



**WEST MOUNT SPILL J
CLOSURE REQUEST**

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

**DATE OF RELEASE: 09/21/2023
INCIDENT NO. nAPP2329832291**

**01/27/2026
Prepared by:**



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

January 27th, 2026

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

Mack Energy Corporation
11344 Lovington Hwy
Artesia, NM 88210

Subject: Closure Request for Mack Energy Corporation – West Mount Spill J

API No. 30-005-64381
Incident No. nAPP2329832291
Unit Letter E, Section 30, Township 15S, Range 29E
Chaves County, New Mexico

To Whom It May Concern,

Mack Energy Corporation retained Energy Staffing Services, LLC (ESS) to conduct a spill assessment associated with a produced water release that occurred on September 20, 2023, at the West Mount Spill J location (hereafter referred to as “Spill J”). 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 Corporation, ESS subsequently submitted the initial Form C-141 Spill/Release Report, along with the spill volume calculator used to determine the estimated release volume, on November 25, 2023 (attachments included). The NMOCD accepted the Form C-141 on November 26, 2023, at 12:00 a.m. The incident number assigned to this release is NAPP2329832291 (notification of correspondence attached).

This report provides a detailed summary of the spill assessment, impact delineation, and remedial activities conducted in response to the release. The documentation herein demonstrates that the applicable closure criteria set forth in 19.15.29.12 NMAC (New Mexico Oil Conservation Division, 2018) have been met and that all applicable regulatory requirements have been satisfied. This report is submitted as the final closure report and is intended to obtain NMOCD approval for closure of the above-referenced release.

Incident Description

On September 20, 2023, the water transfer company Well Spring identified a failure in a lay-flat transfer line that resulted in a produced water release into the pasture area associated with West Mount Spill J.

Upon discovery of the release, Energy Staffing Services, LLC (ESS) was notified and mobilized to the location to conduct a comprehensive environmental site assessment. Based on field measurements and visual observations, the impacted area was delineated and the volume of the release was calculated. It was determined that approximately 9.57 barrels of produced water were released. No recoverable fluids were present at the time of assessment.

Initial site documentation, including photographs and measurements of the impacted area, was completed during the assessment. Initial site photographs are included as attachments to this report.

Site Characterization

The Spill J release occurred on State Land at approximately 32.987071° latitude and -104.072670° longitude, located approximately 20.7 miles southeast of Hagerman, New Mexico. The legal description of the site is Unit Letter E, Section 30, Township 15 South, Range 29 East, Chaves County, New Mexico. A site location map and schematic are included as attachments.

Spill J consists of production flowlines and is located in proximity to existing production facilities and well pads. The release occurred within a pasture area associated with the Spill J location. The site elevation is approximately 3,721 feet above mean sea level. Vegetation in the area is historically and primarily dominated by black grama, bush muhly, dropseed, creosote bush, and other perennial grasses and forbs. Rangeland and vegetation classification information is included as an attachment.

According to the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS), soils within the Spill J release area consist of 100 percent Tencee–Sotim association (soil map attached). Review of the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer indicates the site is within an area identified as having a 0.2 percent annual chance of flooding (500-year floodplain), with potential flood depths of approximately one foot or associated with drainage areas less than one square mile (map attached).

Based on mapping from the United States Department of the Interior, Bureau of Land Management (BLM), the Spill J release area is classified as having a low potential for karst geology. The applicable karst map is included herein.

No surface water features are located at or near the Spill J release area. The site is not within one-half mile of a continuously flowing watercourse, drainage, or lakebed. No additional critical

or community features were identified in the vicinity of the release (see attached watercourse map).

A review of records from the New Mexico Office of the State Engineer (NMOSE) identified the following groundwater wells as the nearest known water wells to the Spill J location:

- RA 12428: Drilled in 2016; total depth of 170 feet; water depth of 125 feet; located approximately 6,409 yards from the site.
- RA 12429 POD 1: Drilled in 2016; total depth of 62 feet; water depth of 27 feet; located approximately 7,768 yards from the site.
- RA 09248: Drilled in 1996; total depth of 150 feet; water depth of 45 feet; located approximately 8,367 yards from the site.
- RA 10280: Drilled in 2002; total depth of 70 feet; water depth of 40 feet; located approximately 8,499 yards from the site.
- L 14514 POD 1: Drilled in 2018; total depth of 208 feet; water depth of 77 feet; located approximately 8,873 yards from the site.
- RA 09059: Drilled in 1995; total depth of 110 feet; water depth of 35 feet; located approximately 8,941 yards from the site.

Closure Criteria Determination

The applicable soil closure criteria for impacts associated with the release are presented in the table below. No groundwater monitoring data are available within a one-half-mile radius of the Spill J release location. In addition, the release occurred on State Land and the site is classified as having low karst potential.

Based on the absence of site-specific groundwater depth data, the Spill J location was conservatively evaluated using the less than 50 feet to groundwater closure criteria category. This classification was applied solely due to the lack of recent or available groundwater depth information and does not indicate the presence of shallow groundwater at the site.

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

Energy Staffing Services, LLC (ESS) has provided sufficient data to demonstrate that the produced water release resulted in soil impacts at the Spill J location and that the response actions implemented are consistent with the remediation and abatement goals and objectives

outlined in the New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release, dated August 14, 2018.

This document outlines the direction for Mack Energy Corporation's initial response actions, as well as the site assessment and delineation procedures conducted by ESS personnel. The following sections present the information associated with the delineation process performed for the Spill J release described herein.

Soil Sampling Procedures

Soil sampling for laboratory analysis was conducted in accordance with NMOCD-approved industry standards. Accepted NMOCD soil sampling procedures and laboratory analytical methods included the following:

- Soil samples were collected using clean techniques and placed into laboratory-supplied, airtight glass containers.
- Each sample container was labeled with appropriate site identification and sample information.
- Samples were stored in a cool environment and maintained on ice to preserve sample integrity.
- Samples were promptly shipped to the analytical laboratory under established chain-of-custody procedures.

Soil samples collected from both bottom (vertical) and sidewall (horizontal) locations were submitted to Envirotech Analytical Laboratory for analysis. The following analytical methods were utilized:

Volatile Organic Compounds (EPA Method 8021B):

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

Non-halogenated Organics (EPA Method 8015D – GRO):

- Gasoline Range Organics (C6–C10)

Non-halogenated Organics (EPA Method 8015D – DRO/ORO):

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

Anions (EPA Methods 300.0 / 9056A):

- Chloride

Release Investigation Data

On December 2, 2023, Energy Staffing Services, LLC (ESS) mobilized to the Spill J release location to conduct soil delineation activities. Delineation sample locations were established and each sample point was surveyed using GPS. Surface soil samples were collected at each delineation location.

All surface samples were field screened, logged, and submitted to Envirotech Analytical Laboratory for analytical confirmation. A total of three (3) vertical (bottom-hole) sample locations and six (6) horizontal (sidewall) sample locations were established. Each sample location was excavated using a backhoe, and soil samples were collected at one-foot (1') and two-foot (2') depth intervals.

Bottom-hole soil samples were submitted to the laboratory for analytical confirmation. The delineation sample data are summarized below, with laboratory-confirmed results highlighted in yellow. Supporting documentation, including sample logs, the delineation sample location map, and laboratory analytical reports, are included as attachments to this report.

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
SP1	SURF	>4000	L	ND	ND	ND	ND	ND	23500	12/2/2023
	2	640								
	4	2400								
	6	1440								
	8	400								
	10	320	L	ND	ND	ND	ND	ND	51.7	7/12/2024
SP2	SURF	2160	L	ND	ND	ND	ND	ND	3000	12/2/2023
	2	800								
	4	320								
	6	240	L	ND	ND	ND	ND	ND	ND	7/12/2024
SP3	SURF	240	L	ND	ND	ND	ND	ND	446	12/2/2023
	2	640								
	4	240								
	6	240	L	ND	ND	ND	ND	ND	ND	7/12/2024
SW1	SURF	>4000	L	ND	ND	ND	ND	ND	12800	12/2/2023
	1	720								
	2	320								
	3	160	L	ND	ND	ND	ND	ND	ND	7/12/2024

SW2	SURF	160	L	ND	ND	ND	ND	ND	ND	12/2/2023
	1	720								
	2	800								
	3	240								
	4	240	L	ND	ND	ND	ND	ND	35.7	7/12/2024
SW3	SURF	160	L	ND	ND	ND	ND	ND	ND	12/2/2023
	1	640								
	2	640								
	3	320								
	4	240	L	ND	ND	ND	ND	ND	36.2	7/12/2024
SW4	SURF	720	L	ND	ND	ND	ND	ND	ND	12/2/2023
	1	800								
	2	800								
	3	240								
	4	240	L	ND	ND	ND	ND	ND	36.1	7/12/2024
SW5	SURF	1840	L	ND	ND	ND	ND	ND	1220	12/2/2023
	1	1040								
	2	800								
	3	720								
	4	240								
	5	160	L	ND	ND	ND	ND	ND	26.7	7/12/2024
SW6	SURF	1440	L	ND	ND	ND	ND	ND	2240	12/2/2023
	1	960								
	2	960								
	3	800								
	4	400								
	5	160	L	ND	ND	ND	ND	ND	26.6	7/12/2024

Delineation photographs documenting the sampling activities are included as attachments to this report.

On August 19, 2024, Energy Staffing Services, LLC (ESS) submitted the official notification to the New Mexico Oil Conservation Division (NMOCD) initiating the composite phase of the Spill J release. On August 19, 2024, at 2:52 p.m., the NMOCD received and accepted the composite phase notification. The associated application identification number is **375262**. Supporting email correspondence is included as an attachment.

On August 5, 2024, field crews initiated composite soil sampling activities within the excavation area associated with the Spill J release. Composite samples were collected at a density of one composite per 200 square feet. A total of eighteen (18) bottom-hole composite samples were collected, field screened, and submitted to Envirotech Analytical Laboratory for analytical confirmation.

Composite sample data are presented below. Supporting documentation, including the composite sample data tables, composite sample location map, and laboratory analytical reports, are included as attachments to this report.

SP ID	Depth	Titr	PID	L- BTEX	L- GRO	L- DRO	L- ORO	L- TPH	L- CHL	Dates
COMP1	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP2	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP3	8	160	L	ND	ND	ND	ND	ND	22.3	9/3/2024
COMP4	8	160	L	ND	ND	ND	ND	ND	145	9/3/2024
COMP5	8	400	L	ND	ND	ND	ND	ND	370	9/3/2024
COMP6	4	240	L	ND	ND	ND	ND	ND	80.3	9/3/2024
COMP7	4	240	L	ND	ND	ND	ND	ND	113	9/3/2024
COMP8	4	160	L	ND	ND	ND	ND	ND	47.3	9/3/2024
COMP9	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP10	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP11	4	160	L	ND	ND	ND	ND	ND	38.2	9/3/2024
SWCOMP1	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
SWCOMP2	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
SWCOMP3	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
SWCOMP4	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024

SWCOMP5	4	240	L	ND	ND	ND	ND	ND	103	9/4/2024
SWCOMP6	8	240	L	ND	ND	ND	ND	ND	88.5	9/4/2024
SWCOMP7	8	240	L	ND	ND	ND	ND	ND	ND	9/4/2024

Remediation photographs documenting excavation, backfilling, and site restoration activities are included as attachments to this report.

The total impacted area associated with the Spill J release measured approximately 2,196 square feet. During remediation activities, approximately 660 cubic yards of impacted soil were excavated and transported to Gandy’s Disposal Facility for proper disposal. Approximately 1,580 cubic yards of backfill material were hauled from Gandy’s Disposal Facility to the site and stockpiled for backfilling, along with approximately 300 cubic yards of topsoil obtained from the landowner’s pit.

Following completion of excavation activities, the site was backfilled, contoured, and graded to restore the area to its natural condition. The site was subsequently seeded to promote revegetation. Backfilling and seeding activities were completed on January 15, 2025. Final site photographs are included as attachments to this report.

Closure Request

On behalf of Mack Energy Corporation, Energy Staffing Services, LLC (ESS) respectfully requests that the incident NAPP2329832291 be closed for the produced water release that occurred in the pasture area of the West Mount Spill J. Mack Energy and ESS have conducted all necessary response, assessment, and remediation activities in accordance with applicable NMOCD closure requirements for this release.

If there are any questions or additional information required regarding this closure request, please contact the undersigned at (575) 390-6397 or (575) 393-9048, or via email at natalie@energystaffingllc.com.

Sincerely,

Natalie Ragsdal
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
- Final C141

Natalie Gladden

From: OCDOnline@state.nm.us
Sent: Wednesday, October 25, 2023 8:58 AM
To: Natalie Gladden
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 279157

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

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2329832291, with the following conditions:

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

Please reference nAPP2329832291, on all subsequent C-141 submissions and communications regarding the remediation of this release.

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

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

ocd.enviro@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

Natalie Gladden

From: OCDOnline@state.nm.us
Sent: Friday, March 1, 2024 7:45 AM
To: Natalie Gladden
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 279167

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

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action (C-141)*, for incident ID (n#) nAPP2329832291, with the following conditions:

- **None**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Robert Hamlet
575-748-1283
Robert.Hamlet@emnrd.nm.gov

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

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.987071 Longitude -104.07267
(NAD 83 in decimal degrees to 5 decimal places)

Site Name WEST MOUNT SPILL J	Site Type PRODUCTION AREA
Date Release Discovered 9/21/2023	API# <i>(if applicable)</i> 30-005-64381

Unit Letter	Section	Township	Range	County
C	31	15	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) 9.57	Volume Recovered (bbls) 0BBLS
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

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

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>NATALIE GLADDEN</u> Title: <u>DIRECTOR OF ENVIRONMENTAL AND REGULATORY</u> Signature: <u></u> Date: <u>10/25/23</u> email: <u>natalie@energystaffingll.com</u> Telephone: <u>575-390-6397</u>
OCD Only Received by: _____ Date: _____

Legend

 Mack Energy, West Mount.#1 .frac line spill J 1323 SQ. FT.



WEST MOUNT SPILL J

WEST MOUNT SPILL K



200 ft

WEST MOUNT SPILL J – INITIAL SITE PHOTOS







Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition

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

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

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

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

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

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

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

Reference:

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

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

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

WEST MOUNT SPILL J

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								

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

WEST MOUNT SPILL J

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	Rangeland	Forest understory
		Favorable year	Normal year	Unfavorable year				
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct dry wt</i>	<i>Pct dry wt</i>	
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		

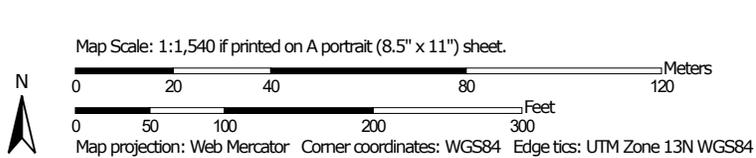
Data Source Information

Soil Survey Area: Chaves County, New Mexico, Southern Part
Survey Area Data: Version 18, Sep 7, 2023

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



Soil Map may not be valid at this scale.



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

6/5/2024
Page 1 of 3

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

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Chaves County, New Mexico, Southern Part
Survey Area Data: Version 18, Sep 7, 2023

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

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

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

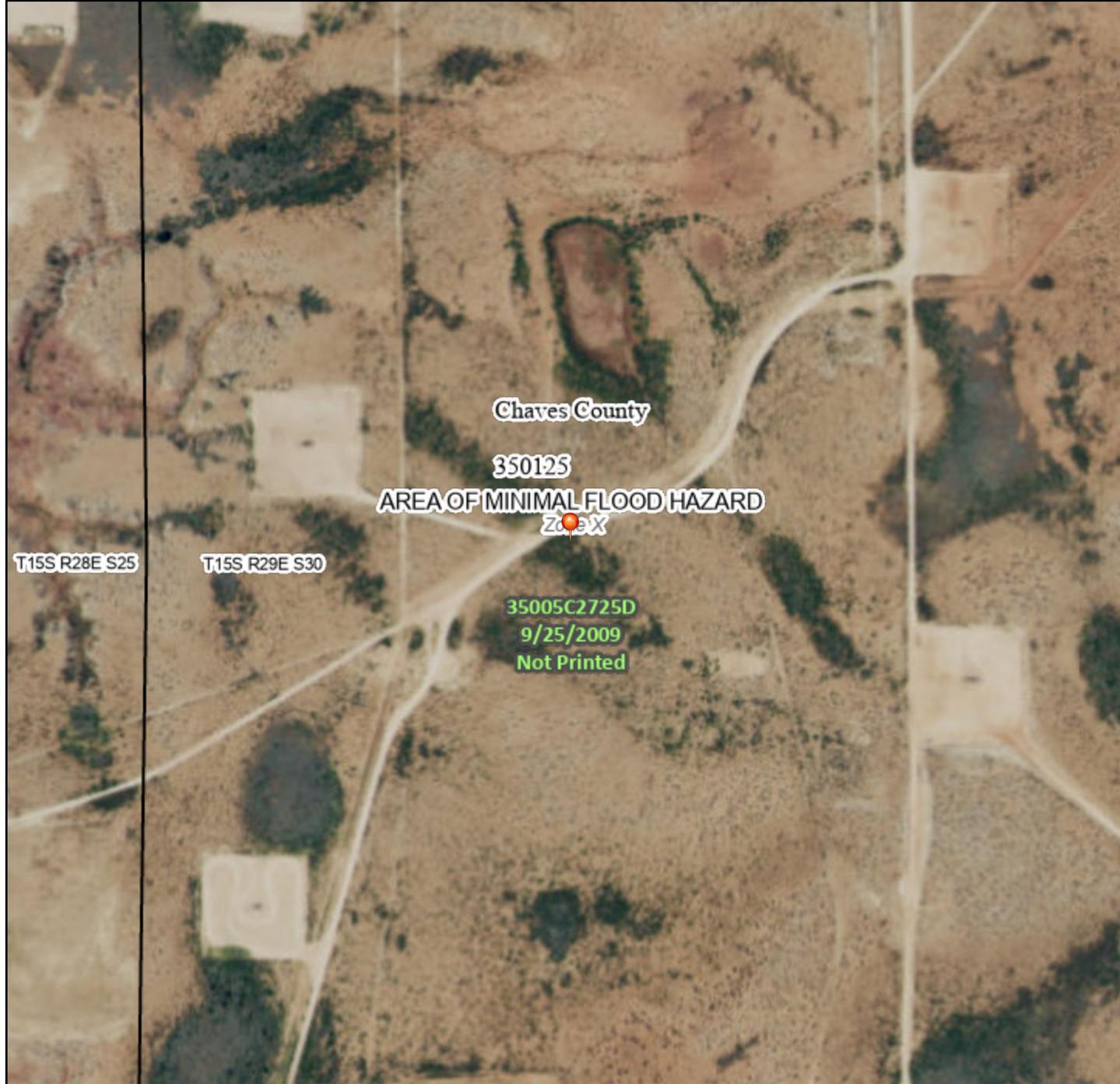
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TS	Tencee-Sotim association	11.3	100.0%
Totals for Area of Interest		11.3	100.0%

National Flood Hazard Layer FIRMette



104°4'40"W 32°59'29"N



Legend

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

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

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

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

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

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

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/5/2024 at 11:50 AM 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.

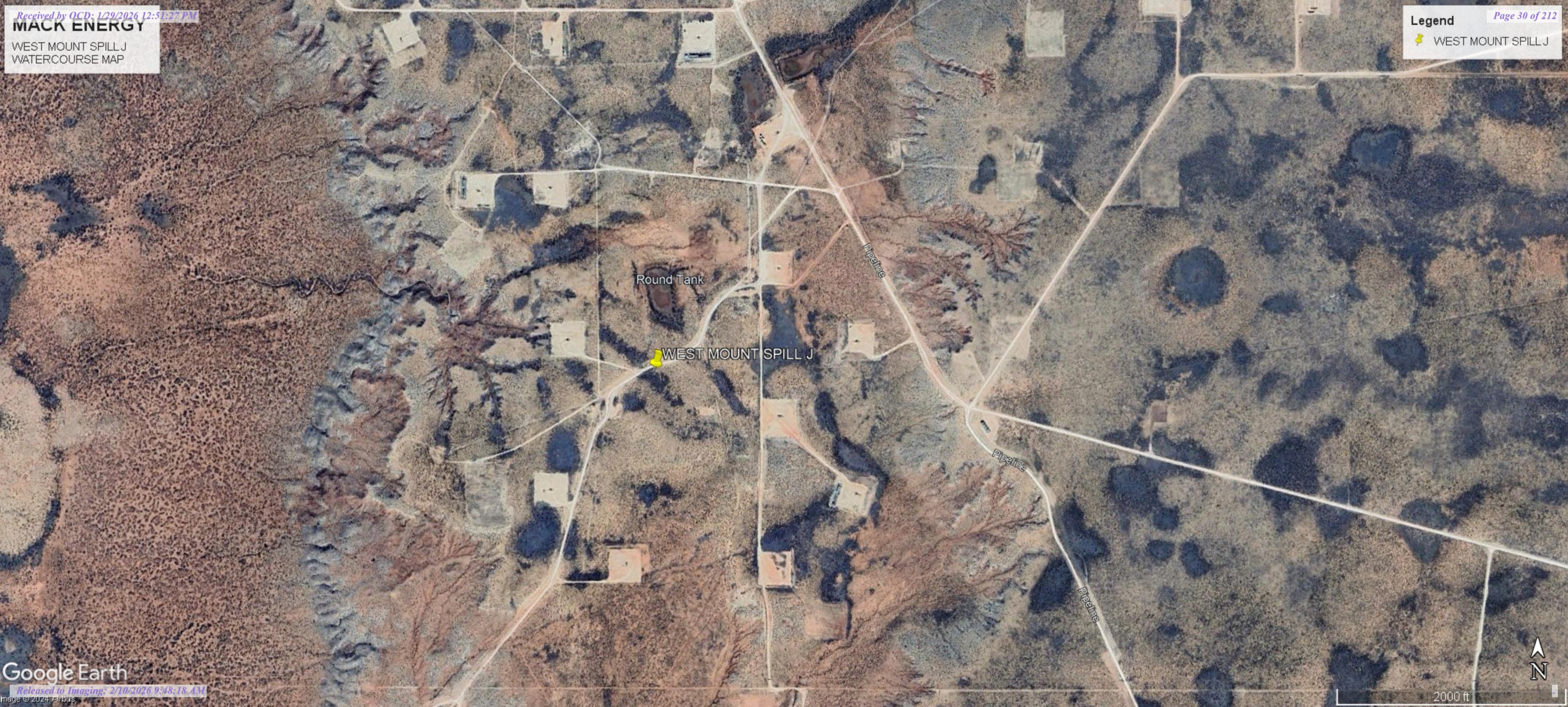
Released to Imaging: 2/10/2026 9:48:18 AM

1:6,000
Basemap Imagery Source: USGS National Map 2023

Legend

- High
- Low
- Medium
- WEST MOUNT SPILL J





Round Tank

WEST MOUNT SPILL J

Pipeline

Pipeline

Pipeline



Legend

- L14514 POD1-8,873-77 FT
- RA09248-8,367-45 FT
- RA10280-8,499-40 FT
- RA12428-6,409-125 FT
- RA12429 POD1-7,768-27 FT
- WEST MOUNT SPILL J



2 mi

A north arrow pointing upwards and a scale bar representing 2 miles.



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNA83 Radius Search (in meters):

Easting (X): 586641.49

Northing (Y): 3650235.39

Radius: 1000

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

6/5/24 9:55 AM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNA83 Radius Search (in meters):

Easting (X): 586641.49

Northing (Y): 3650235.39

Radius: 5000

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

6/5/24 9:55 AM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION



New Mexico Office of the State Engineer

Wells with Well Log Information

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

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

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

(NAD83 UTM in meters)

(in feet)

POD Number	POD Sub-Code	basin	County	Source	q	q	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
RA 12428	RA	CH	Shallow	4	2	1	21	15S	28E	580579	3652317		6409	07/28/2016	08/04/2016	08/08/2016	170	125	DONALD KUEHN III	1058
RA 12429 POD1	RA	CH	Shallow	1	1	4	32	15S	28E	579093	3648401		7768	11/17/2016	11/17/2016	11/28/2016	62	27	EADES, ALAN	1044
RA 09248	RA	CH	Shallow	1	4	3	17	15S	28E	578704	3652884*		8367	07/10/1996	07/13/1996	07/25/1996	150	45	RAYMOND ANDERSON	1344
RA 10280	RA	CH	Shallow	4	3	3	17	15S	28E	578501	3652680*		8499	06/20/2002	07/15/2002	04/23/2003	70	40	CARREON, FERNANDO	1490
L 14514 POD1	L	LE	Shallow	2	2	1	32	15S	36E	595494	3649622		8873	08/09/2018	08/10/2018	08/17/2018	208	77	JOHN GOERTZEN	1611
RA 09059	RA	CH	Shallow	2	4	4	18	15S	28E	578099	3652875*		8941	11/13/1995	01/15/1996	02/08/1997	110	35	RAYMOND ANDERSON	1344

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 586641.49

Northing (Y): 3650235.39

Radius: 10000

*UTM location was derived from PLSS - see Help

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



New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)	(NAD83 UTM in meters)						
		Q64 Q16 Q4 Sec Tws Rng	X	Y					
	RA 09248	1 4 3 17 15S 28E	578704	3652884*					

Driller License: 1344	Driller Company: ANDERSON, RAYMOND	
Driller Name: RAYMOND ANDERSON		
Drill Start Date: 07/10/1996	Drill Finish Date: 07/13/1996	Plug Date:
Log File Date: 07/25/1996	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 2 GPM
Casing Size: 4.50	Depth Well: 150 feet	Depth Water: 45 feet

Water Bearing Stratifications:	Top	Bottom	Description
	50	60	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	45	100

*UTM location was derived from PLSS - see Help

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



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

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

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

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

Casing Perforations:	Top	Bottom
	40	70

*UTM location was derived from PLSS - see Help

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



New Mexico Office of the State Engineer Point of Diversion Summary

Well Tag	POD Number								
	RA 12428								
		(quarters are 1=NW 2=NE 3=SW 4=SE)		(quarters are smallest to largest)		(NAD83 UTM in meters)			
		Q64	Q16	Q4	Sec	Tws	Rng	X	Y
		4	2	1	21	15S	28E	580579	3652317

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

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

Casing Perforations:	Top	Bottom
	125	170

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



New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)	(NAD83 UTM in meters)						
		Q64 Q16 Q4 Sec Tws Rng	X	Y					
	RA 12429 POD1	1 1 4 32 15S 28E	579093	3648401					

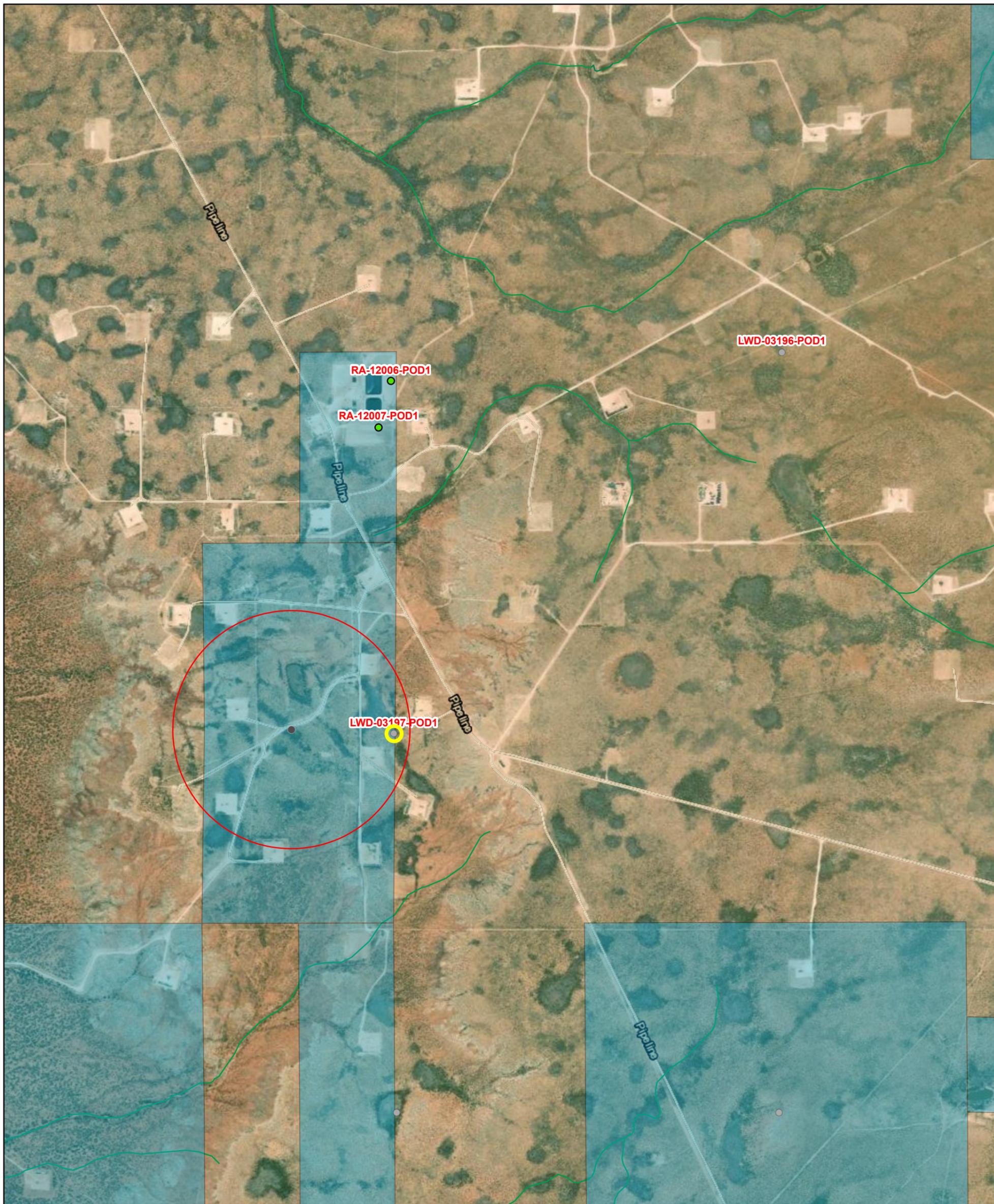
Driller License: 1044	Driller Company: EADES WELL DRILLING & PUMP SERVICE	
Driller Name: EADES, ALAN		
Drill Start Date: 11/17/2016	Drill Finish Date: 11/17/2016	Plug Date:
Log File Date: 11/28/2016	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield:
Casing Size: 5.13	Depth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

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

Casing Perforations:	Top	Bottom
	22	62

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.

OSE POD Location Map



6/21/2024, 12:36:51 PM

GIS WATERS PODs

New Mexico State Trust Lands

1:18,056

● Pending

■ Both Estates

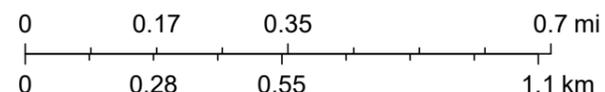
●

NHD Flowlines

□ OSE District Boundary

— Artificial Path

— Stream River



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

Company Name: MACK

Location Name: WEST MOUNT SPILL J

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
SP1	SURF	>4000	L	ND	ND	ND	ND	ND	23500	12/2/2023
	2	640								
	4	2400								
	6	1440								
	8	400								
	10	320	L	ND	ND	ND	ND	ND	51.7	7/12/2024
SP2	SURF	2160	L	ND	ND	ND	ND	ND	3000	12/2/2023
	2	800								
	4	320								
	6	240	L	ND	ND	ND	ND	ND	ND	7/12/2024
SP3	SURF	240	L	ND	ND	ND	ND	ND	446	12/2/2023
	2	640								
	4	240								
	6	240	L	ND	ND	ND	ND	ND	ND	7/12/2024
SW1	SURF	>4000	L	ND	ND	ND	ND	ND	12800	12/2/2023
	1	720								
	2	320								
	3	160	L	ND	ND	ND	ND	ND	ND	7/12/2024
SW2	SURF	160	L	ND	ND	ND	ND	ND	ND	12/2/2023
	1	720								
	2	800								
	3	240								
	4	240	L	ND	ND	ND	ND	ND	35.7	7/12/2024
SW3	SURF	160	L	ND	ND	ND	ND	ND	ND	12/2/2023
	1	640								
	2	640								

	3	320								
	4	240	L	ND	ND	ND	ND	ND	36.2	7/12/2024
SW4	SURF	720	L	ND	ND	ND	ND	ND	ND	12/2/2023
	1	800								
	2	800								
	3	240								
	4	240	L	ND	ND	ND	ND	ND	36.1	7/12/2024
SW5	SURF	1840	L	ND	ND	ND	ND	ND	1220	12/2/2023
	1	1040								
	2	800								
	3	720								
	4	240								
	5	160	L	ND	ND	ND	ND	ND	26.7	7/12/2024
SW6	SURF	1440	L	ND	ND	ND	ND	ND	2240	12/2/2023
	1	960								
	2	960								
	3	800								
	4	400								
	5	160	L	ND	ND	ND	ND	ND	26.6	7/12/2024

Mack Energy

West Mount J Spill
Delineation Map

Legend

- Vertical Sample Points
- Horizontal Sample Points



CLIENTS MACK ENERGY
LOCATION West Mount Spill J
 Delineation GPS

SAMPLE ID	LAT	LONG
SP1	32.987114°	-104.072764°
SP2	32.987077°	-104.072878°
SP3	32.987055°	-104.072958°
SW1	32.987119°	-104.072713°
SW2	32.987059°	-104.072848°
SW3	32.987032°	-104.072950°
SW4	32.987038°	-104.073009°
SW5	32.987083°	-104.072939°
SW6	32.987119°	-104.072853°

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill J

Work Order: E312012

Job Number: 20046-0001

Received: 12/5/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/6/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 12/6/23



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill J
Workorder: E312012
Date Received: 12/5/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/5/2023 7:30:00AM, under the Project Name: West Mount Spill J.

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

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

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

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

Respectfully,

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

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SP1-Surf	5
SP2-Surf	6
SP3-Surf	7
QC Summary Data	8
QC - Volatile Organic Compounds by EPA 8260B	8
QC - Nonhalogenated Organics by EPA 8015D - GRO	9
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	10
QC - Anions by EPA 300.0/9056A	11
Definitions and Notes	12
Chain of Custody etc.	13

Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/06/23 14:49
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1-Surf	E312012-01A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.
SP2-Surf	E312012-02A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.
SP3-Surf	E312012-03A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 2:49:45PM
--	--	---

SP1-Surf

E312012-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RAS		Batch: 2349030
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.5 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RAS		Batch: 2349030
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.5 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2349028
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		90.0 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2349036
Chloride	23500	200	10	12/05/23	12/06/23	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 2:49:45PM
--	--	---

SP2-Surf

E312012-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2349030
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		117 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.5 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2349030
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		117 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.5 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349028
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		94.3 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2349036
Chloride	3000	40.0	2	12/05/23	12/06/23	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 2:49:45PM
--	--	---

SP3-Surf

E312012-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RAS		Batch: 2349030
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.8 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RAS		Batch: 2349030
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.8 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		107 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2349028
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		92.3 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2349036
Chloride	446	20.0	1	12/05/23	12/06/23	



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 2:49:45PM
--	--	---

Volatile Organic Compounds by EPA 8260B

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2349030-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.604		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.453		0.500		90.6	70-130			
Surrogate: Toluene-d8	0.540		0.500		108	70-130			

LCS (2349030-BS1)

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.84	0.0250	2.50		113	70-130			
Ethylbenzene	2.73	0.0250	2.50		109	70-130			
Toluene	2.70	0.0250	2.50		108	70-130			
o-Xylene	2.62	0.0250	2.50		105	70-130			
p,m-Xylene	5.29	0.0500	5.00		106	70-130			
Total Xylenes	7.91	0.0250	7.50		105	70-130			
Surrogate: Bromofluorobenzene	0.597		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		93.0	70-130			
Surrogate: Toluene-d8	0.553		0.500		111	70-130			

Matrix Spike (2349030-MS1)

Source: E312013-08

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.79	0.0250	2.50	ND	111	48-131			
Ethylbenzene	2.71	0.0250	2.50	ND	108	45-135			
Toluene	2.68	0.0250	2.50	ND	107	48-130			
o-Xylene	2.64	0.0250	2.50	ND	106	43-135			
p,m-Xylene	5.28	0.0500	5.00	ND	106	43-135			
Total Xylenes	7.92	0.0250	7.50	ND	106	43-135			
Surrogate: Bromofluorobenzene	0.608		0.500		122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.543		0.500		109	70-130			

Matrix Spike Dup (2349030-MSD1)

Source: E312013-08

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.83	0.0250	2.50	ND	113	48-131	1.67	23	
Ethylbenzene	2.75	0.0250	2.50	ND	110	45-135	1.50	27	
Toluene	2.72	0.0250	2.50	ND	109	48-130	1.32	24	
o-Xylene	2.70	0.0250	2.50	ND	108	43-135	2.21	27	
p,m-Xylene	5.42	0.0500	5.00	ND	108	43-135	2.72	27	
Total Xylenes	8.12	0.0250	7.50	ND	108	43-135	2.55	27	
Surrogate: Bromofluorobenzene	0.609		0.500		122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.7	70-130			
Surrogate: Toluene-d8	0.547		0.500		109	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 2:49:45PM
--	--	---

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2349030-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.604		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.453		0.500		90.6	70-130			
Surrogate: Toluene-d8	0.540		0.500		108	70-130			

LCS (2349030-BS2)

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	54.0	20.0	50.0		108	70-130			
Surrogate: Bromofluorobenzene	0.614		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.3	70-130			
Surrogate: Toluene-d8	0.559		0.500		112	70-130			

Matrix Spike (2349030-MS2)

Source: E312013-08

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	55.5	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	0.599		0.500		120	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.474		0.500		94.8	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			

Matrix Spike Dup (2349030-MSD2)

Source: E312013-08

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	54.7	20.0	50.0	ND	109	70-130	1.43	20	
Surrogate: Bromofluorobenzene	0.586		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.531		0.500		106	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 2:49:45PM
--	--	---

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

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

Blank (2349028-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.3		50.0		96.6	50-200			

LCS (2349028-BS1)

Prepared: 12/05/23 Analyzed: 12/05/23

Diesel Range Organics (C10-C28)	219	25.0	250		87.7	38-132			
Surrogate: n-Nonane	47.6		50.0		95.2	50-200			

Matrix Spike (2349028-MS1)

Source: E311231-05

Prepared: 12/05/23 Analyzed: 12/05/23

Diesel Range Organics (C10-C28)	225	25.0	250	ND	89.9	38-132			
Surrogate: n-Nonane	47.8		50.0		95.7	50-200			

Matrix Spike Dup (2349028-MSD1)

Source: E311231-05

Prepared: 12/05/23 Analyzed: 12/05/23

Diesel Range Organics (C10-C28)	215	25.0	250	ND	86.1	38-132	4.35	20	
Surrogate: n-Nonane	47.2		50.0		94.5	50-200			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 2:49:45PM
--	--	---

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2349036-BLK1)

Prepared: 12/05/23 Analyzed: 12/06/23

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2349036-BS1)

Prepared: 12/05/23 Analyzed: 12/06/23

Chloride	246	20.0	250		98.3	90-110			
----------	-----	------	-----	--	------	--------	--	--	--

Matrix Spike (2349036-MS1)

Source: E312012-02

Prepared: 12/05/23 Analyzed: 12/06/23

Chloride	3210	40.0	250	3000	82.8	80-120			
----------	------	------	-----	------	------	--------	--	--	--

Matrix Spike Dup (2349036-MSD1)

Source: E312012-02

Prepared: 12/05/23 Analyzed: 12/06/23

Chloride	3190	40.0	250	3000	74.6	80-120	0.642	20	M4
----------	------	------	-----	------	------	--------	-------	----	----

QC Summary Report Comment:

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill J	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/06/23 14:49

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.



Client: Acct Energy
 Project: West Mont Spill J
 Project Manager:
 Address:
 City, State, Zip
 Phone:
 Email:
 Report due by:

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

Lab Use Only
 Lab WO# E 312012 Job Number 20046-0001
 TAT: 1D 2D 3D
 Standard: CWA SDWA
 RCRA

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Analysis and Method		TAT		EPA Program					Remarks			
						DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Standard		CWA	SDWA	RCRA
	12/02/23	S	1	SP 1 - Surf	1													
	12/02/23	S	1	SP 2 - Surf	2													
	12/02/23	S	1	SP 3 - Surf	3													

Additional Instructions:

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

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

Relinquished by: (Signature) <u>Juan Solis</u>	Date <u>12/02/23</u>	Time	Received by: (Signature) <u>Michelle Kemp</u>	Date <u>12-4-23</u>	Time <u>1315</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N
Relinquished by: (Signature) <u>Michelle Kemp</u>	Date <u>12-4-23</u>	Time <u>1630</u>	Received by: (Signature) <u>Andrew Russo</u>	Date <u>12-4-23</u>	Time <u>1630</u>	T1 _____ T2 _____ T3 _____
Relinquished by: (Signature) <u>Andrew Russo</u>	Date <u>12.4.23</u>	Time <u>2245</u>	Received by: (Signature) <u>AMANTINO</u>	Date <u>12/6/23</u>	Time <u>7:30</u>	AVG Temp °C <u>4</u>

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA
 Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Envirotech Analytical Laboratory

Printed: 12/5/2023 9:20:02AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Mack Energy Date Received: 12/05/23 07:30 Work Order ID: E312012
Phone: (575) 390-6397 Date Logged In: 12/04/23 15:14 Logged In By: Jordan Montano
Email: Natalie@energystaffingllc.com Due Date: 12/06/23 17:00 (1 day TAT)

Chain of Custody (COC)

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

Carrier: Courier

Comments/Resolution

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

- 20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? No
Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

[Empty box for 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 J

Work Order: E312015

Job Number: 20046-0001

Received: 12/5/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/6/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 12/6/23



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill J
Workorder: E312015
Date Received: 12/5/2023 7:30:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/5/2023 7:30:00AM, under the Project Name: West Mount Spill J.

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

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

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

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

Respectfully,

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

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SW1 - Surf	5
SW2 - Surf	6
SW3 - Surf	7
SW4 - Surf	8
SW5 - Surf	9
SW6 - Surf	10
QC Summary Data	11
QC - Volatile Organic Compounds by EPA 8260B	11
QC - Nonhalogenated Organics by EPA 8015D - GRO	12
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	13
QC - Anions by EPA 300.0/9056A	14
Definitions and Notes	15
Chain of Custody etc.	16

Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/06/23 16:20
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1 - Surf	E312015-01A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.
SW2 - Surf	E312015-02A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.
SW3 - Surf	E312015-03A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.
SW4 - Surf	E312015-04A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.
SW5 - Surf	E312015-05A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.
SW6 - Surf	E312015-06A	Soil	12/02/23	12/05/23	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

**SW1 - Surf
E312015-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.8 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		99.6 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.8 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		99.6 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2349046
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		88.7 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2349049
Chloride	12800	200	10	12/05/23	12/06/23	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

SW2 - Surf

E312015-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.8 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		100 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.8 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		100 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349046
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		85.4 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349049
Chloride	ND	20.0	1	12/05/23	12/06/23	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

SW3 - Surf
E312015-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS		Batch: 2349053	
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.1 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		100 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2349053	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.1 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		100 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2349046	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		80.9 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2349049	
Chloride	ND	20.0	1	12/05/23	12/06/23	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

SW4 - Surf
E312015-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.6 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		99.7 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.6 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		99.7 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2349046
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		83.7 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2349049
Chloride	ND	20.0	1	12/05/23	12/06/23	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

SW5 - Surf
E312015-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.6 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.6 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2349046
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		82.5 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2349049
Chloride	1220	20.0	1	12/05/23	12/06/23	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

SW6 - Surf
E312015-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Benzene	ND	0.0250	1	12/05/23	12/05/23	
Ethylbenzene	ND	0.0250	1	12/05/23	12/05/23	
Toluene	ND	0.0250	1	12/05/23	12/05/23	
o-Xylene	ND	0.0250	1	12/05/23	12/05/23	
p,m-Xylene	ND	0.0500	1	12/05/23	12/05/23	
Total Xylenes	ND	0.0250	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		87.3 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		100 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2349053
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/23	12/05/23	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	12/05/23	12/05/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		87.3 %	70-130	12/05/23	12/05/23	
<i>Surrogate: Toluene-d8</i>		100 %	70-130	12/05/23	12/05/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2349046
Diesel Range Organics (C10-C28)	ND	25.0	1	12/05/23	12/06/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/05/23	12/06/23	
<i>Surrogate: n-Nonane</i>		77.8 %	50-200	12/05/23	12/06/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2349049
Chloride	2240	40.0	2	12/05/23	12/06/23	



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

Volatile Organic Compounds by EPA 8260B

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2349053-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.531		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.454		0.500		90.7	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			

LCS (2349053-BS1)

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.61	0.0250	2.50		104	70-130			
Ethylbenzene	2.68	0.0250	2.50		107	70-130			
Toluene	2.55	0.0250	2.50		102	70-130			
o-Xylene	2.79	0.0250	2.50		112	70-130			
p,m-Xylene	5.43	0.0500	5.00		109	70-130			
Total Xylenes	8.22	0.0250	7.50		110	70-130			
Surrogate: Bromofluorobenzene	0.551		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.458		0.500		91.5	70-130			
Surrogate: Toluene-d8	0.497		0.500		99.4	70-130			

Matrix Spike (2349053-MS1)

Source: E312015-06

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.66	0.0250	2.50	ND	106	48-131			
Ethylbenzene	2.70	0.0250	2.50	ND	108	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.74	0.0250	2.50	ND	110	43-135			
p,m-Xylene	5.31	0.0500	5.00	ND	106	43-135			
Total Xylenes	8.05	0.0250	7.50	ND	107	43-135			
Surrogate: Bromofluorobenzene	0.551		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.434		0.500		86.7	70-130			
Surrogate: Toluene-d8	0.500		0.500		99.9	70-130			

Matrix Spike Dup (2349053-MSD1)

Source: E312015-06

Prepared: 12/05/23 Analyzed: 12/05/23

Benzene	2.63	0.0250	2.50	ND	105	48-131	1.17	23	
Ethylbenzene	2.69	0.0250	2.50	ND	108	45-135	0.500	27	
Toluene	2.55	0.0250	2.50	ND	102	48-130	0.645	24	
o-Xylene	2.82	0.0250	2.50	ND	113	43-135	2.88	27	
p,m-Xylene	5.50	0.0500	5.00	ND	110	43-135	3.55	27	
Total Xylenes	8.32	0.0250	7.50	ND	111	43-135	3.32	27	
Surrogate: Bromofluorobenzene	0.561		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.504		0.500		101	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2349053-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.531		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.454		0.500		90.7	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			

LCS (2349053-BS2)

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	59.6	20.0	50.0		119	70-130			
Surrogate: Bromofluorobenzene	0.557		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.449		0.500		89.8	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

Matrix Spike (2349053-MS2)

Source: E312015-06

Prepared: 12/05/23 Analyzed: 12/05/23

Gasoline Range Organics (C6-C10)	56.8	20.0	50.0	ND	114	70-130			
Surrogate: Bromofluorobenzene	0.538		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.452		0.500		90.4	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			

Matrix Spike Dup (2349053-MSD2)

Source: E312015-06

Prepared: 12/05/23 Analyzed: 12/06/23

Gasoline Range Organics (C6-C10)	56.4	20.0	50.0	ND	113	70-130	0.792	20	
Surrogate: Bromofluorobenzene	0.551		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.452		0.500		90.4	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

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

Blank (2349046-BLK1)

Prepared: 12/05/23 Analyzed: 12/06/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.3		50.0		90.6	50-200			

LCS (2349046-BS1)

Prepared: 12/05/23 Analyzed: 12/06/23

Diesel Range Organics (C10-C28)	223	25.0	250		89.1	38-132			
Surrogate: n-Nonane	42.9		50.0		85.9	50-200			

Matrix Spike (2349046-MS1)

Source: E312015-03

Prepared: 12/05/23 Analyzed: 12/06/23

Diesel Range Organics (C10-C28)	257	25.0	250	ND	103	38-132			
Surrogate: n-Nonane	44.2		50.0		88.5	50-200			

Matrix Spike Dup (2349046-MSD1)

Source: E312015-03

Prepared: 12/05/23 Analyzed: 12/06/23

Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132	3.50	20	
Surrogate: n-Nonane	45.5		50.0		90.9	50-200			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 12/6/2023 4:20:05PM
--	--	---

Anions by EPA 300.0/9056A

Analyst: BA

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

Blank (2349049-BLK1)

Prepared: 12/05/23 Analyzed: 12/05/23

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2349049-BS1)

Prepared: 12/05/23 Analyzed: 12/05/23

Chloride	256	20.0	250		102	90-110			
----------	-----	------	-----	--	-----	--------	--	--	--

Matrix Spike (2349049-MS1)

Source: E312013-01

Prepared: 12/05/23 Analyzed: 12/05/23

Chloride	1620	20.0	250	1440	71.9	80-120			M4
----------	------	------	-----	------	------	--------	--	--	----

Matrix Spike Dup (2349049-MSD1)

Source: E312013-01

Prepared: 12/05/23 Analyzed: 12/05/23

Chloride	1620	20.0	250	1440	74.5	80-120	0.397	20	M4
----------	------	------	-----	------	------	--------	-------	----	----

QC Summary Report Comment:

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill J	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	12/06/23 16:20

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.



Envirotech Analytical Laboratory

Printed: 12/5/2023 9:29:28AM

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: 12/05/23 07:30	Work Order ID: E312015
Phone: (575) 390-6397	Date Logged In: 12/04/23 15:15	Logged In By: Jordan Montano
Email: Natalie@energystaffingllc.com	Due Date: 12/06/23 17:00 (1 day TAT)	

Chain of Custody (COC)

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

Carrier: Courier

Comments/Resolution

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

- 20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? No
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill J

Work Order: E407112

Job Number: 20046-0001

Received: 7/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/17/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 7/17/24



Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill J
Workorder: E407112
Date Received: 7/16/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/16/2024 6:00:00AM, under the Project Name: West Mount Spill J.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
Sw 1 - 3'	5
Sw 2 - 4'	6
Sw 3 - 4'	7
Sw 4 - 4'	8
Sw 5 - 5'	9
Sw 6 - 5'	10
QC Summary Data	11
QC - Volatile Organic Compounds by EPA8260B	11
QC - Nonhalogenated Organics by EPA 8015D - GRO	12
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	13
QC - Anions by EPA 300.0/9056A	14
Definitions and Notes	15
Chain of Custody etc.	16

Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 07/17/24 13:14
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sw 1 - 3'	E407112-01A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
Sw 2 - 4'	E407112-02A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
Sw 3 - 4'	E407112-03A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
Sw 4 - 4'	E407112-04A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
Sw 5 - 5'	E407112-05A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
Sw 6 - 5'	E407112-06A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

Sw 1 - 3'
E407112-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B		mg/kg	mg/kg	Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.3 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.3 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
<i>Surrogate: n-Nonane</i>		101 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: DT		Batch: 2429030
Chloride	ND	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

Sw 2 - 4'

E407112-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.7 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.7 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
<i>Surrogate: n-Nonane</i>		104 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	35.7	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

Sw 3 - 4'
E407112-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.3 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		102 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.3 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		102 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
<i>Surrogate: n-Nonane</i>		100 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	36.2	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

Sw 4 - 4'

E407112-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.4 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		105 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.4 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
<i>Surrogate: n-Nonane</i>		97.3 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	36.1	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

Sw 5 - 5'
E407112-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90.6 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90.6 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		104 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
<i>Surrogate: n-Nonane</i>		103 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	26.7	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	----------------------------------

Sw 6 - 5'
E407112-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/16/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/16/24	
Toluene	ND	0.0250	1	07/16/24	07/16/24	
o-Xylene	ND	0.0250	1	07/16/24	07/16/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/16/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.9 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/16/24	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	07/16/24	07/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.9 %	70-130	07/16/24	07/16/24	
<i>Surrogate: Toluene-d8</i>		105 %	70-130	07/16/24	07/16/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/16/24	
<i>Surrogate: n-Nonane</i>		103 %	50-200	07/16/24	07/16/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	26.6	20.0	1	07/16/24	07/16/24	



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

Volatile Organic Compounds by EPA 8260B

Analyst: IY

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

Blank (2429028-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.6	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			

LCS (2429028-BS1)

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.22	0.0250	2.50		88.8	70-130			
Ethylbenzene	2.32	0.0250	2.50		92.6	70-130			
Toluene	2.32	0.0250	2.50		92.6	70-130			
o-Xylene	2.45	0.0250	2.50		98.2	70-130			
p,m-Xylene	4.90	0.0500	5.00		98.0	70-130			
Total Xylenes	7.35	0.0250	7.50		98.0	70-130			
Surrogate: Bromofluorobenzene	0.560		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.467		0.500		93.3	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike (2429028-MS1)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.26	0.0250	2.50	ND	90.3	48-131			
Ethylbenzene	2.38	0.0250	2.50	ND	95.2	45-135			
Toluene	2.37	0.0250	2.50	ND	94.7	48-130			
o-Xylene	2.51	0.0250	2.50	ND	100	43-135			
p,m-Xylene	5.03	0.0500	5.00	ND	101	43-135			
Total Xylenes	7.54	0.0250	7.50	ND	101	43-135			
Surrogate: Bromofluorobenzene	0.555		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			

Matrix Spike Dup (2429028-MSD1)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.33	0.0250	2.50	ND	93.1	48-131	3.05	23	
Ethylbenzene	2.44	0.0250	2.50	ND	97.8	45-135	2.65	27	
Toluene	2.43	0.0250	2.50	ND	97.1	48-130	2.50	24	
o-Xylene	2.56	0.0250	2.50	ND	102	43-135	1.95	27	
p,m-Xylene	5.11	0.0500	5.00	ND	102	43-135	1.57	27	
Total Xylenes	7.67	0.0250	7.50	ND	102	43-135	1.70	27	
Surrogate: Bromofluorobenzene	0.547		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		92.9	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

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

Blank (2429028-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.6	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			

LCS (2429028-BS2)

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	55.1	20.0	50.0		110	70-130			
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.456		0.500		91.1	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			

Matrix Spike (2429028-MS2)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130			
Surrogate: Bromofluorobenzene	0.541		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.457		0.500		91.4	70-130			
Surrogate: Toluene-d8	0.524		0.500		105	70-130			

Matrix Spike Dup (2429028-MSD2)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130	1.49	20	
Surrogate: Bromofluorobenzene	0.544		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.455		0.500		90.9	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2429026-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.6		50.0		109	50-200			

LCS (2429026-BS1)

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	295	25.0	250		118	38-132			
Surrogate: n-Nonane	52.6		50.0		105	50-200			

Matrix Spike (2429026-MS1)

Source: E407113-02

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	294	25.0	250	ND	118	38-132			
Surrogate: n-Nonane	49.7		50.0		99.3	50-200			

Matrix Spike Dup (2429026-MSD1)

Source: E407113-02

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	280	25.0	250	ND	112	38-132	4.77	20	
Surrogate: n-Nonane	50.8		50.0		102	50-200			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:14:43PM
--	--	---

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2429030-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2429030-BS1)

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride	253	20.0	250		101	90-110			
----------	-----	------	-----	--	-----	--------	--	--	--

Matrix Spike (2429030-MS1)

Source: E407112-02

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride	292	20.0	250	35.7	103	80-120			
----------	-----	------	-----	------	-----	--------	--	--	--

Matrix Spike Dup (2429030-MSD1)

Source: E407112-02

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride	292	20.0	250	35.7	103	80-120	0.0818	20	
----------	-----	------	-----	------	-----	--------	--------	----	--

QC Summary Report Comment:

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill J	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/17/24 13:14

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Client: <u>Mac Energy</u> Project: <u>West main spin J</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>E407122</u> Job Number <u>20046-0001</u>	TAT 1D 2D 3D Standard <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	EPA Program CWA SDWA RCRA State NM CO UT AZ TX <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
--	--	---	---	--

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks		
	07/12	S	1	Sw 1 - 3'	1							X				
	}	}	}	Sw 2 - 4'	2											
				Sw 3 - 4'	3											
				Sw 4 - 4'	4											
				Sw 5 - 5'	5											
	07/12	S	1	Sw 6 - 5'	6							X				

Additional Instructions:

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

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

Relinquished by: (Signature) <u>Juan Solis</u>	Date <u>07/12/24</u>	Time	Received by: (Signature) <u>Michelle Gonzalez</u>	Date <u>7-15-24</u>	Time <u>1320</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Gonzalez</u>	Date <u>7-15-24</u>	Time <u>1600</u>	Received by: (Signature) <u>Andrew M880</u>	Date <u>7-15-24</u>	Time <u>1715</u>	
Relinquished by: (Signature) <u>Andrew M880</u>	Date <u>7-15-24</u>	Time <u>2330</u>	Received by: (Signature) <u>Keefy R Hall</u>	Date <u>7-16-24</u>	Time <u>0600</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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



Envirotech Analytical Laboratory

Printed: 7/16/2024 1:14:10PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Mack Energy	Date Received: 07/16/24 06:00	Work Order ID: E407112
Phone: (575) 390-6397	Date Logged In: 07/15/24 16:22	Logged In By: Noe Soto
Email: Natalie@energystaffingllc.com	Due Date: 07/17/24 17:00 (1 day TAT)	

Chain of Custody (COC)

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

Carrier: Courier

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

Comments/Resolution

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

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill J

Work Order: E407116

Job Number: 20046-0001

Received: 7/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/17/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 7/17/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount Spill J
Workorder: E407116
Date Received: 7/16/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/16/2024 6:00:00AM, under the Project Name: West Mount Spill J.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SP 1 - 10'	5
SP 2 - 6'	6
SP 3 - 6'	7
QC Summary Data	8
QC - Volatile Organic Compounds by EPA8260B	8
QC - Nonhalogenated Organics by EPA 8015D - GRO	9
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	10
QC - Anions by EPA 300.0/9056A	11
Definitions and Notes	12
Chain of Custody etc.	13

Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 07/17/24 13:20
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 1 - 10'	E407116-01A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SP 2 - 6'	E407116-02A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
SP 3 - 6'	E407116-03A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:20:02PM
--	--	---

SP 1 - 10'
E407116-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/17/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/17/24	
Toluene	ND	0.0250	1	07/16/24	07/17/24	
o-Xylene	ND	0.0250	1	07/16/24	07/17/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/17/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/17/24	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	07/16/24	07/17/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.0 %	70-130	07/16/24	07/17/24	
<i>Surrogate: Toluene-d8</i>		97.4 %	70-130	07/16/24	07/17/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/17/24	
<i>Surrogate: Bromofluorobenzene</i>		106 %	70-130	07/16/24	07/17/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.0 %	70-130	07/16/24	07/17/24	
<i>Surrogate: Toluene-d8</i>		97.4 %	70-130	07/16/24	07/17/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
<i>Surrogate: n-Nonane</i>		99.9 %	50-200	07/16/24	07/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	51.7	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:20:02PM
--	--	---

SP 2 - 6'

E407116-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/17/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/17/24	
Toluene	ND	0.0250	1	07/16/24	07/17/24	
o-Xylene	ND	0.0250	1	07/16/24	07/17/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/17/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/17/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/17/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90.1 %	70-130	07/16/24	07/17/24	
<i>Surrogate: Toluene-d8</i>		106 %	70-130	07/16/24	07/17/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/17/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/17/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90.1 %	70-130	07/16/24	07/17/24	
<i>Surrogate: Toluene-d8</i>		106 %	70-130	07/16/24	07/17/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
<i>Surrogate: n-Nonane</i>		97.8 %	50-200	07/16/24	07/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	ND	20.0	1	07/16/24	07/16/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:20:02PM
--	--	---

SP 3 - 6'

E407116-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Benzene	ND	0.0250	1	07/16/24	07/17/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/17/24	
Toluene	ND	0.0250	1	07/16/24	07/17/24	
o-Xylene	ND	0.0250	1	07/16/24	07/17/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/17/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/17/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/17/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.4 %	70-130	07/16/24	07/17/24	
<i>Surrogate: Toluene-d8</i>		105 %	70-130	07/16/24	07/17/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2429028
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/17/24	
<i>Surrogate: Bromofluorobenzene</i>		107 %	70-130	07/16/24	07/17/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.4 %	70-130	07/16/24	07/17/24	
<i>Surrogate: Toluene-d8</i>		105 %	70-130	07/16/24	07/17/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KH		Batch: 2429026
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
<i>Surrogate: n-Nonane</i>		52.9 %	50-200	07/16/24	07/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2429030
Chloride	ND	20.0	1	07/16/24	07/16/24	



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:20:02PM
--	--	----------------------------------

Volatile Organic Compounds by EPA 8260B

Analyst: IY

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

Blank (2429028-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.534		0.500		107		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.6		70-130		
Surrogate: Toluene-d8	0.518		0.500		104		70-130		

LCS (2429028-BS1)

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.22	0.0250	2.50		88.8		70-130		
Ethylbenzene	2.32	0.0250	2.50		92.6		70-130		
Toluene	2.32	0.0250	2.50		92.6		70-130		
o-Xylene	2.45	0.0250	2.50		98.2		70-130		
p,m-Xylene	4.90	0.0500	5.00		98.0		70-130		
Total Xylenes	7.35	0.0250	7.50		98.0		70-130		
Surrogate: Bromofluorobenzene	0.560		0.500		112		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.467		0.500		93.3		70-130		
Surrogate: Toluene-d8	0.514		0.500		103		70-130		

Matrix Spike (2429028-MS1)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.26	0.0250	2.50	ND	90.3		48-131		
Ethylbenzene	2.38	0.0250	2.50	ND	95.2		45-135		
Toluene	2.37	0.0250	2.50	ND	94.7		48-130		
o-Xylene	2.51	0.0250	2.50	ND	100		43-135		
p,m-Xylene	5.03	0.0500	5.00	ND	101		43-135		
Total Xylenes	7.54	0.0250	7.50	ND	101		43-135		
Surrogate: Bromofluorobenzene	0.555		0.500		111		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1		70-130		
Surrogate: Toluene-d8	0.512		0.500		102		70-130		

Matrix Spike Dup (2429028-MSD1)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Benzene	2.33	0.0250	2.50	ND	93.1		48-131	3.05	23
Ethylbenzene	2.44	0.0250	2.50	ND	97.8		45-135	2.65	27
Toluene	2.43	0.0250	2.50	ND	97.1		48-130	2.50	24
o-Xylene	2.56	0.0250	2.50	ND	102		43-135	1.95	27
p,m-Xylene	5.11	0.0500	5.00	ND	102		43-135	1.57	27
Total Xylenes	7.67	0.0250	7.50	ND	102		43-135	1.70	27
Surrogate: Bromofluorobenzene	0.547		0.500		109		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		92.9		70-130		
Surrogate: Toluene-d8	0.518		0.500		104		70-130		



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:20:02PM
--	--	---

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

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

Blank (2429028-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.6	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			

LCS (2429028-BS2)

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	55.1	20.0	50.0		110	70-130			
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.456		0.500		91.1	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			

Matrix Spike (2429028-MS2)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130			
Surrogate: Bromofluorobenzene	0.541		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.457		0.500		91.4	70-130			
Surrogate: Toluene-d8	0.524		0.500		105	70-130			

Matrix Spike Dup (2429028-MSD2)

Source: E407113-07

Prepared: 07/16/24 Analyzed: 07/16/24

Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130	1.49	20	
Surrogate: Bromofluorobenzene	0.544		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.455		0.500		90.9	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:20:02PM
--	--	---

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2429026-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.6		50.0		109	50-200			

LCS (2429026-BS1)

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	295	25.0	250		118	38-132			
Surrogate: n-Nonane	52.6		50.0		105	50-200			

Matrix Spike (2429026-MS1)

Source: E407113-02

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	294	25.0	250	ND	118	38-132			
Surrogate: n-Nonane	49.7		50.0		99.3	50-200			

Matrix Spike Dup (2429026-MSD1)

Source: E407113-02

Prepared: 07/16/24 Analyzed: 07/16/24

Diesel Range Organics (C10-C28)	280	25.0	250	ND	112	38-132	4.77	20	
Surrogate: n-Nonane	50.8		50.0		102	50-200			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 7/17/2024 1:20:02PM
--	--	---

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2429030-BLK1)

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride ND 20.0

LCS (2429030-BS1)

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride 253 20.0 250 101 90-110

Matrix Spike (2429030-MS1)

Source: E407112-02

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride 292 20.0 250 35.7 103 80-120

Matrix Spike Dup (2429030-MSD1)

Source: E407112-02

Prepared: 07/16/24 Analyzed: 07/16/24

Chloride 292 20.0 250 35.7 103 80-120 0.0818 20

QC Summary Report Comment:

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



Definitions and Notes

Mack Energy	Project Name:	West Mount Spill J	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	07/17/24 13:20

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.



Client: <u>Mach Energy</u> Project: <u>West mount Spill J</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>E40712b</u> Job Number <u>20046-0001</u>	TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Standard	EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/> State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>
--	--	---	---	--

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
	07/12	S	1	SP 1 - 10'	1							X		
	(S	S	SP 2 - 6'	2							S		
	07/12	S	1	SP 3 - 6'	3							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 5 °C on subsequent days.

Relinquished by: (Signature) <u>Juan Solis</u>	Date <u>07/12/24</u>	Time _____	Received by: (Signature) <u>Michelle Gonzales</u>	Date <u>7-15-24</u>	Time <u>1320</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Gonzales</u>	Date <u>7-15-24</u>	Time <u>1600</u>	Received by: (Signature) <u>Andrew Jasso</u>	Date <u>7-15-24</u>	Time <u>1715</u>	
Relinquished by: (Signature) <u>Andrew Jasso</u>	Date <u>7-15-24</u>	Time <u>2330</u>	Received by: (Signature) <u>Kyle & Hall</u>	Date <u>7-16-24</u>	Time <u>06:00</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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



Envirotech Analytical Laboratory

Printed: 7/16/2024 12:51:13PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Mack Energy Date Received: 07/16/24 06:00 Work Order ID: E407116
Phone: (575) 390-6397 Date Logged In: 07/15/24 17:09 Logged In By: Noe Soto
Email: Natalie@energystaffingllc.com Due Date: 07/17/24 17:00 (1 day TAT)

Chain of Custody (COC)

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

Carrier: Courier

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

Empty box for client instruction.

Comments/Resolution

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

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

Date



envirotech Inc.

WEST MOUNT SPILL J-DELINEATION PHOTOS









Jul 12, 2024 8:00:45 AM
32.98704465N 104.07286789W
Chaves County
Mack Energy
West mount (J)
samples points





Natalie Gladden

From: OCDOnline@state.nm.us
Sent: Monday, August 19, 2024 2:52 PM
To: Natalie Gladden
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 375262

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#) nAPP2329832291.

The sampling event is expected to take place:

When: 08/23/2024 @ 07:00

Where: E-30-15S-29E 0 FNL 0 FEL (32.987071,-104.07267)

Additional Information: CONTACT NATALIE GLADDEN 575-390-6397

Additional Instructions: CONTACT NATALIE GLADDEN 575-390-6397

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

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

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

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

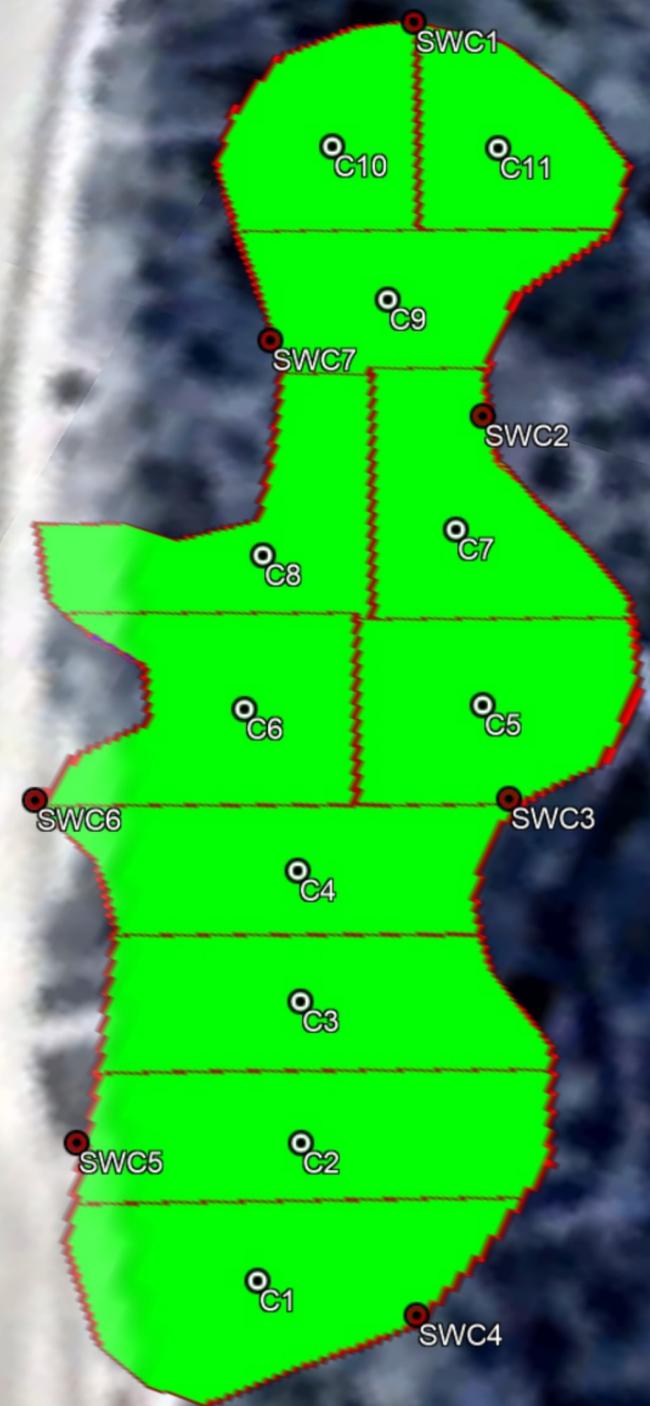
Company Name: MACK ENERGY

Location Name: WEST MOUNT SPILL J

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Dates
COMP1	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP2	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP3	8	160	L	ND	ND	ND	ND	ND	22.3	9/3/2024
COMP4	8	160	L	ND	ND	ND	ND	ND	145	9/3/2024
COMP5	8	400	L	ND	ND	ND	ND	ND	370	9/3/2024
COMP6	4	240	L	ND	ND	ND	ND	ND	80.3	9/3/2024
COMP7	4	240	L	ND	ND	ND	ND	ND	113	9/3/2024
COMP8	4	160	L	ND	ND	ND	ND	ND	47.3	9/3/2024
COMP9	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP10	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
COMP11	4	160	L	ND	ND	ND	ND	ND	38.2	9/3/2024
SWCOMP1	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
SWCOMP2	8	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
SWCOMP3	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
SWCOMP4	4	160	L	ND	ND	ND	ND	ND	ND	9/3/2024
SWCOMP5	4	240	L	ND	ND	ND	ND	ND	103	9/4/2024

SWCOMP6	8	240	L	ND	ND	ND	ND	ND	88.5	9/4/2024
SWCOMP7	8	240	L	ND	ND	ND	ND	ND	ND	9/4/2024

- Composites
- Side Wall Composites



CLIENTS MACK ENERGY
LOCATION West Mount Spill J
Composite GPS

SAMPLE ID	LAT	LONG
C1	32.987038°	-104.072985°
C2	32.987041°	-104.072959°
C3	32.987051°	-104.072934°
C4	32.987061°	-104.072910°
C5	32.987045°	-104.072865°
C6	32.987082°	-104.072882°
C7	32.987063°	-104.072830°
C8	32.987092°	-104.072849°
C9	32.987094°	-104.072783°
C10	32.987118°	-104.072750°
C11	32.987089°	-104.072738°
SWC1	32.987116°	-104.072712°
SWC2	32.987068°	-104.072803°
SWC3	32.987034°	-104.072882°
SWC4	32.987013°	-104.072981°
SWC5	32.987074°	-104.072973°
SWC6	32.987107°	-104.072914°
SWC7	32.987110°	-104.072801°

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill J

Work Order: E409015

Job Number: 20046-0001

Received: 9/5/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/6/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 9/6/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210



Project Name: West Mount Spill J
Workorder: E409015
Date Received: 9/5/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/5/2024 6:00:00AM, under the Project Name: West Mount Spill J.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SP Comp 1 - 8'	5
SP Comp 2 - 8'	6
SP Comp 3 - 8'	7
SP Comp 4 - 8'	8
SP Comp 5 - 8'	9
SP Comp 6 - 4'	10
SP Comp 7 - 4'	11
SP Comp 8 - 4'	12
SP Comp 9 - 4'	13
SP Comp 10 - 4'	14
SP Comp 11 - 4'	15
QC Summary Data	16
QC - Volatile Organics by EPA 8021B	16
QC - Nonhalogenated Organics by EPA 8015D - GRO	17
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	18
QC - Anions by EPA 300.0/9056A	19
Definitions and Notes	20
Chain of Custody etc.	21

Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 09/06/24 14:47
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP Comp 1 - 8'	E409015-01A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 2 - 8'	E409015-02A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 3 - 8'	E409015-03A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 4 - 8'	E409015-04A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 5 - 8'	E409015-05A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 6 - 4'	E409015-06A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 7 - 4'	E409015-07A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 8 - 4'	E409015-08A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 9 - 4'	E409015-09A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 10 - 4'	E409015-10A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SP Comp 11 - 4'	E409015-11A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 1 - 8'
E409015-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		88.3 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.0 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436043
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		67.5 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: WF		Batch: 2436037
Chloride	ND	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 2 - 8'

E409015-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		87.5 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.3 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436043
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		75.0 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2436037
Chloride	ND	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 3 - 8'

E409015-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		88.3 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.4 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436043	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		70.4 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2436037	
Chloride	22.3	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 4 - 8'

E409015-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.8 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.9 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436043	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		66.9 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2436037	
Chloride	145	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 5 - 8'

E409015-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		88.0 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		90.5 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436043	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		70.9 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2436037	
Chloride	370	40.0	2	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 6 - 4'

E409015-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		88.1 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.5 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436043	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		72.7 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2436037	
Chloride	80.3	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 7 - 4'

E409015-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.3 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.8 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436043
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		73.6 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2436037
Chloride	113	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 8 - 4'

E409015-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.3 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		90.9 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436043
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		72.0 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2436037
Chloride	47.3	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 9 - 4'

E409015-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		87.7 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.2 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436043
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		73.7 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2436037
Chloride	ND	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 10 - 4'

E409015-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		88.8 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.0 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436043	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		76.6 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2436037	
Chloride	ND	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

SP Comp 11 - 4'

E409015-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Benzene	ND	0.0250	1	09/05/24	09/06/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/06/24	
Toluene	ND	0.0250	1	09/05/24	09/06/24	
o-Xylene	ND	0.0250	1	09/05/24	09/06/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/06/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		87.8 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436039
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.1 %	70-130	09/05/24	09/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436043
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/06/24	
<i>Surrogate: n-Nonane</i>		75.7 %	50-200	09/05/24	09/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: DT		Batch: 2436037
Chloride	38.2	20.0	1	09/05/24	09/05/24	



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2436039-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.10		8.00		88.8	70-130			

LCS (2436039-BS1)

Prepared: 09/05/24 Analyzed: 09/05/24

Benzene	4.75	0.0250	5.00		95.1	70-130			
Ethylbenzene	4.53	0.0250	5.00		90.7	70-130			
Toluene	4.66	0.0250	5.00		93.3	70-130			
o-Xylene	4.51	0.0250	5.00		90.1	70-130			
p,m-Xylene	9.21	0.0500	10.0		92.1	70-130			
Total Xylenes	13.7	0.0250	15.0		91.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.07		8.00		88.4	70-130			

Matrix Spike (2436039-MS1)

Source: E409010-01

Prepared: 09/05/24 Analyzed: 09/05/24

Benzene	5.42	0.0250	5.00	ND	108	54-133			
Ethylbenzene	5.23	0.0250	5.00	ND	105	61-133			
Toluene	5.34	0.0250	5.00	ND	107	61-130			
o-Xylene	5.19	0.0250	5.00	ND	104	63-131			
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131			
Total Xylenes	15.8	0.0250	15.0	ND	105	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.06		8.00		88.3	70-130			

Matrix Spike Dup (2436039-MSD1)

Source: E409010-01

Prepared: 09/05/24 Analyzed: 09/05/24

Benzene	5.31	0.0250	5.00	ND	106	54-133	2.01	20	
Ethylbenzene	5.12	0.0250	5.00	ND	102	61-133	2.06	20	
Toluene	5.24	0.0250	5.00	ND	105	61-130	1.94	20	
o-Xylene	5.09	0.0250	5.00	ND	102	63-131	1.91	20	
p,m-Xylene	10.4	0.0500	10.0	ND	104	63-131	2.12	20	
Total Xylenes	15.5	0.0250	15.0	ND	103	63-131	2.05	20	
Surrogate: 4-Bromochlorobenzene-PID	7.00		8.00		87.5	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2436039-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.19		8.00		89.8	70-130			

LCS (2436039-BS2)

Prepared: 09/05/24 Analyzed: 09/05/24

Gasoline Range Organics (C6-C10)	35.4	20.0	50.0		70.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.30		8.00		91.3	70-130			

Matrix Spike (2436039-MS2)

Source: E409010-01

Prepared: 09/05/24 Analyzed: 09/05/24

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.8	70-130			

Matrix Spike Dup (2436039-MSD2)

Source: E409010-01

Prepared: 09/05/24 Analyzed: 09/05/24

Gasoline Range Organics (C6-C10)	41.3	20.0	50.0	ND	82.7	70-130	6.05	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.39		8.00		92.4	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

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

Blank (2436043-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	38.3		50.0		76.5	50-200			

LCS (2436043-BS1)

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	192	25.0	250		76.7	38-132			
Surrogate: n-Nonane	39.8		50.0		79.7	50-200			

Matrix Spike (2436043-MS1)

Source: E409010-04

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	205	25.0	250	ND	82.1	38-132			
Surrogate: n-Nonane	42.6		50.0		85.2	50-200			

Matrix Spike Dup (2436043-MSD1)

Source: E409010-04

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	200	25.0	250	ND	80.0	38-132	2.61	20	
Surrogate: n-Nonane	37.8		50.0		75.5	50-200			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:47:44PM
--	--	--

Anions by EPA 300.0/9056A

Analyst: WF

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

Blank (2436037-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2436037-BS1)

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	250	20.0	250		99.9	90-110			
----------	-----	------	-----	--	------	--------	--	--	--

Matrix Spike (2436037-MS1)

Source: E409013-04

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	386	20.0	250	129	103	80-120			
----------	-----	------	-----	-----	-----	--------	--	--	--

Matrix Spike Dup (2436037-MSD1)

Source: E409013-04

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	382	20.0	250	129	101	80-120	0.980	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 J	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/06/24 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

Client: Macn Energy Project: West Mount Spin J 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# 409015 Job Number 20046-0001		TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/>		EPA Program CWA <input type="checkbox"/> SDWA <input type="checkbox"/> RCRA <input type="checkbox"/>	
Report due by:		Analysis and Method		State NM <input type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/> TX <input type="checkbox"/>		Remarks			

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DIC by 8015	GRO/DIC by 8015	BTEX by 8021	VOC by 8260	Metals 8010	Chloride 8000	BGDOC NM	SEDOC	Remarks	
	09/03	S	1	SP Comp 1 - 8'	1							X			
	}	}	}	SP Comp 2 - 8'	2										
				SP Comp 3 - 8'	3										
				SP Comp 4 - 8'	4										
				SP Comp 5 - 8'	5										
				SP Comp 6 - 4'	6										
				SP Comp 7 - 4'	7										
				SP Comp 8 - 4'	8										
	SP Comp 9 - 4'	9													
	09/03	S	1	SP Comp 10 - 4'	10							X			

Additional Instructions:

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

Relinquished by: (Signature) Juan Solis	Date 09/03/24	Time	Received by: (Signature) Michelle Gonzales	Date 9-4-24	Time 1315	Lab Use Only Received on ice: <input checked="" type="checkbox"/> / N
Relinquished by: (Signature) Michelle Gonzales	Date 9-4-24	Time 1830	Received by: (Signature) Andrew Hubbo	Date 9-4-24	Time 1830	T1 _____ T2 _____ T3 _____
Relinquished by: (Signature) Andrew Hubbo	Date 9-4-24	Time 2400	Received by: (Signature) Kimberly R. Havel	Date 9-5-24	Time 0600	AVG 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 report.



Envirotech Analytical Laboratory

Printed: 9/5/2024 7:54:35AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Mack Energy	Date Received: 09/05/24 06:00	Work Order ID: E409015
Phone: (575) 390-6397	Date Logged In: 09/04/24 17:20	Logged In By: Noe Soto
Email: Natalie@energystaffingllc.com	Due Date: 09/06/24 17:00 (1 day TAT)	

Chain of Custody (COC)

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

Carrier: Courier

Comments/Resolution

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

- 20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? No
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill J

Work Order: E409016

Job Number: 20046-0001

Received: 9/5/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/6/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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



Date Reported: 9/6/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill J
Workorder: E409016
Date Received: 9/5/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/5/2024 6:00:00AM, under the Project Name: West Mount Spill J.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SW Comp 1 - 8'	5
SW Comp 2 - 8'	6
SW Comp 3 - 4'	7
SW Comp 4 - 4'	8
QC Summary Data	9
QC - Volatile Organics by EPA 8021B	9
QC - Nonhalogenated Organics by EPA 8015D - GRO	10
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	11
QC - Anions by EPA 300.0/9056A	12
Definitions and Notes	13
Chain of Custody etc.	14

Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 09/06/24 14:48
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW Comp 1 - 8'	E409016-01A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SW Comp 2 - 8'	E409016-02A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SW Comp 3 - 4'	E409016-03A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.
SW Comp 4 - 4'	E409016-04A	Soil	09/03/24	09/05/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

SW Comp 1 - 8'
E409016-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2436038
Benzene	ND	0.0250	1	09/05/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/05/24	
Toluene	ND	0.0250	1	09/05/24	09/05/24	
o-Xylene	ND	0.0250	1	09/05/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		103 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2436038
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.6 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2436036
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/05/24	
<i>Surrogate: n-Nonane</i>						
		86.6 %	50-200	09/05/24	09/05/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2436042
Chloride	ND	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

SW Comp 2 - 8'

E409016-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436038	
Benzene	ND	0.0250	1	09/05/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/05/24	
Toluene	ND	0.0250	1	09/05/24	09/05/24	
o-Xylene	ND	0.0250	1	09/05/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436038	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.7 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436036	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/05/24	
<i>Surrogate: n-Nonane</i>		79.8 %	50-200	09/05/24	09/05/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2436042	
Chloride	ND	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

SW Comp 3 - 4'

E409016-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436038	
Benzene	ND	0.0500	2	09/05/24	09/05/24	
Ethylbenzene	ND	0.0500	2	09/05/24	09/05/24	
Toluene	ND	0.0500	2	09/05/24	09/05/24	
o-Xylene	ND	0.0500	2	09/05/24	09/05/24	
p,m-Xylene	ND	0.100	2	09/05/24	09/05/24	
Total Xylenes	ND	0.0500	2	09/05/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436038	
Gasoline Range Organics (C6-C10)	ND	40.0	2	09/05/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.9 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436036	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/05/24	
<i>Surrogate: n-Nonane</i>		80.6 %	50-200	09/05/24	09/05/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2436042	
Chloride	ND	20.0	1	09/05/24	09/05/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

SW Comp 4 - 4'

E409016-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2436038
Benzene	ND	0.0250	1	09/05/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/05/24	
Toluene	ND	0.0250	1	09/05/24	09/05/24	
o-Xylene	ND	0.0250	1	09/05/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/05/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		99.1 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2436038
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/05/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.7 %	70-130	09/05/24	09/05/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2436036
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/05/24	
<i>Surrogate: n-Nonane</i>						
		80.8 %	50-200	09/05/24	09/05/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2436042
Chloride	ND	20.0	1	09/05/24	09/05/24	



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2436038-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.88		8.00		98.5	70-130			

LCS (2436038-BS1)

Prepared: 09/05/24 Analyzed: 09/06/24

Benzene	5.19	0.0250	5.00		104	70-130			
Ethylbenzene	5.04	0.0250	5.00		101	70-130			
Toluene	5.13	0.0250	5.00		103	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	7.86		8.00		98.2	70-130			

Matrix Spike (2436038-MS1)

Source: E409009-02

Prepared: 09/05/24 Analyzed: 09/06/24

Benzene	4.99	0.0250	5.00	ND	99.8	54-133			
Ethylbenzene	4.86	0.0250	5.00	ND	97.1	61-133			
Toluene	4.94	0.0250	5.00	ND	98.8	61-130			
o-Xylene	4.86	0.0250	5.00	ND	97.2	63-131			
p,m-Xylene	9.93	0.0500	10.0	ND	99.3	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.18		8.00		102	70-130			

Matrix Spike Dup (2436038-MSD1)

Source: E409009-02

Prepared: 09/05/24 Analyzed: 09/06/24

Benzene	5.22	0.0250	5.00	ND	104	54-133	4.41	20	
Ethylbenzene	5.07	0.0250	5.00	ND	101	61-133	4.41	20	
Toluene	5.15	0.0250	5.00	ND	103	61-130	4.22	20	
o-Xylene	5.07	0.0250	5.00	ND	101	63-131	4.23	20	
p,m-Xylene	10.4	0.0500	10.0	ND	104	63-131	4.19	20	
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131	4.20	20	
Surrogate: 4-Bromochlorobenzene-PID	8.19		8.00		102	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2436038-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

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

LCS (2436038-BS2)

Prepared: 09/05/24 Analyzed: 09/06/24

Gasoline Range Organics (C6-C10)	46.1	20.0	50.0		92.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.69		8.00		96.2	70-130			

Matrix Spike (2436038-MS2)

Source: E409009-02

Prepared: 09/05/24 Analyzed: 09/06/24

Gasoline Range Organics (C6-C10)	48.4	20.0	50.0	ND	96.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.73		8.00		96.6	70-130			

Matrix Spike Dup (2436038-MSD2)

Source: E409009-02

Prepared: 09/05/24 Analyzed: 09/06/24

Gasoline Range Organics (C6-C10)	47.9	20.0	50.0	ND	95.7	70-130	1.21	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		8.00		96.0	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

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

Blank (2436036-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	41.2		50.0		82.4	50-200			

LCS (2436036-BS1)

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	198	25.0	250		79.3	38-132			
Surrogate: n-Nonane	40.7		50.0		81.3	50-200			

Matrix Spike (2436036-MS1)

Source: E409009-01

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	781	25.0	250	709	29.0	38-132			M4
Surrogate: n-Nonane	42.4		50.0		84.9	50-200			M4

Matrix Spike Dup (2436036-MSD1)

Source: E409009-01

Prepared: 09/05/24 Analyzed: 09/05/24

Diesel Range Organics (C10-C28)	824	25.0	250	709	46.3	38-132	5.38	20	
Surrogate: n-Nonane	40.3		50.0		80.7	50-200			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/6/2024 2:48:47PM
--	--	--

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2436042-BLK1)

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2436042-BS1)

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	252	20.0	250		101	90-110			
----------	-----	------	-----	--	-----	--------	--	--	--

Matrix Spike (2436042-MS1)

Source: E409016-02

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	264	20.0	250	ND	106	80-120			
----------	-----	------	-----	----	-----	--------	--	--	--

Matrix Spike Dup (2436042-MSD1)

Source: E409016-02

Prepared: 09/05/24 Analyzed: 09/05/24

Chloride	264	20.0	250	ND	106	80-120	0.0481	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 J	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/06/24 14:48

M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Project Information

Chain of Custody

Client: MGM Energy	Bill To:	Lab Use Only	TAT			EPA Program							
Project: West Mount SR-11 J	Attention: ENERGY STAFFING SERVICES	Lab WO# 409016	Job Number 20046-0001	1D	2D	3D	Standard	CWA	SDWA				
Project Manager:	Address: 2724 NW COUNTY RD	Analysis and Method							RCRA				
Address:	City, State, Zip: HOBBS, NM 88240	DRO/DIC by 8015	GRO/DIC by 8015	BTEX by 8021	VOC by 8169	Metals 8020	NOTE Aqueous	RGDC NM	SGDC 15	State			
City, State, Zip:	Phone: 575-393-9048								NM	CO	UT	AZ	TX
Phone:	Email: NATALIE@ENERGYSTAFFINGLLC.COM								Remarks				
Email:	Email: BRITTNEY@ENERGYSTAFFINGLLC.COM												
Report due by:													

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number	DRO/DIC by 8015	GRO/DIC by 8015	BTEX by 8021	VOC by 8169	Metals 8020	NOTE Aqueous	RGDC NM	SGDC 15	Remarks
	09/03	S	1	SW Comp 1 - 8'	1							X		
				SW Comp 2 - 8'	2							S		
				SW Comp 3 - 4'	3									
	09/03	S	1	SW Comp 4 - 4'	4							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.

Relinquished by: (Signature) Juan Solis	Date 09/03/24	Time	Received by: (Signature) Michelle Gonzales	Date 9.4.24	Time 1315	Lab Use Only
Relinquished by: (Signature) Michelle Gonzales	Date 9.4.24	Time 1830	Received by: (Signature) Andrew Hobbs	Date 9.4.24	Time 1830	Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N
Relinquished by: (Signature) Andrew Hobbs	Date 9.4.24	Time 2400	Received by: (Signature) Kyle R. Helle	Date 9.5.24	Time 0600	T1 _____ T2 _____ T3 _____
Sample Matrix: S - Soil, SD - Solid, Sg - Sludge, A - Aqueous, O - Other						AVG 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 report.



Envirotech Analytical Laboratory

Printed: 9/5/2024 7:51:58AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Mack Energy	Date Received: 09/05/24 06:00	Work Order ID: E409016
Phone: (575) 390-6397	Date Logged In: 09/04/24 17:27	Logged In By: Noe Soto
Email: Natalie@energystaffingllc.com	Due Date: 09/06/24 17:00 (1 day TAT)	

Chain of Custody (COC)

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

Carrier: Courier

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

- 20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? No
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Comments/Resolution

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

Client Instruction

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

Date



envirotech Inc.

Report to:
Natalie Gladden



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: West Mount Spill J

Work Order: E409026

Job Number: 20046-0001

Received: 9/7/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/9/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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



Date Reported: 9/9/24

Natalie Gladden
7 W. Compress Road
Artesia, NM 88210

Project Name: West Mount Spill J
Workorder: E409026
Date Received: 9/7/2024 6:00:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/7/2024 6:00:00AM, under the Project Name: West Mount Spill J.

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

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

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

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

Respectfully,

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

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

Field Offices:

Southern New Mexico Area

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

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SW COMP 5 - 4'	5
SW COMP 6 - 8'	6
SW COMP 7 - 8'	7
QC Summary Data	8
QC - Volatile Organics by EPA 8021B	8
QC - Nonhalogenated Organics by EPA 8015D - GRO	9
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	10
QC - Anions by EPA 300.0/9056A	11
Definitions and Notes	12
Chain of Custody etc.	13

Sample Summary

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 09/09/24 13:59
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW COMP 5 - 4'	E409026-01A	Soil	09/04/24	09/07/24	Glass Jar, 2 oz.
SW COMP 6 - 8'	E409026-02A	Soil	09/04/24	09/07/24	Glass Jar, 2 oz.
SW COMP 7 - 8'	E409026-03A	Soil	09/04/24	09/07/24	Glass Jar, 2 oz.



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/9/2024 1:59:09PM
--	--	--

SW COMP 5 - 4'

E409026-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2436084	
Benzene	ND	0.0250	1	09/07/24	09/07/24	
Ethylbenzene	ND	0.0250	1	09/07/24	09/07/24	
Toluene	ND	0.0250	1	09/07/24	09/07/24	
o-Xylene	ND	0.0250	1	09/07/24	09/07/24	
p,m-Xylene	ND	0.0500	1	09/07/24	09/07/24	
Total Xylenes	ND	0.0250	1	09/07/24	09/07/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		88.6 %	70-130	09/07/24	09/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2436084	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/07/24	09/07/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.7 %	70-130	09/07/24	09/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2436083	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/07/24	09/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/07/24	09/08/24	
<i>Surrogate: n-Nonane</i>						
		100 %	50-200	09/07/24	09/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2436099	
Chloride	103	20.0	1	09/07/24	09/08/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/9/2024 1:59:09PM
--	--	--

SW COMP 6 - 8'

E409026-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436084
Benzene	ND	0.0250	1	09/07/24	09/07/24	
Ethylbenzene	ND	0.0250	1	09/07/24	09/07/24	
Toluene	ND	0.0250	1	09/07/24	09/07/24	
o-Xylene	ND	0.0250	1	09/07/24	09/07/24	
p,m-Xylene	ND	0.0500	1	09/07/24	09/07/24	
Total Xylenes	ND	0.0250	1	09/07/24	09/07/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.2 %	70-130	09/07/24	09/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436084
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/07/24	09/07/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.6 %	70-130	09/07/24	09/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436083
Diesel Range Organics (C10-C28)	ND	25.0	1	09/07/24	09/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/07/24	09/08/24	
<i>Surrogate: n-Nonane</i>		95.4 %	50-200	09/07/24	09/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY		Batch: 2436099
Chloride	88.5	20.0	1	09/07/24	09/08/24	



Sample Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/9/2024 1:59:09PM
--	--	--

SW COMP 7 - 8'

E409026-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: CG		Batch: 2436084
Benzene	ND	0.0250	1	09/07/24	09/07/24	
Ethylbenzene	ND	0.0250	1	09/07/24	09/07/24	
Toluene	ND	0.0250	1	09/07/24	09/07/24	
o-Xylene	ND	0.0250	1	09/07/24	09/07/24	
p,m-Xylene	ND	0.0500	1	09/07/24	09/07/24	
Total Xylenes	ND	0.0250	1	09/07/24	09/07/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		88.2 %	70-130	09/07/24	09/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: CG		Batch: 2436084
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/07/24	09/07/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.6 %	70-130	09/07/24	09/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV		Batch: 2436083
Diesel Range Organics (C10-C28)	ND	25.0	1	09/07/24	09/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/07/24	09/08/24	
<i>Surrogate: n-Nonane</i>		96.2 %	50-200	09/07/24	09/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY		Batch: 2436099
Chloride	ND	20.0	1	09/07/24	09/08/24	



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/9/2024 1:59:09PM
--	--	--

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2436084-BLK1)

Prepared: 09/07/24 Analyzed: 09/07/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.13		8.00		89.1	70-130			

LCS (2436084-BS1)

Prepared: 09/07/24 Analyzed: 09/07/24

Benzene	5.39	0.0250	5.00		108	70-130			
Ethylbenzene	5.23	0.0250	5.00		105	70-130			
Toluene	5.33	0.0250	5.00		107	70-130			
o-Xylene	5.19	0.0250	5.00		104	70-130			
p,m-Xylene	10.6	0.0500	10.0		106	70-130			
Total Xylenes	15.8	0.0250	15.0		105	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.06		8.00		88.3	70-130			

LCS Dup (2436084-BSD1)

Prepared: 09/07/24 Analyzed: 09/07/24

Benzene	5.26	0.0250	5.00		105	70-130	2.58	20	
Ethylbenzene	5.13	0.0250	5.00		103	70-130	1.91	20	
Toluene	5.22	0.0250	5.00		104	70-130	2.10	20	
o-Xylene	5.09	0.0250	5.00		102	70-130	2.08	20	
p,m-Xylene	10.4	0.0500	10.0		104	70-130	1.93	20	
Total Xylenes	15.5	0.0250	15.0		103	70-130	1.98	20	
Surrogate: 4-Bromochlorobenzene-PID	7.20		8.00		90.0	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/9/2024 1:59:09PM
--	--	--

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2436084-BLK1)

Prepared: 09/07/24 Analyzed: 09/07/24

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

LCS (2436084-BS2)

Prepared: 09/07/24 Analyzed: 09/07/24

Gasoline Range Organics (C6-C10)	43.8	20.0	50.0		87.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.46		8.00		93.3	70-130			

LCS Dup (2436084-BSD2)

Prepared: 09/07/24 Analyzed: 09/07/24

Gasoline Range Organics (C6-C10)	44.8	20.0	50.0		89.6	70-130	2.34	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.43		8.00		92.9	70-130			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/9/2024 1:59:09PM
--	--	--

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

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

Blank (2436083-BLK1)

Prepared: 09/07/24 Analyzed: 09/08/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.4		50.0		92.8	50-200			

LCS (2436083-BS1)

Prepared: 09/07/24 Analyzed: 09/08/24

Diesel Range Organics (C10-C28)	227	25.0	250		90.7	38-132			
Surrogate: n-Nonane	46.2		50.0		92.5	50-200			

LCS Dup (2436083-BSD1)

Prepared: 09/07/24 Analyzed: 09/08/24

Diesel Range Organics (C10-C28)	187	25.0	250		74.8	38-132	19.2	20	
Surrogate: n-Nonane	48.0		50.0		95.9	50-200			



QC Summary Data

Mack Energy 7 W. Compress Road Artesia NM, 88210	Project Name: West Mount Spill J Project Number: 20046-0001 Project Manager: Natalie Gladden	Reported: 9/9/2024 1:59:09PM
--	--	--

Anions by EPA 300.0/9056A

Analyst: IY

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

Blank (2436099-BLK1)

Prepared: 09/07/24 Analyzed: 09/08/24

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2436099-BS1)

Prepared: 09/07/24 Analyzed: 09/08/24

Chloride	253	20.0	250		101	90-110			
----------	-----	------	-----	--	-----	--------	--	--	--

LCS Dup (2436099-BSD1)

Prepared: 09/07/24 Analyzed: 09/08/24

Chloride	253	20.0	250		101	90-110	0.0810	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 J	
7 W. Compress Road	Project Number:	20046-0001	Reported:
Artesia NM, 88210	Project Manager:	Natalie Gladden	09/09/24 13:59

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: **Mach Energy**
 Project: **West man+ SP: H J**
 Project Manager:
 Address:
 City, State, Zip:
 Phone:
 Email:

Report due by:

Time Sampled	Date Sampled	Matrix	No of Containers	Sample ID	Lab Number
	09/04	S	1	SW Comp 5-4'	1
	S	S	S	SW Comp 6-8'	2
	09/04	S	1	SW Comp 7-8'	3

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
 BRITNEY@ENERGYSTAFFINGLLC.COM

Lab Use Only
 Lab WO# **E 409026** Job Number **20046-0001**
 TAT: 1D, 2D, 3D, Standard
 EPA Program: CWA, SDWA, RCRA
 Analysis and Method: DRO/DRO by 8015, GRO/DIC by 8015, STEX by 8021, VOC by 8260, Metals 6030, 0000 Petroleum, BOD/C NM, BOD/C IX
 State: NM, CO, UT, AZ, TX
 Remarks:

Additional Instructions:

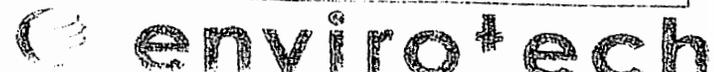
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Relinquished by: (Signature) **Juan Sols** Date: **09/04/24** Time: **9440**
 Relinquished by: (Signature) **J.S.** Date: **9.5.24** Time: **1730**
 Relinquished by: (Signature) **J.S.** Date: **9.5.24** Time: **2400**

Received by: (Signature) **Juan Sols** Date: **9.5.24** Time: **1440**
 Received by: (Signature) **J.S.** Date: **9.5.24** Time: **1730**
 Received by: (Signature) **J.S.** Date: **9-7-24** Time: **0700**

Lab Use Only
 Received on ice: Y N
 T1 T2 T3
 AVG Temp °C **4**
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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



Envirotech Analytical Laboratory

Printed: 9/9/2024 10:14:49AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: Mack Energy	Date Received: 09/07/24 06:00	Work Order ID: E409026
Phone: (575) 390-6397	Date Logged In: 09/05/24 16:02	Logged In By: Noe Soto
Email: Natalie@energystaffingllc.com	Due Date: 09/09/24 17:00 (0 day TAT)	

Chain of Custody (COC)

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

Carrier: Courier

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

Comments/Resolution

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

Sample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

- 20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

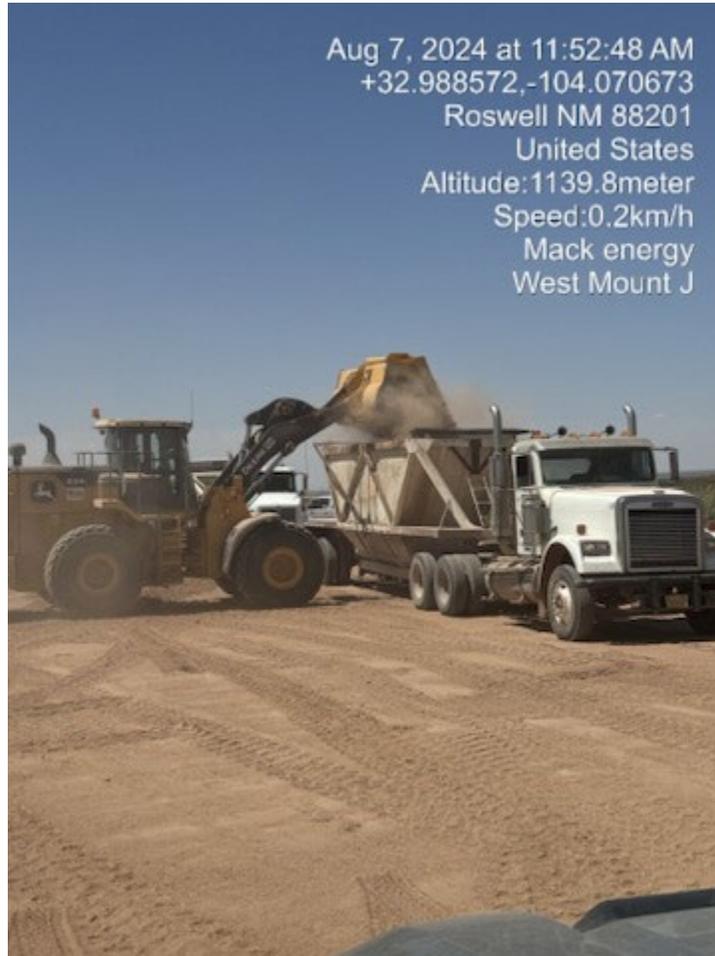
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

WEST MOUNT SPILL J-REMEDATION, COMPOSITE AND FINAL PHOTOS

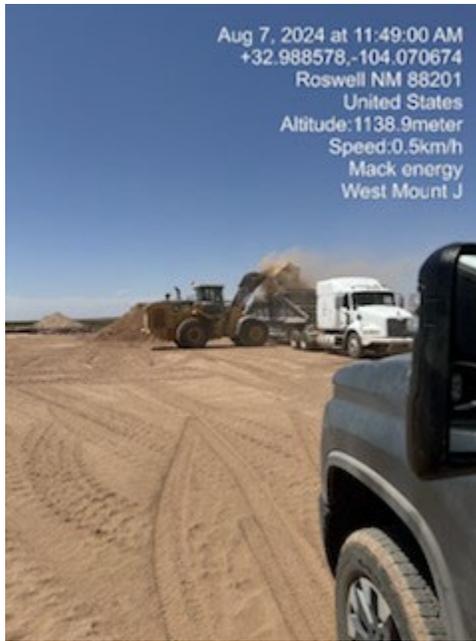










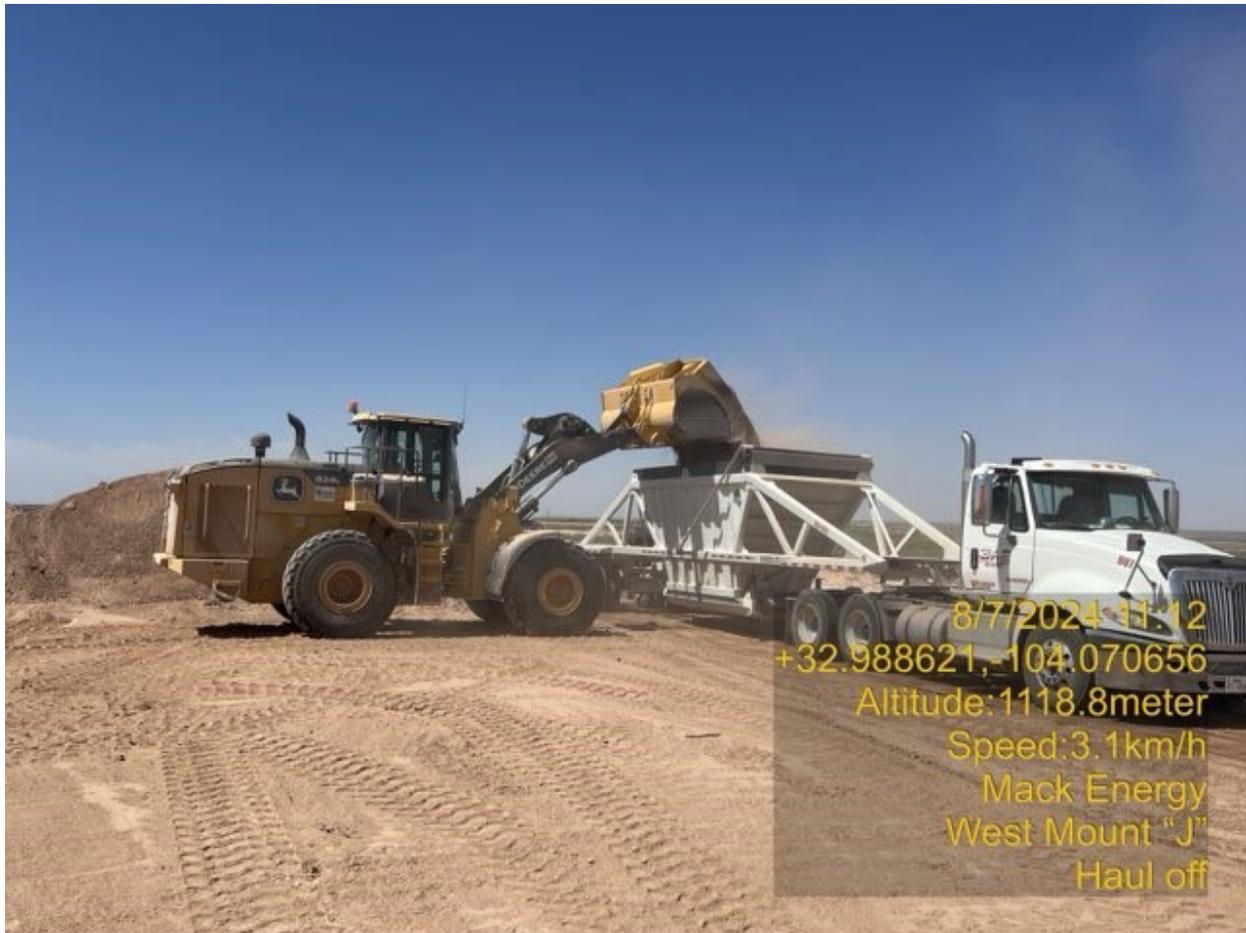










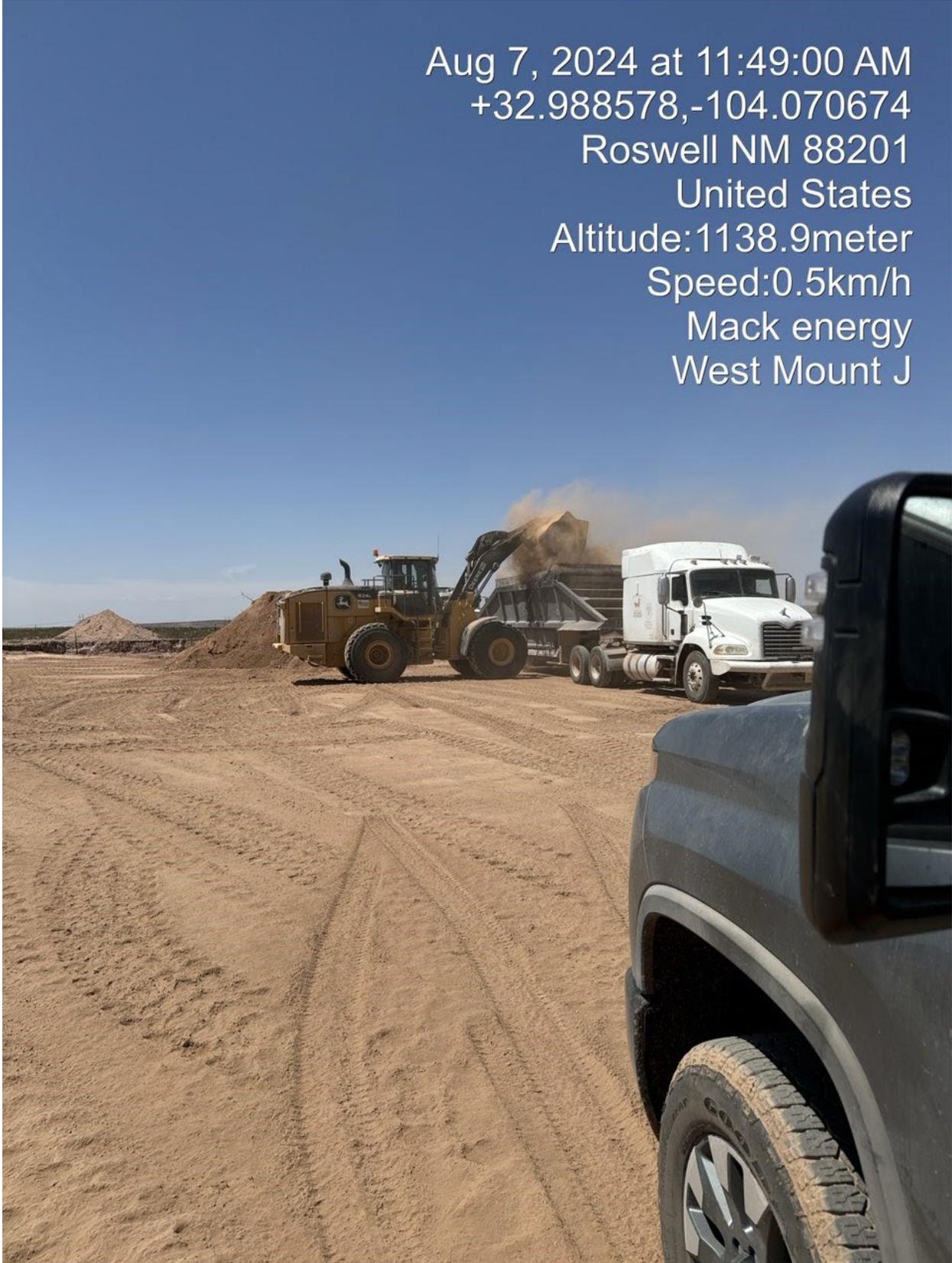




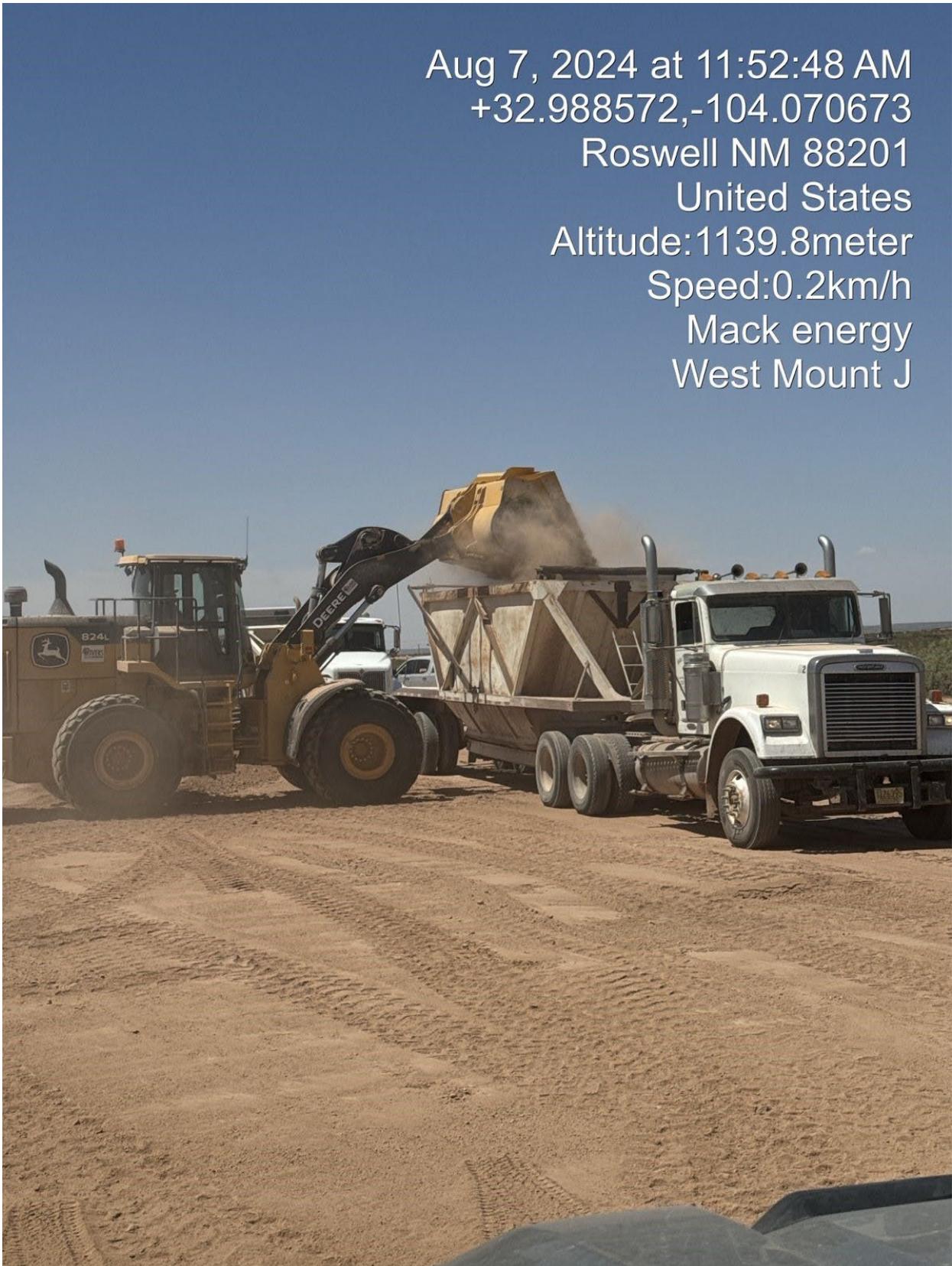


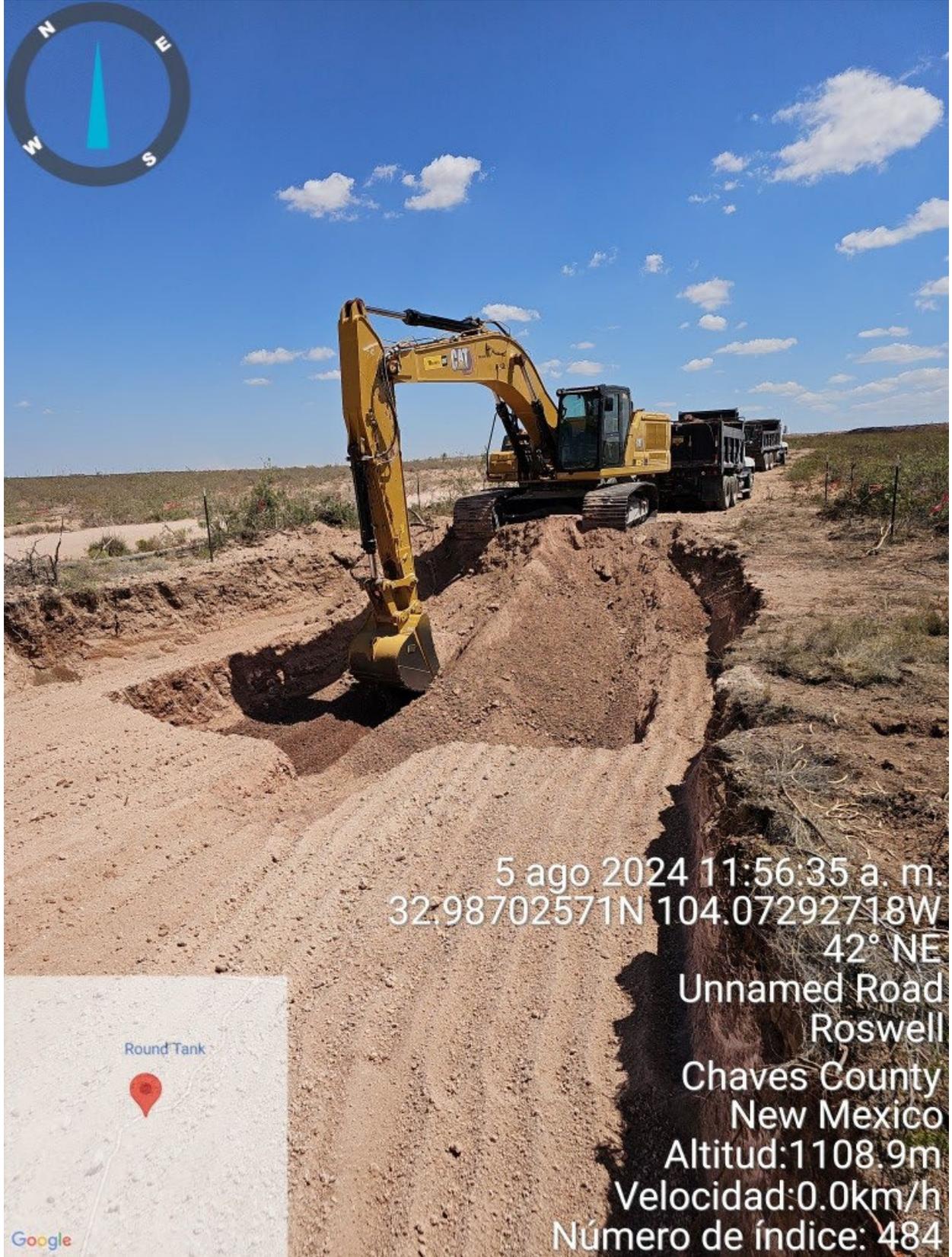


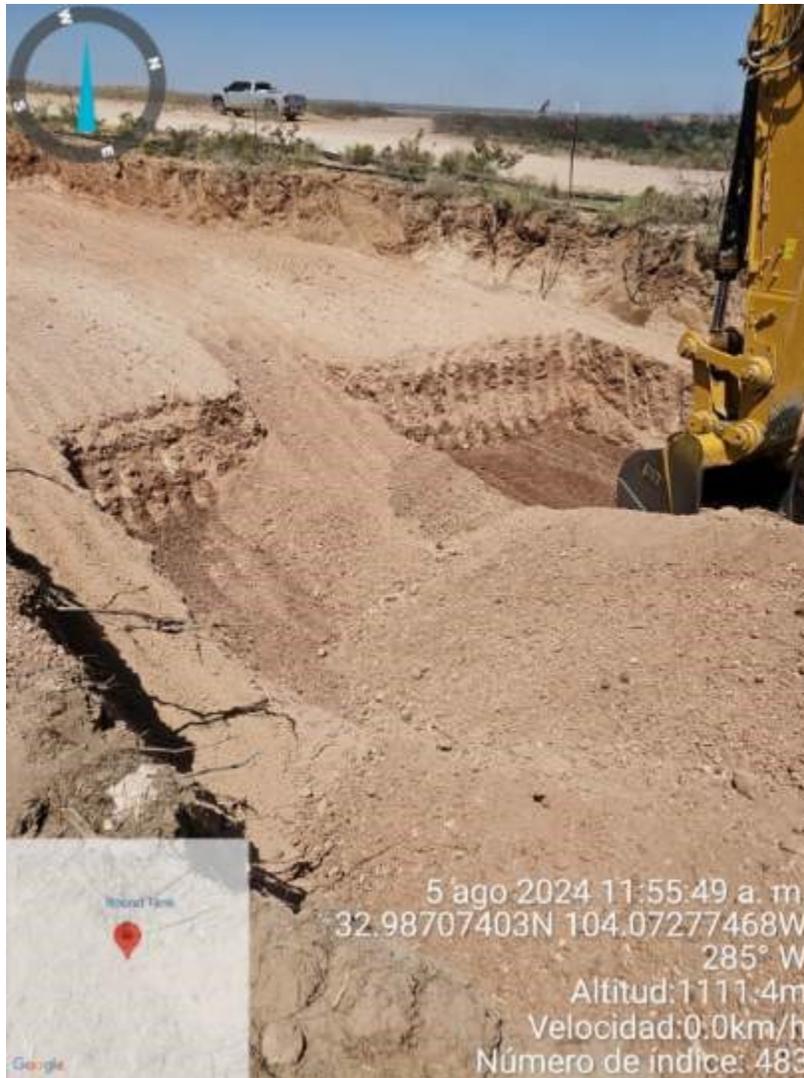
Aug 7, 2024 at 11:49:00 AM
+32.988578,-104.070674
Roswell NM 88201
United States
Altitude:1138.9meter
Speed:0.5km/h
Mack energy
West Mount J

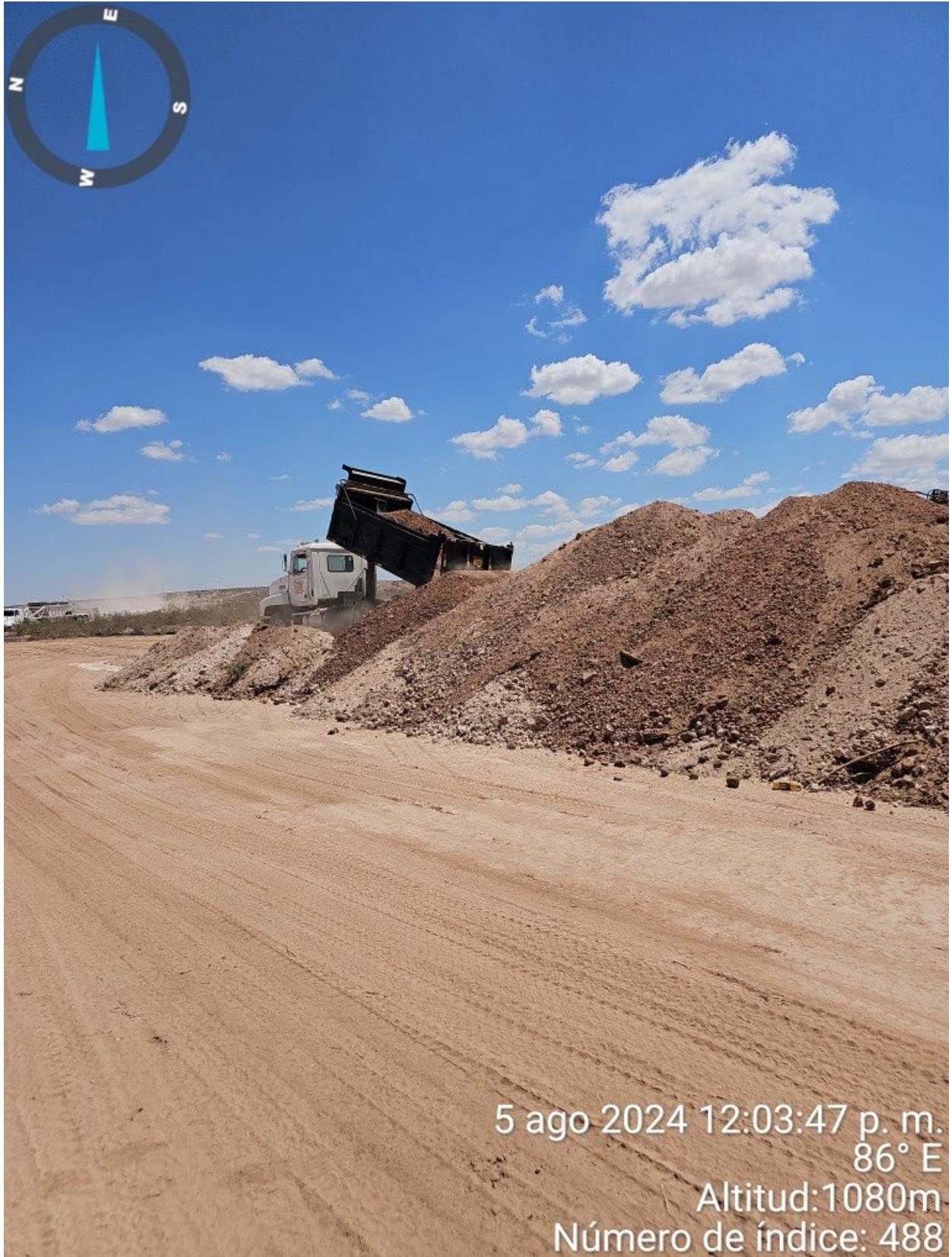


Aug 7, 2024 at 11:52:48 AM
+32.988572,-104.070673
Roswell NM 88201
United States
Altitude:1139.8meter
Speed:0.2km/h
Mack energy
West Mount J



































**MACK ENERGY CORPORATION
WEST MOUNT SPILL J
RECLAMATION EXECUTIVE SUMMARY
INCIDENT NO. NAPP2329832291**

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

Reclamation Executive Summary

Subject: Final Reclamation Summary-West Mount Spill J (Incident No. NAPP2329832291)

On January 15, 2025 ESS initiated and completed reclamation activities at the West Mount Spill J site following the finalization of remediation efforts for the release that occurred on September 21, 2023 (Incident Number: NAPP2329832291).

A total of 660 cubic yards of topsoil was loaded and hauled from Mack Energy's Bogel Pit. The topsoil was evenly spread across the entire 1,323 square-foot impacted area. The site was then ripped, contoured, and sloped to match the natural grade. Reseeding was conducted using the Sandy Loam Seed Mix from Curtis and Curtis Seed, which covered the excavation area and disturbed area used for remediation and reclamation efforts consisting of 1,323 square-foot in accordance with State Land Office (SLO) Rules and Regulations.

A five-point composite was taken from the center of the excavation/backfill area located at 32.987078 -104.072874. 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 J 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



Mack Energy
NMSLO Sandy Loam- 1.8 Ac Broadcasted
Lot #: 68135
 28.29

Item	% Pure Mix	Origin	Purity	Germination	Dormant	Total Germ:	Test Date
Little Bluestem, Aldous	9.72%	Kansas	61.68%	59.00%	31.00%	98.00%	11/2024
Caileta, 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	1.52%	0.00%	0.00%	99.00%	11/2024
Winter Fat, Variety Not Stated	6.66%	New Mexico	8.97%	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
Caillardia Aristata, Variety Not Stated	3.61%	Oregon	89.09%	97.00%	0.00%	97.00%	6/2024
Blue Flax, Appar	3.60%	Washington	8.42%	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	95.39%						
Inert Matter:	34.54%						
Other Crop:	0.08%						
Weed Seed:	0.01%						

NMSLO Sandy Loam-1.8 AC Broadcasted.
 Bag into 31 0.5 acre Bag into 31 0.5 ac

curtis seed, 4500 4th floor office, Clovis, NM 88101 (575) 762-4759

WEST MOUNT SPILL J -TOPSOIL AND SEEDING PHOTOS



Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 548104

QUESTIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2329832291
Incident Name	NAPP2329832291 WEST MOUT SPILL J @ 30-005-64381
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received
Incident Well	[30-005-64381] WESTMOUNT FEDERAL COM #001H

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	WEST MOUT SPILL J
Date Release Discovered	09/21/2023
Surface Owner	State

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

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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 2

Action 548104

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

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	<i>Not answered.</i>

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: 01/29/2026
--	---

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 3

Action 548104

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<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)	23500
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	08/05/2024
On what date will (or did) the final sampling or liner inspection occur	09/03/2024
On what date will (or was) the remediation complete(d)	01/07/2025
What is the estimated surface area (in square feet) that will be reclaimed	2196
What is the estimated volume (in cubic yards) that will be reclaimed	300
What is the estimated surface area (in square feet) that will be remediated	2196
What is the estimated volume (in cubic yards) that will be remediated	660

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.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 4

Action 548104

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112338393 GANDY MARLEY LANDFARM/LANDFILL
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	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

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 01/29/2026
--	---

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.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 5

Action 548104

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 6

Action 548104

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	375262
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/23/2024
What was the (estimated) number of samples that were to be gathered	7
What was the sampling surface area in square feet	1323

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	2196
What was the total volume (cubic yards) remediated	660
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	2196
What was the total volume (in cubic yards) reclaimed	300
Summarize any additional remediation activities not included by answers (above)	MORE BACKFILL MATERIAL WAS USED BUILD UP THE PASTURE FROM THE SIDE OF THE ROAD FROM THE NATURAL GRADE OF THE LAND TO LEVEL THE AREA OUT.

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

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

I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 01/29/2026
--	---

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 7

Action 548104

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	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	2196
What was the total volume of replacement material (in cubic yards) for this site	1880
<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)	01/15/2025
Summarize any additional reclamation activities not included by answers (above)	SITE WAS CONTOURED, CROSS RIPPED, SEEDED, CROSS RIPPED AGAIN THEN WATERED TO SET SEED.
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Natalie Gladden Title: Environmental Email: natalie@energystaffingllc.com Date: 01/29/2026

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 8

Action 548104

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	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>	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 548104

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 548104
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your reclamation/remediation closure report for Incident #NAPP2329832291 WEST MOUT SPILL J, thank you. The reclamation/remediation closure report is approved.	2/10/2026