
Toluene	ND	0.0500	2	10/17/24	10/18/24	
o-Xylene	ND	0.0500	2	10/17/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/17/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		92.1 %	70-130	10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: CG		Batch: 2442122
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		98.0 %	70-130	10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: AF		Batch: 2442130
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>		92.8 %	50-200	10/17/24	10/18/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: IY		Batch: 2442124
Chloride	275	20.0	1	10/17/24	10/17/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/18/2024 2:08:55PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP Comp 36-4
E410166-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0500	2	10/17/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/17/24	10/18/24	
Toluene	ND	0.0500	2	10/17/24	10/18/24	
o-Xylene	ND	0.0500	2	10/17/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/17/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/17/24	10/18/24	
Surrogate: 4-Bromochlorobenzene-PID	92.5 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/17/24	10/18/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.2 %	70-130		10/17/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
Surrogate: n-Nonane	96.4 %	50-200		10/17/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	425	40.0	2	10/17/24	10/17/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/18/2024 2:08:55PM

SP Comp 37-4

E410166-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Benzene	ND	0.0250	1	10/17/24	10/18/24	
Ethylbenzene	ND	0.0250	1	10/17/24	10/18/24	
Toluene	ND	0.0250	1	10/17/24	10/18/24	
o-Xylene	ND	0.0250	1	10/17/24	10/18/24	
p,m-Xylene	ND	0.0500	1	10/17/24	10/18/24	
Total Xylenes	ND	0.0250	1	10/17/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	<i>92.7 %</i>	<i>70-130</i>		<i>10/17/24</i>	<i>10/18/24</i>	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442122	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/17/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	<i>99.6 %</i>	<i>70-130</i>		<i>10/17/24</i>	<i>10/18/24</i>	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442130	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/24	10/18/24	
<i>Surrogate: n-Nonane</i>	<i>92.8 %</i>	<i>50-200</i>		<i>10/17/24</i>	<i>10/18/24</i>	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442124	
Chloride	187	20.0	1	10/17/24	10/17/24	



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/18/2024 2:08:55PM

Volatile Organics by EPA 8021B

Analyst: CG

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

Blank (2442122-BLK1) Prepared: 10/17/24 Analyzed: 10/17/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.35		8.00		91.9	70-130			

LCS (2442122-BS1) Prepared: 10/17/24 Analyzed: 10/18/24

Benzene	4.33	0.0250	5.00		86.7	70-130			
Ethylbenzene	4.38	0.0250	5.00		87.7	70-130			
Toluene	4.41	0.0250	5.00		88.3	70-130			
o-Xylene	4.39	0.0250	5.00		87.7	70-130			
p,m-Xylene	8.93	0.0500	10.0		89.3	70-130			
Total Xylenes	13.3	0.0250	15.0		88.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.27		8.00		90.9	70-130			

Matrix Spike (2442122-MS1) Source: E410166-06 Prepared: 10/17/24 Analyzed: 10/17/24

Benzene	4.85	0.0250	5.00	ND	96.9	54-133			
Ethylbenzene	4.80	0.0250	5.00	ND	96.1	61-133			
Toluene	4.88	0.0250	5.00	ND	97.5	61-130			
o-Xylene	4.83	0.0250	5.00	ND	96.7	63-131			
p,m-Xylene	9.74	0.0500	10.0	ND	97.4	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.40		8.00		92.5	70-130			

Matrix Spike Dup (2442122-MSD1) Source: E410166-06 Prepared: 10/17/24 Analyzed: 10/17/24

Benzene	4.54	0.0250	5.00	ND	90.7	54-133	6.62	20	
Ethylbenzene	4.51	0.0250	5.00	ND	90.1	61-133	6.40	20	
Toluene	4.57	0.0250	5.00	ND	91.3	61-130	6.58	20	
o-Xylene	4.55	0.0250	5.00	ND	91.0	63-131	6.09	20	
p,m-Xylene	9.14	0.0500	10.0	ND	91.4	63-131	6.27	20	
Total Xylenes	13.7	0.0250	15.0	ND	91.3	63-131	6.21	20	
Surrogate: 4-Bromochlorobenzene-PID	7.43		8.00		92.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/18/2024 2:08:55PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442122-BLK1) Prepared: 10/17/24 Analyzed: 10/17/24

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

LCS (2442122-BS2) Prepared: 10/17/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	45.1	20.0	50.0		90.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.91		8.00		98.9	70-130			

Matrix Spike (2442122-MS2) Source: E410166-06 Prepared: 10/17/24 Analyzed: 10/17/24

Gasoline Range Organics (C6-C10)	43.3	20.0	50.0	ND	86.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.91		8.00		98.8	70-130			

Matrix Spike Dup (2442122-MSD2) Source: E410166-06 Prepared: 10/17/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	39.3	20.0	50.0	ND	78.7	70-130	9.67	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.02		8.00		100	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/18/2024 2:08:55PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442130-BLK1)					Prepared: 10/17/24 Analyzed: 10/18/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	47.9		50.0		95.9	50-200			

LCS (2442130-BS1)					Prepared: 10/17/24 Analyzed: 10/18/24				
Diesel Range Organics (C10-C28)	247	25.0	250		98.6	38-132			
Surrogate: n-Nonane	47.1		50.0		94.2	50-200			

Matrix Spike (2442130-MS1)					Source: E410166-01		Prepared: 10/17/24 Analyzed: 10/18/24		
Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	48.7		50.0		97.4	50-200			

Matrix Spike Dup (2442130-MSD1)					Source: E410166-01		Prepared: 10/17/24 Analyzed: 10/18/24		
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132	1.04	20	
Surrogate: n-Nonane	47.9		50.0		95.8	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/18/2024 2:08:55PM

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 (2442124-BLK1)					Prepared: 10/17/24 Analyzed: 10/17/24				
Chloride	ND	20.0							
LCS (2442124-BS1)					Prepared: 10/17/24 Analyzed: 10/17/24				
Chloride	254	20.0	250		101	90-110			
Matrix Spike (2442124-MS1)					Source: E410165-05		Prepared: 10/17/24 Analyzed: 10/17/24		
Chloride	766	20.0	250	492	109	80-120			
Matrix Spike Dup (2442124-MSD1)					Source: E410165-05		Prepared: 10/17/24 Analyzed: 10/17/24		
Chloride	716	20.0	250	492	89.4	80-120	6.73	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 C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/18/24 14:08

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



Project Information

Chain of Custody

Client: <u>Maui Energy</u>				Bill To				Lab Use Only				TAT				EPA Program			
Project: <u>West Maui</u>				Attention: <u>ENERGY STAFFING SERVICES</u>				Lab WO# <u>E410166</u>				Job Number <u>20046-0001</u>				CWA		SDWA	
Project Manager				Address: <u>2724 NW COUNTY RD</u>				Analysis and Method				Standard				RCRA			
Address:				City, State, Zip <u>HOBBS, NM 88240</u>															
City, State, Zip				Phone: <u>575-393-9048</u>															
Phone:				Email: <u>NATALIE@ENERGYSTAFFINGLLC.COM</u>															
Email:				BRIITNEY@ENERGYSTAFFINGLLC.COM															
Report due by:																			
Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRG/DRO by 8014	SGO/DRO by 8014	STEX by 8024	VOC by 8150	Metals 8010	Chloride 8010	AGDUC RM	SGDUC IS	State					
														NM CO UT AZ TX					
														Remarks					
	10/15	S	1	Spcomp 28-4	1							X							
				Spcomp 29-4	2														
				Spcomp 30-8	3														
				Spcomp 31-8	4														
				Spcomp 32-4	5														
				Spcomp 33-4	6														
				Spcomp 34-4	7														
				Spcomp 35-4	8														
				Spcomp 36-4	9														
	10/15	S	1	Spcomp 37-4	10							X							
Additional Instructions:																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.							
Relinquished by (Signature)				Date		Time		Received by (Signature)				Date		Time		Lab Use Only			
Andy Tonga				10-16-24		1336		Michelle Gonzales				10-16-24		1635		Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N			
Michelle Gonzales				10-16-24		1630		Lain Se				10-16-24		1635		T1 T2 T3			
Lain Se				10/16/24		2240		Caitla Man				10-17-24		8:00		AVG Temp °C 4			
Sample Matrix: S - Soil, SD - Solid, SG - Sludge, A - Aqueous, O - Other																			
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																			

Envirotech Analytical Laboratory

Printed: 10/17/2024 9:05:06AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	10/17/24 08:00	Work Order ID:	E410166
Phone:	(575) 390-6397	Date Logged In:	10/16/24 14:36	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	10/18/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/Resolution

Project Manager and time sampled not provided on COC per client.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount C

Work Order: E410179

Job Number: 20046-0001

Received: 10/18/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/21/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 10/21/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount C
Workorder: E410179
Date Received: 10/18/2024 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/18/2024 8:00:00AM, under the Project Name: West Mount C.

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

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

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

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

Respectfully,

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Laboratory Director
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Cell: 775-287-1762
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Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount C Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 10/21/24 17:49
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW Comp 1-4	E410179-01A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 2-4	E410179-02A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 3-6	E410179-03A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 4-4	E410179-04A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 5-4	E410179-05A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 6-4	E410179-06A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 7-8	E410179-07A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 8-4	E410179-08A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 9-4	E410179-09A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SW Comp 10-4	E410179-10A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/21/2024 5:49:24PM

SW Comp 1-4

E410179-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.7 %	70-130	10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		97.0 %	70-130	10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>		101 %	50-200	10/18/24	10/19/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	325	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:49:24PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW Comp 2-4
E410179-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.0 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.3 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	99.3 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	340	20.0	1	10/18/24	10/18/24	

Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:49:24PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW Comp 3-6
E410179-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
Surrogate: 4-Bromochlorobenzene-PID	91.4 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.8 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
Surrogate: n-Nonane	104 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	327	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/21/2024 5:49:24PM

SW Comp 4-4

E410179-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0250	1	10/18/24	10/18/24	
Ethylbenzene	ND	0.0250	1	10/18/24	10/18/24	
Toluene	ND	0.0250	1	10/18/24	10/18/24	
o-Xylene	ND	0.0250	1	10/18/24	10/18/24	
p,m-Xylene	ND	0.0500	1	10/18/24	10/18/24	
Total Xylenes	ND	0.0250	1	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.7 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	317	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/21/2024 5:49:24PM

SW Comp 5-4

E410179-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0250	1	10/18/24	10/18/24	
Ethylbenzene	ND	0.0250	1	10/18/24	10/18/24	
Toluene	ND	0.0250	1	10/18/24	10/18/24	
o-Xylene	ND	0.0250	1	10/18/24	10/18/24	
p,m-Xylene	ND	0.0500	1	10/18/24	10/18/24	
Total Xylenes	ND	0.0250	1	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.2 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.5 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	78.3	40.0	2	10/18/24	10/18/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:49:24PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW Comp 6-4
E410179-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0250	1	10/18/24	10/18/24	
Ethylbenzene	ND	0.0250	1	10/18/24	10/18/24	
Toluene	ND	0.0250	1	10/18/24	10/18/24	
o-Xylene	ND	0.0250	1	10/18/24	10/18/24	
p,m-Xylene	ND	0.0500	1	10/18/24	10/18/24	
Total Xylenes	ND	0.0250	1	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.7 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	215	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:49:24PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW Comp 7-8
E410179-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
Surrogate: 4-Bromochlorobenzene-PID	90.8 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.7 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
Surrogate: n-Nonane	102 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	212	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:49:24PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW Comp 8-4
E410179-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.7 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.7 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	230	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:49:24PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SW Comp 9-4
E410179-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0250	1	10/18/24	10/18/24	
Ethylbenzene	ND	0.0250	1	10/18/24	10/18/24	
Toluene	ND	0.0250	1	10/18/24	10/18/24	
o-Xylene	ND	0.0250	1	10/18/24	10/18/24	
p,m-Xylene	ND	0.0500	1	10/18/24	10/18/24	
Total Xylenes	ND	0.0250	1	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.3 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	219	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/21/2024 5:49:24PM

SW Comp 10-4

E410179-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0250	1	10/18/24	10/18/24	
Ethylbenzene	ND	0.0250	1	10/18/24	10/18/24	
Toluene	ND	0.0250	1	10/18/24	10/18/24	
o-Xylene	ND	0.0250	1	10/18/24	10/18/24	
p,m-Xylene	ND	0.0500	1	10/18/24	10/18/24	
Total Xylenes	ND	0.0250	1	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.0 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.4 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	219	20.0	1	10/18/24	10/18/24	



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:49:24PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442142-BLK1) Prepared: 10/18/24 Analyzed: 10/18/24

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	7.20		8.00		90.1	70-130			

LCS (2442142-BS1) Prepared: 10/18/24 Analyzed: 10/18/24

Benzene	4.35	0.0250	5.00		87.0	70-130			
Ethylbenzene	4.51	0.0250	5.00		90.1	70-130			
Toluene	4.50	0.0250	5.00		90.0	70-130			
o-Xylene	4.52	0.0250	5.00		90.4	70-130			
p,m-Xylene	9.18	0.0500	10.0		91.8	70-130			
Total Xylenes	13.7	0.0250	15.0		91.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.21		8.00		90.1	70-130			

Matrix Spike (2442142-MS1) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Benzene	8.82	0.0500	10.0	ND	88.3	54-133			
Ethylbenzene	9.19	0.0500	10.0	ND	91.9	61-133			
Toluene	9.17	0.0500	10.0	ND	91.8	61-130			
o-Xylene	9.20	0.0500	10.0	ND	92.0	63-131			
p,m-Xylene	18.7	0.100	20.0	ND	93.5	63-131			
Total Xylenes	27.9	0.0500	30.0	ND	93.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	14.6		16.0		91.0	70-130			

Matrix Spike Dup (2442142-MSD1) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Benzene	9.01	0.0500	10.0	ND	90.1	54-133	2.09	20	
Ethylbenzene	9.37	0.0500	10.0	ND	93.7	61-133	1.96	20	
Toluene	9.35	0.0500	10.0	ND	93.6	61-130	1.94	20	
o-Xylene	9.41	0.0500	10.0	ND	94.1	63-131	2.27	20	
p,m-Xylene	19.0	0.100	20.0	ND	95.3	63-131	1.87	20	
Total Xylenes	28.5	0.0500	30.0	ND	94.9	63-131	2.00	20	
Surrogate: 4-Bromochlorobenzene-PID	14.5		16.0		90.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:49:24PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442142-BLK1) Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.97		8.00		99.6	70-130			

LCS (2442142-BS2) Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0		87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.11		8.00		101	70-130			

Matrix Spike (2442142-MS2) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	86.9	40.0	100	ND	86.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.3		16.0		95.9	70-130			

Matrix Spike Dup (2442142-MSD2) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	85.6	40.0	100	ND	85.6	70-130	1.53	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.6		16.0		97.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:49:24PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442144-BLK1)					Prepared: 10/18/24 Analyzed: 10/19/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.5		50.0		103	50-200			

LCS (2442144-BS1)					Prepared: 10/18/24 Analyzed: 10/19/24				
Diesel Range Organics (C10-C28)	273	25.0	250		109	38-132			
Surrogate: n-Nonane	55.5		50.0		111	50-200			

Matrix Spike (2442144-MS1)					Source: E410179-09		Prepared: 10/18/24 Analyzed: 10/19/24		
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132			
Surrogate: n-Nonane	54.1		50.0		108	50-200			

Matrix Spike Dup (2442144-MSD1)					Source: E410179-09		Prepared: 10/18/24 Analyzed: 10/19/24		
Diesel Range Organics (C10-C28)	259	25.0	250	ND	104	38-132	8.66	20	
Surrogate: n-Nonane	52.3		50.0		105	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:49:24PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442151-BLK1)					Prepared: 10/18/24 Analyzed: 10/18/24				
Chloride	ND	20.0							
LCS (2442151-BS1)					Prepared: 10/18/24 Analyzed: 10/18/24				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2442151-MS1)					Source: E410179-03		Prepared: 10/18/24 Analyzed: 10/18/24		
Chloride	576	20.0	250	327	99.5	80-120			
Matrix Spike Dup (2442151-MSD1)					Source: E410179-03		Prepared: 10/18/24 Analyzed: 10/18/24		
Chloride	593	20.0	250	327	106	80-120	2.94	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 C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/24 17:49

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



Project Information

Chain of Custody

Page 1 of 1

Client: MAIL Energy
 Project: WESTMONT
 Project Manager:
 Address:
 City, State, Zip:
 Phone:
 Email:
 Report due by:

Attention: ENERGY STAFFING SERVICES
 Address: 2724 NW COUNTY RD
 City, State, Zip: HOBBBS NM 88230
 Phone: 575 393-9098
 Email: NATALLIE@ENERGYSTAFFING.COM
WILLIAM@ENERGYSTAFFING.COM

Time Date Sample ID Lab Number

10/16	5	1	SW Comp 1-4	1
			SW Comp 2-4	2
			SW Comp 3-4	3
			SW Comp 4-4	4
			SW Comp 5-4	5
			SW Comp 6-4	6
			SW Comp 7-8	7
			SW Comp 8-4	8
			SW Comp 9-4	9
10/16	5	1	SW Comp 10-4	10

Additional Instructions:

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

Signature of Sampler: Andy Wenger
 Date: 10-17-24
 Time: 1600
 Signature of Receiver: Michelle Gonzales
 Date: 10-17-24
 Time: 1600
 Signature of Client: Michelle Gonzales
 Date: 10-17-24
 Time: 1600
 Signature of Lab: Michelle Gonzales
 Date: 10-17-24
 Time: 1600
 Signature of Analyst: Michelle Gonzales
 Date: 10-17-24
 Time: 1600
 Signature of QA/QC: Michelle Gonzales
 Date: 10-17-24
 Time: 1600
 Signature of Director: Michelle Gonzales
 Date: 10-17-24
 Time: 1600
 Signature of Manager: Michelle Gonzales
 Date: 10-17-24
 Time: 1600
 Signature of Owner: Michelle Gonzales
 Date: 10-17-24
 Time: 1600

Lab Use Only
 Lab WOH# 410179
 Job Number 2046-0001
 Analysis and Method
 ID 12 30 Standard
 EPA Program CWA SDWA RCRA

State NM CO UT AZ TX
 Remarks

Sample's retaining thermal preservation must be met when on ice the day following sample collection. Packed in ice at or above 10mp above 0 but less than 6 °C on subsequent days.

Received on ice: Y N
 Lab Use Only
 Sample Type g glass p poly/plastic ag amber glass v VOA
 (containing type g glass p poly/plastic ag amber glass v VOA)
 Sample Temp °C 4

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 request.

EnviroTech

Envirotech Analytical Laboratory

Printed: 10/18/2024 9:04:20AM

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:	10/18/24 08:00	Work Order ID:	E410179
Phone:	(575) 390-6397	Date Logged In:	10/17/24 14:39	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	10/21/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC per client.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount C

Work Order: E410180

Job Number: 20046-0001

Received: 10/18/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/21/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 10/21/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount C
Workorder: E410180
Date Received: 10/18/2024 8:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/18/2024 8:00:00AM, under the Project Name: West Mount C.

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

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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rainaschwanz@envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/24 17:09

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 38-4'	E410180-01A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SP 39-4'	E410180-02A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.
SP 40-4'	E410180-03A	Soil	10/16/24	10/18/24	Glass Jar, 2 oz.



Sample Data

Mack Energy
7 W. Compress Road
Artesia NM, 88210

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

Reported:
10/21/2024 5:09:29PM

SP 38-4'

E410180-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.2 %	70-130	10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.7 %	70-130	10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>		105 %	50-200	10/18/24	10/19/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	ND	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:09:29PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP 39-4'

E410180-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
Surrogate: 4-Bromochlorobenzene-PID	91.8 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.1 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
Surrogate: n-Nonane	107 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	127	20.0	1	10/18/24	10/18/24	



Sample Data

Mack Energy	Project Name:	West Mount C	Reported: 10/21/2024 5:09:29PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

SP 40-4'

E410180-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Benzene	ND	0.0500	2	10/18/24	10/18/24	
Ethylbenzene	ND	0.0500	2	10/18/24	10/18/24	
Toluene	ND	0.0500	2	10/18/24	10/18/24	
o-Xylene	ND	0.0500	2	10/18/24	10/18/24	
p,m-Xylene	ND	0.100	2	10/18/24	10/18/24	
Total Xylenes	ND	0.0500	2	10/18/24	10/18/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.6 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442142	
Gasoline Range Organics (C6-C10)	ND	40.0	2	10/18/24	10/18/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.2 %	70-130		10/18/24	10/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442144	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/18/24	10/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/18/24	10/19/24	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		10/18/24	10/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442151	
Chloride	118	20.0	1	10/18/24	10/18/24	



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:09:29PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442142-BLK1) Prepared: 10/18/24 Analyzed: 10/18/24

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	7.20		8.00		90.1	70-130			

LCS (2442142-BS1) Prepared: 10/18/24 Analyzed: 10/18/24

Benzene	4.35	0.0250	5.00		87.0	70-130			
Ethylbenzene	4.51	0.0250	5.00		90.1	70-130			
Toluene	4.50	0.0250	5.00		90.0	70-130			
o-Xylene	4.52	0.0250	5.00		90.4	70-130			
p,m-Xylene	9.18	0.0500	10.0		91.8	70-130			
Total Xylenes	13.7	0.0250	15.0		91.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.21		8.00		90.1	70-130			

Matrix Spike (2442142-MS1) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Benzene	8.82	0.0500	10.0	ND	88.3	54-133			
Ethylbenzene	9.19	0.0500	10.0	ND	91.9	61-133			
Toluene	9.17	0.0500	10.0	ND	91.8	61-130			
o-Xylene	9.20	0.0500	10.0	ND	92.0	63-131			
p,m-Xylene	18.7	0.100	20.0	ND	93.5	63-131			
Total Xylenes	27.9	0.0500	30.0	ND	93.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	14.6		16.0		91.0	70-130			

Matrix Spike Dup (2442142-MSD1) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Benzene	9.01	0.0500	10.0	ND	90.1	54-133	2.09	20	
Ethylbenzene	9.37	0.0500	10.0	ND	93.7	61-133	1.96	20	
Toluene	9.35	0.0500	10.0	ND	93.6	61-130	1.94	20	
o-Xylene	9.41	0.0500	10.0	ND	94.1	63-131	2.27	20	
p,m-Xylene	19.0	0.100	20.0	ND	95.3	63-131	1.87	20	
Total Xylenes	28.5	0.0500	30.0	ND	94.9	63-131	2.00	20	
Surrogate: 4-Bromochlorobenzene-PID	14.5		16.0		90.9	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:09:29PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442142-BLK1) Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.97		8.00		99.6	70-130			

LCS (2442142-BS2) Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0		87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.11		8.00		101	70-130			

Matrix Spike (2442142-MS2) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	86.9	40.0	100	ND	86.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.3		16.0		95.9	70-130			

Matrix Spike Dup (2442142-MSD2) Source: E410179-08 Prepared: 10/18/24 Analyzed: 10/18/24

Gasoline Range Organics (C6-C10)	85.6	40.0	100	ND	85.6	70-130	1.53	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	15.6		16.0		97.5	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:09:29PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442144-BLK1)					Prepared: 10/18/24 Analyzed: 10/19/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.5		50.0		103	50-200			

LCS (2442144-BS1)					Prepared: 10/18/24 Analyzed: 10/19/24				
Diesel Range Organics (C10-C28)	273	25.0	250		109	38-132			
Surrogate: n-Nonane	55.5		50.0		111	50-200			

Matrix Spike (2442144-MS1)					Source: E410179-09		Prepared: 10/18/24 Analyzed: 10/19/24		
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132			
Surrogate: n-Nonane	54.1		50.0		108	50-200			

Matrix Spike Dup (2442144-MSD1)					Source: E410179-09		Prepared: 10/18/24 Analyzed: 10/19/24		
Diesel Range Organics (C10-C28)	259	25.0	250	ND	104	38-132	8.66	20	
Surrogate: n-Nonane	52.3		50.0		105	50-200			



QC Summary Data

Mack Energy	Project Name:	West Mount C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/2024 5:09:29PM

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 (2442151-BLK1)					Prepared: 10/18/24 Analyzed: 10/18/24				
Chloride	ND	20.0							
LCS (2442151-BS1)					Prepared: 10/18/24 Analyzed: 10/18/24				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2442151-MS1)					Source: E410179-03		Prepared: 10/18/24 Analyzed: 10/18/24		
Chloride	576	20.0	250	327	99.5	80-120			
Matrix Spike Dup (2442151-MSD1)					Source: E410179-03		Prepared: 10/18/24 Analyzed: 10/18/24		
Chloride	593	20.0	250	327	106	80-120	2.94	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 C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	10/21/24 17:09

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



Chain of Custody

Page 1 of 2

Page 13 of 16

Chain of Custody

Page 1 of 1

Page 14 of 16

Envirotech Analytical Laboratory

Printed: 10/18/2024 9:39:12AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	10/18/24 08:00	Work Order ID:	E410180
Phone:	(575) 390-6397	Date Logged In:	10/17/24 14:43	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	10/21/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC per client. Sample names on containers did not match names on COC. Client asked to change sample names on COC to match containers.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Envirotech Analytical Laboratory

Printed: 10/18/2024 9:39:12AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	10/18/24 08:00	Work Order ID:	E410180
Phone:	(575) 390-6397	Date Logged In:	10/17/24 14:43	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	10/21/24 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierComments/Resolution

Project manager and time sampled not provided on COC per client. Sample names on containers did not match names on COC. Client asked to change sample names on COC to match containers.

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

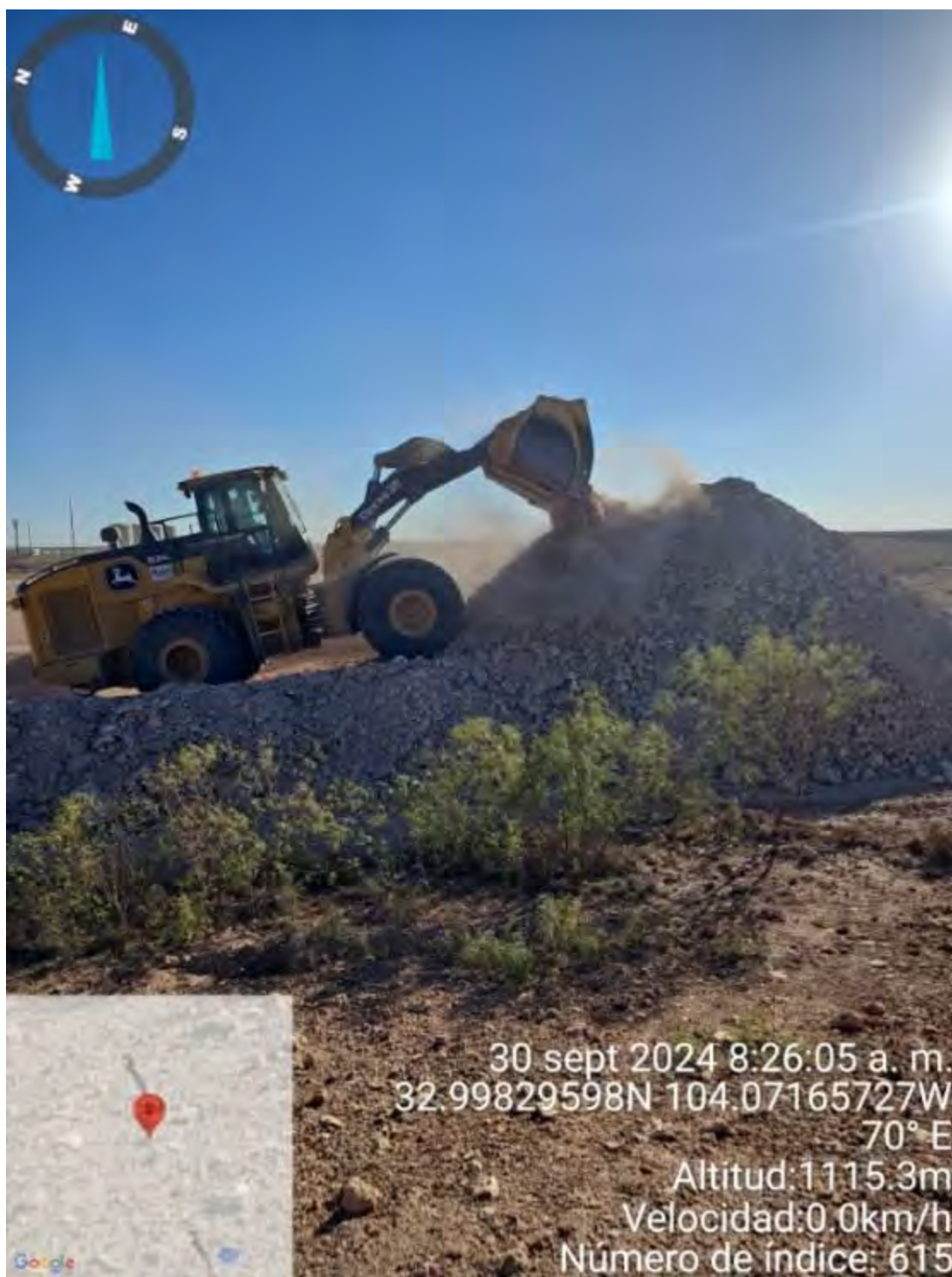


envirotech Inc.

MACK ENERGY: WEST MOUNT SPILL C REMEDIATION AND FINAL PHOTOS











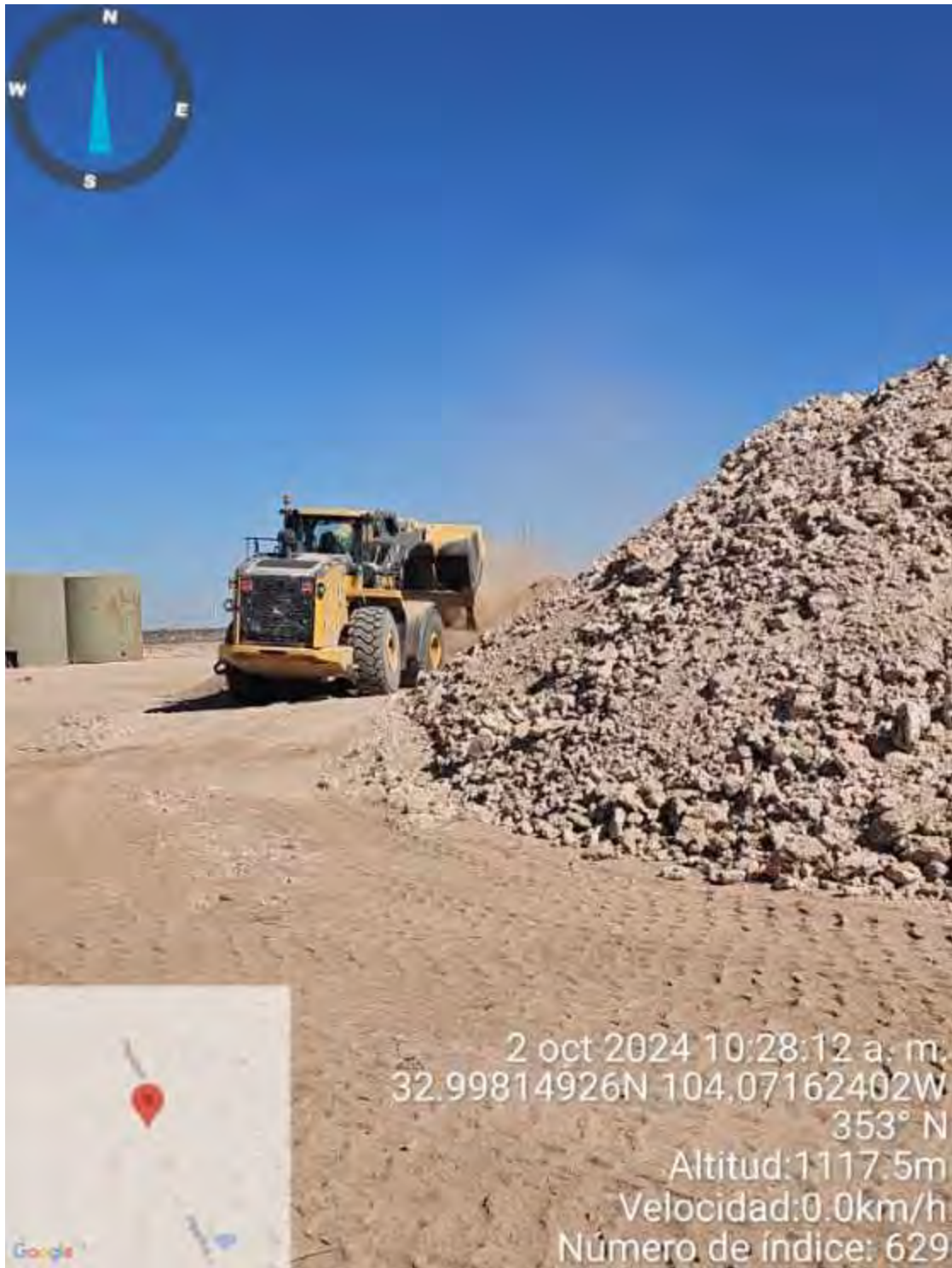
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Pipeline
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Chaves County
New Mexico
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Velocidad: 0.0km/h
Número de índice: 618

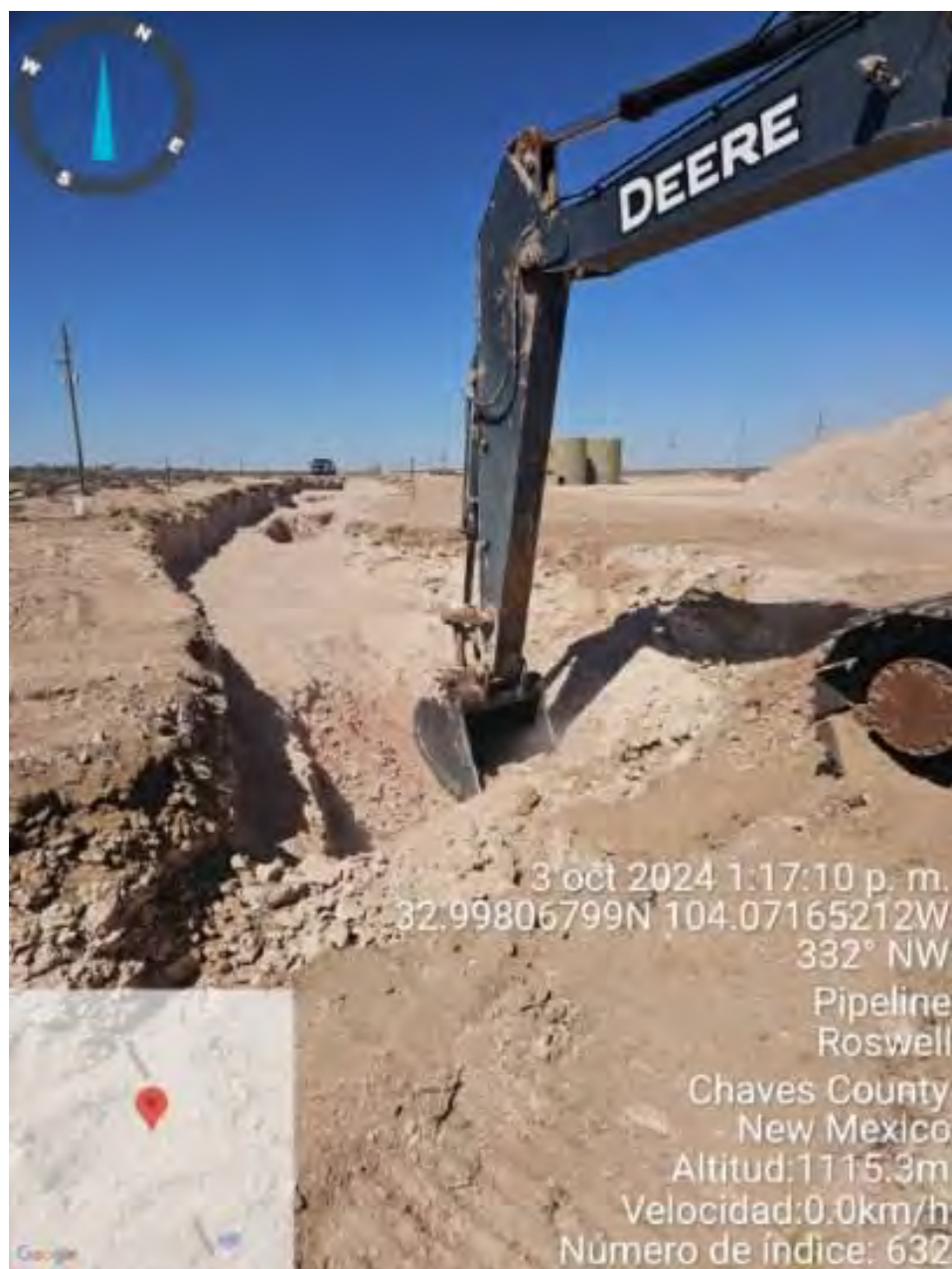




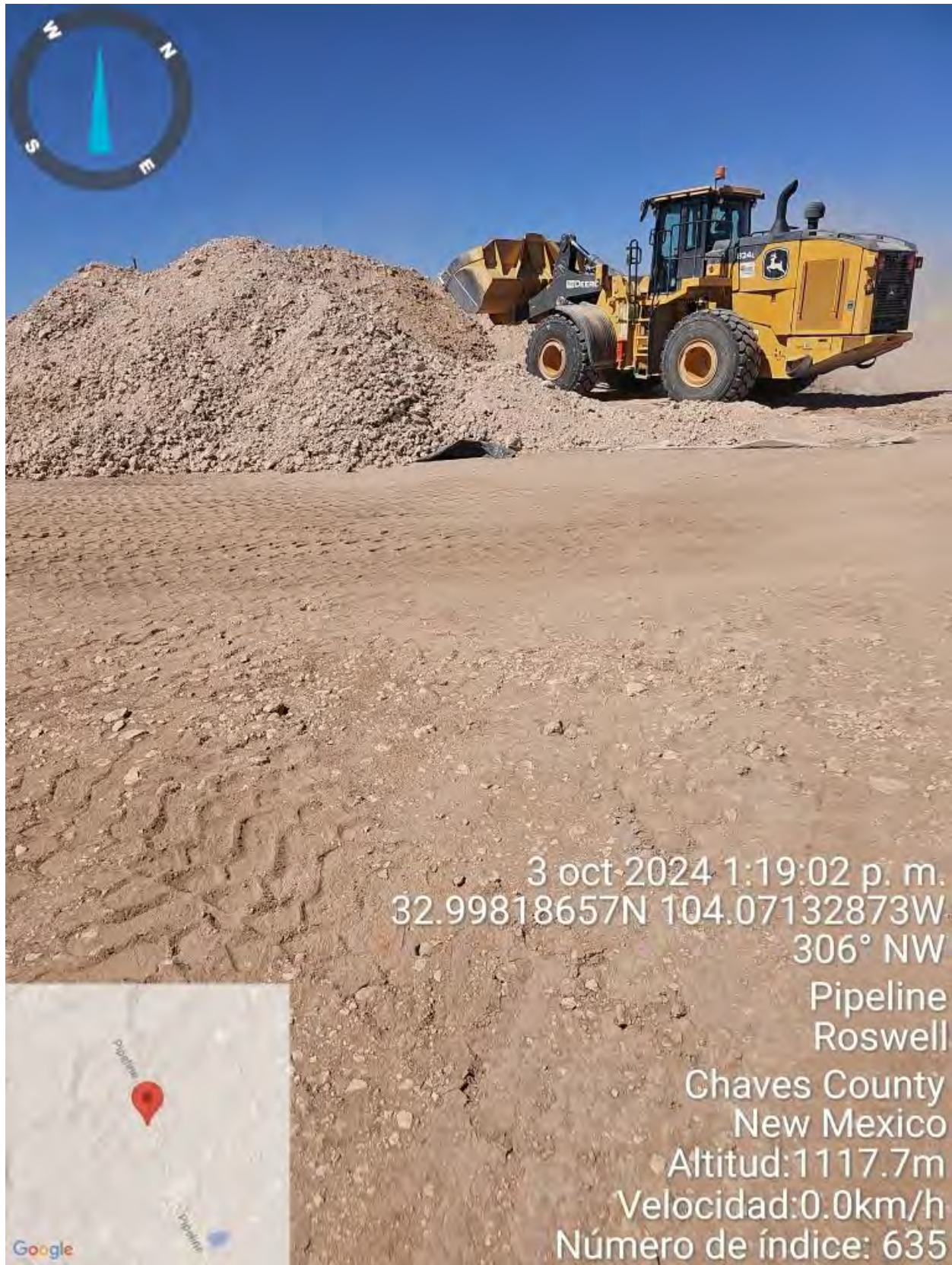
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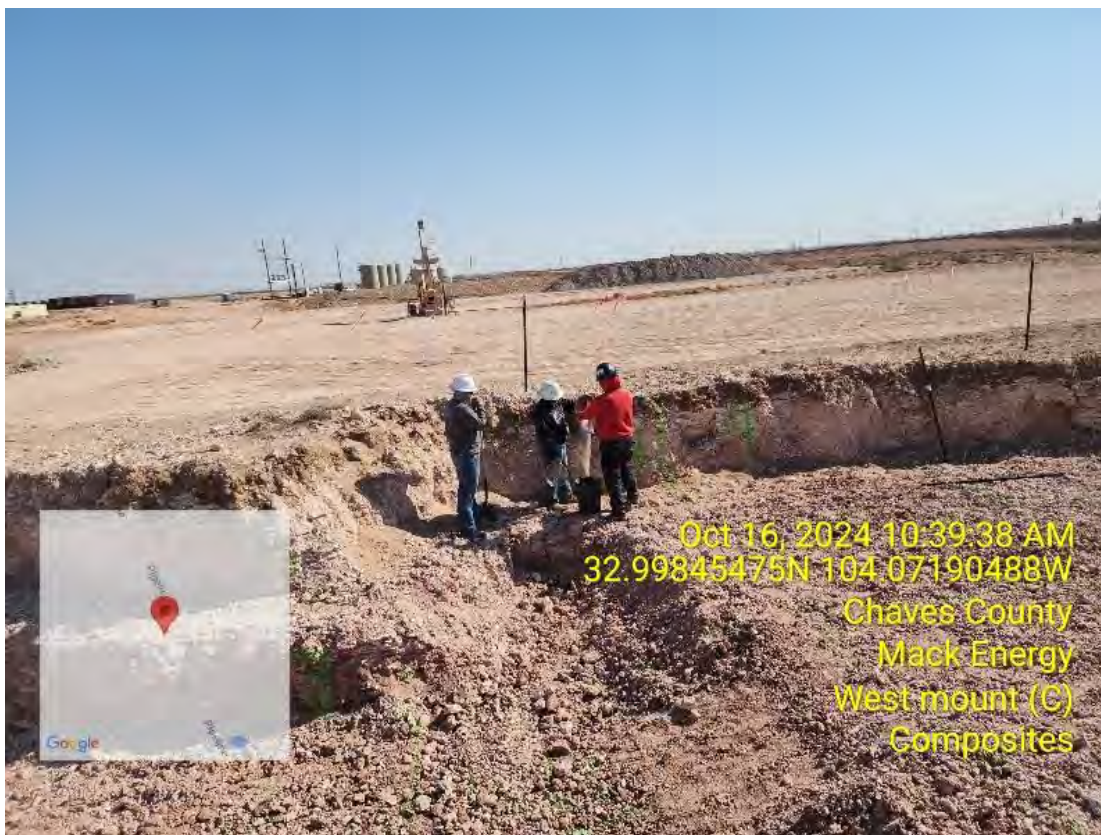




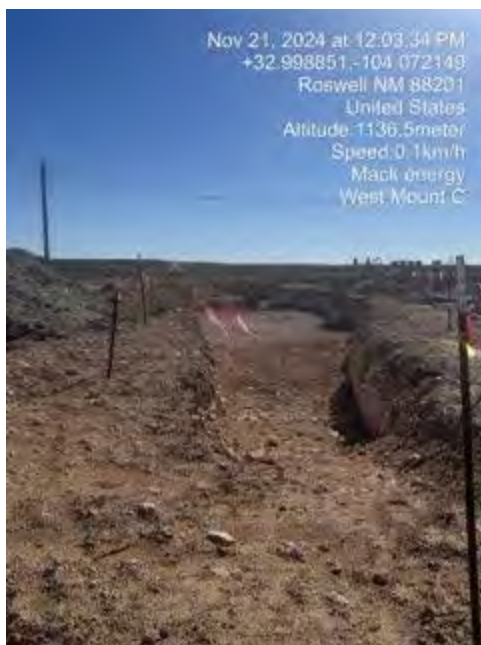
























**MACK ENERGY CORPORATION
WEST MOUNT SPILL C
RECLAMATION EXECUTIVE SUMMARY**

**API NO. 30-005-64381
UNIT LETTER F, SECTION 27, TOWNSHIP 15S, RANGE 28E
CHAVES COUNTY, NEW MEXICO**

Reclamation Executive Summary

Subject: Final Reclamation Summary – West Mount Spill C (Incident No. NAPP2327834535)

On January 13, 2025, ESS initiated and completed reclamation activities at the West Mount Spill C site following the finalization of remediation efforts for the release that occurred on September 20, 2023 (Incident Number: NAPP2327834535).

A total of 2,040 cubic yards of caliche were pushed up and hauled from Gandy's disposal and 240 cubic yards of topsoil were loaded and hauled from Mack's Bogel's Pit. The topsoil was evenly spread across the entire 4,312 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 Mixture 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 32.998410 -104.071879. 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 C 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





Mack Energy
NMSLO Sandy Loam- 1.8 Ac Broadcasted
Lot #: 68135
 28.29

Item	% Pure Mix	Origin	Purity	Germ	Dormant	Total Germ:	Test Date
Little Bluestem, Aldous	9.72%	Kansas	61.69%	59.00%	31.00%	90.00%	11/2024
Galleta, Viva	9.30%	Texas	86.14%	21.00%	73.00%	94.00%	9/2024
Blue Grama, Alma	7.36%	Texas	31.75%	94.00%	1.00%	95.00%	10/2024
Sidecoats Grama, Niner	7.21%	Texas	71.10%	16.00%	81.00%	97.00%	12/2024
Four-wing Saltbush, Variety Not Stated	7.07%	New Mexico	91.52%	0.00%	0.00%	99.00%	11/2024
Winter Fat, Variety Not Stated	6.66%	New Mexico	88.97%	90.00%	2.00%	92.00%	8/2024
Palmer Penstemon, Variety Not Stated	3.72%	Utah	98.86%	15.00%	79.00%	94.00%	7/2024
Sand Dropseed, Variety Not Stated	3.61%	Oklahoma	95.21%	92.00%	5.00%	97.00%	10/2024
Gaillardia Aristata, Variety Not Stated	3.61%	Oregon	89.09%	97.00%	0.00%	97.00%	6/2024
Blue Flax, Appar	3.60%	Washington	98.42%	97.00%	0.00%	97.00%	6/2024
Blackeyed Susan, Variety Not Stated	3.53%	Iowa	99.38%	99.00%	0.00%	99.00%	6/2024
Seed Total	65.39%						
Inert Matter:	34.54%						
Other Crop:	0.06%						
Weed Seed:	0.01%						

NMSLO Sandy Loam-1.8 AC Broadcasted.
 Bag into 3) 0.5 acre Bag into 3) 0.5 ac

curtisseed.com Noxious Weed: None

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



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 C

Work Order: E507175

Job Number: 20046-0001

Received: 7/17/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/18/25

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

Date Reported: 7/18/25

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount Spill C
Workorder: E507175
Date Received: 7/17/2025 7:00:34AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/17/2025 7:00:34AM, under the Project Name: West Mount Spill C.

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

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

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

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

Respectfully,

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

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Laboratory Administrator
Office: 505-632-1881
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mgonzaless@envirotech-inc.com

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Sample Summary

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/18/25 14:06

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BACKFILL COMP 1- SURF	E507175-01A	Soil	07/15/25	07/17/25	Glass Jar, 2 oz.



Sample Data

Mack Energy	Project Name:	West Mount Spill C	Reported: 7/18/2025 2:06:57PM
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	

BACKFILL COMP 1- SURF

E507175-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2529119	
Benzene	ND	0.0250	1	07/17/25	07/17/25	
Ethylbenzene	ND	0.0250	1	07/17/25	07/17/25	
Toluene	ND	0.0250	1	07/17/25	07/17/25	
o-Xylene	ND	0.0250	1	07/17/25	07/17/25	
p,m-Xylene	ND	0.0500	1	07/17/25	07/17/25	
Total Xylenes	ND	0.0250	1	07/17/25	07/17/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	07/17/25	07/17/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2529119	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/17/25	07/17/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.3 %	70-130	07/17/25	07/17/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH		Batch: 2529134	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/25	07/17/25	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/25	07/17/25	
<i>Surrogate: n-Nonane</i>		95.0 %	61-141	07/17/25	07/17/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2529117	
Chloride	62.3	20.0	1	07/17/25	07/17/25	



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/18/2025 2:06:57PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2529119-BLK1)

Prepared: 07/17/25 Analyzed: 07/17/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.00		8.00		100	70-130			

LCS (2529119-BS1)

Prepared: 07/17/25 Analyzed: 07/17/25

Benzene	5.17	0.0250	5.00		103	70-130			
Ethylbenzene	5.14	0.0250	5.00		103	70-130			
Toluene	5.19	0.0250	5.00		104	70-130			
o-Xylene	5.04	0.0250	5.00		101	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.4	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.02		8.00		100	70-130			

Matrix Spike (2529119-MS1)

Source: E507176-01

Prepared: 07/17/25 Analyzed: 07/17/25

Benzene	5.04	0.0250	5.00	ND	101	70-130			
Ethylbenzene	5.10	0.0250	5.00	ND	102	70-130			
Toluene	5.12	0.0250	5.00	ND	102	70-130			
o-Xylene	5.03	0.0250	5.00	ND	101	70-130			
p,m-Xylene	10.3	0.0500	10.0	ND	103	70-130			
Total Xylenes	15.3	0.0250	15.0	ND	102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.27		8.00		103	70-130			

Matrix Spike Dup (2529119-MSD1)

Source: E507176-01

Prepared: 07/17/25 Analyzed: 07/17/25

Benzene	4.92	0.0250	5.00	ND	98.4	70-130	2.42	27	
Ethylbenzene	4.99	0.0250	5.00	ND	99.8	70-130	2.12	26	
Toluene	5.00	0.0250	5.00	ND	100	70-130	2.31	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	70-130	1.95	25	
p,m-Xylene	10.1	0.0500	10.0	ND	101	70-130	2.00	23	
Total Xylenes	15.0	0.0250	15.0	ND	100	70-130	1.98	26	
Surrogate: 4-Bromochlorobenzene-PID	8.36		8.00		104	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/18/2025 2:06:57PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2529119-BLK1) Prepared: 07/17/25 Analyzed: 07/17/25

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

LCS (2529119-BS2) Prepared: 07/17/25 Analyzed: 07/17/25

Gasoline Range Organics (C6-C10)	45.6	20.0	50.0		91.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.4	70-130			

Matrix Spike (2529119-MS2) Source: E507176-01 Prepared: 07/17/25 Analyzed: 07/17/25

Gasoline Range Organics (C6-C10)	42.1	20.0	50.0	ND	84.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.52		8.00		94.0	70-130			

Matrix Spike Dup (2529119-MSD2) Source: E507176-01 Prepared: 07/17/25 Analyzed: 07/17/25

Gasoline Range Organics (C6-C10)	42.7	20.0	50.0	ND	85.3	70-130	1.40	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.44		8.00		93.0	70-130			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/18/2025 2:06:57PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2529134-BLK1) Prepared: 07/17/25 Analyzed: 07/17/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	47.8		50.0		95.7	61-141			

LCS (2529134-BS1) Prepared: 07/17/25 Analyzed: 07/17/25

Diesel Range Organics (C10-C28)	240	25.0	250		95.9	66-144			
Surrogate: n-Nonane	47.9		50.0		95.7	61-141			

Matrix Spike (2529134-MS1) Source: E507178-07 Prepared: 07/17/25 Analyzed: 07/17/25

Diesel Range Organics (C10-C28)	240	25.0	250	ND	96.1	56-156			
Surrogate: n-Nonane	47.9		50.0		95.8	61-141			

Matrix Spike Dup (2529134-MSD1) Source: E507178-07 Prepared: 07/17/25 Analyzed: 07/17/25

Diesel Range Organics (C10-C28)	238	25.0	250	ND	95.1	56-156	1.08	20	
Surrogate: n-Nonane	47.7		50.0		95.5	61-141			



QC Summary Data

Mack Energy	Project Name:	West Mount Spill C	Reported:
7 W. Compress Road	Project Number:	20046-0001	
Artesia NM, 88210	Project Manager:	Natalie Gladden	7/18/2025 2:06:57PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2529117-BLK1)

Prepared: 07/17/25 Analyzed: 07/17/25

Chloride ND 20.0

LCS (2529117-BS1)

Prepared: 07/17/25 Analyzed: 07/17/25

Chloride 248 20.0 250 99.3 90-110

Matrix Spike (2529117-MS1)

Source: E507178-02

Prepared: 07/17/25 Analyzed: 07/17/25

Chloride 786 20.0 250 555 92.6 80-120

Matrix Spike Dup (2529117-MSD1)

Source: E507178-02

Prepared: 07/17/25 Analyzed: 07/17/25

Chloride 795 20.0 250 555 96.2 80-120 1.12 20

QC Summary Report Comment:

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill C	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/18/25 14:06

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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





Envirotech Analytical Laboratory

Printed: 7/17/2025 2:09:57PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Mack Energy	Date Received:	07/17/25 07:00	Work Order ID:	E507175
Phone:	(575) 390-6397	Date Logged In:	07/16/25 16:07	Logged In By:	Caitlin Mars
Email:	Natalie@energystaffingllc.com	Due Date:	07/18/25 17:00 (1 day TAT)		

Chain of Custody (COC)

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

Carrier: Courier

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client InstructionComments/Resolution

Project manager not provided on COC.

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

Date






envirotech Inc.

MACK ENERGY

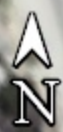
WEST MOUNT SPILL C
BACKFILL COMPOSITE MAP

Legend

-  Mack Energy. WestMount#1u2026Frac line spill C 4312 SQ. FT.
-  SPILL C BF COMPOSITE 32.998410 -104.071879
-  WEST MOUNT SPILL C

SPILL C BF COMPOSITE 32.998410 -104.071879

WEST MOUNT SPILL C





Mack Energy
NMSLO Sandy Loam- 1.8 Ac Broadcasted
Lot #: 68135
 28.29

Item	% Pure Mix	Origin	Purity	Germ	Dormant	Total	Germ:	Test Date
Little Bluestem, Aldous	9.72%	Kansas	61.69%	59.00%	31.00%	90.00%		11/2024
Galleta, Viva	9.30%	Texas	86.14%	21.00%	73.00%	94.00%		9/2024
Blue Grama, Alma	7.36%	Texas	31.75%	94.00%	1.00%	95.00%		10/2024
Sidecoats Grama, Niner	7.21%	Texas	71.10%	16.00%	81.00%	97.00%		12/2024
Four-wing Saltbush, Variety Not Stated	7.07%	New Mexico	91.52%	0.00%	0.00%	99.00%		11/2024
Winter Fat, Variety Not Stated	6.66%	New Mexico	88.97%	90.00%	2.00%	92.00%		8/2024
Palmer Penstemon, Variety Not Stated	3.72%	Utah	98.86%	15.00%	79.00%	94.00%		7/2024
Sand Dropseed, Variety Not Stated	3.61%	Oklahoma	95.21%	92.00%	5.00%	97.00%		10/2024
Gaillardia Aristata, Variety Not Stated	3.61%	Oregon	89.09%	97.00%	0.00%	97.00%		6/2024
Blue Flax, Appar	3.60%	Washington	98.42%	97.00%	0.00%	97.00%		6/2024
Blackeyed Susan, Variety Not Stated	3.53%	Iowa	99.38%	99.00%	0.00%	99.00%		6/2024
Seed Total	65.39%							
Inert Matter:	34.54%							
Other Crop:	0.08%							
Weed Seed:	0.01%							

curtisseed.com

Noxious Weed: None

4500 North Prince, Clovis, NM 88101

NMSLO Sandy Loam-1.8 AC Broadcasted.
 Bag into 3) 0.5 acre Bag into 3) 0.5 ac
 broadcasted bags @ 28.29 bulk pounds

(575) 762-4759



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

QUESTIONS

Action 499961

QUESTIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327834535
Incident Name	NAPP2327834535 WEST MOUNT SPILL C @ 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 C
Date Release Discovered	09/20/2023
Surface Owner	State

Incident Details

Please answer all the questions in this group.

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

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Produced Water Released: 31 BBL Recovered: 0 BBL Lost: 31 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 499961

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 08/27/2025
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QUESTIONS, Page 3

Action 499961

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	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	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

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
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	19600
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	247.5
GRO+DRO (EPA SW-846 Method 8015M)	247.5
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	09/23/2024
On what date will (or did) the final sampling or liner inspection occur	10/11/2024
On what date will (or was) the remediation complete(d)	01/13/2025
What is the estimated surface area (in square feet) that will be reclaimed	4312
What is the estimated volume (in cubic yards) that will be reclaimed	1760
What is the estimated surface area (in square feet) that will be remediated	4312
What is the estimated volume (in cubic yards) that will be remediated	1760

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, Page 4

Action 499961

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112338393 GANDY MARLEY LANDFARM/LANDFILL
OR which OCD approved well (API) will be used for off-site disposal	<i>Not answered.</i>
OR is the off-site disposal site, to be used, out-of-state	<i>Not answered.</i>
OR is the off-site disposal site, to be used, an NMED facility	<i>Not answered.</i>
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 08/27/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 499961

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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QUESTIONS, Page 6

Action 499961

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	390458
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/09/2024
What was the (estimated) number of samples that were to be gathered	32
What was the sampling surface area in square feet	4312

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
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	4312
What was the total volume (cubic yards) remediated	1760
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	4312
What was the total volume (in cubic yards) reclaimed	1760
Summarize any additional remediation activities not included by answers (above)	N/A
<p><i>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></p>	
<p>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.</p>	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 08/27/2025

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QUESTIONS, Page 7

Action 499961

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Reclamation Report	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	4312
What was the total volume of replacement material (in cubic yards) for this site	2280
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	01/13/2025
Summarize any additional reclamation activities not included by answers (above)	SITE WAS SEEDED WITH SLO SANDY LOAM SEED AS ORDERED BY SLO.
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 08/27/2025

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QUESTIONS, Page 8

Action 499961

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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CONDITIONS

Action 499961

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 499961
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your reclamation report for Incident #nAPP2327834535 WEST MOUNT SPILL C, thank you. The reclamation report is approved.	10/9/2025