

THUNDERBAY FED COM #1H CLOSURE REQUEST

API NO. 30-005-64308 LEGALS: U/L E, S20, T15S, R29E CHAVES COUNTY, NEW MEXICO

DATE OF RELEASE: 08/20/2018 INCIDENT NO. NMAP1825441890 RP NO. 2RP-4955

June 6, 2022

Prepared By:



2734 NW County Road Hobbs, NM 88240



June 8, 2022

New Mexico Energy, Minerals & Natural Resources NMOCD District I C/O Mike Bratcher, Robert Hamlet & Chad Hensley 1625 N. French Drive Hobbs, NM 88240

Bureau of Land Management C/O Jim Amos 620 E. Green Street Carlsbad, NM 88220

Mack Energy Corporation C/O Matt Buckles PO Box 960 Artesia, NM 88211

Subject: Closure Request for Mack Energy Corporation – Thunderbay Fed Com 1H

API No. 30-005-64308 Incident No. NMAP18255441890 (2RP-4955) Unit Letter E, Section 20, Township 15 South, Range 29 East Chaves County, New Mexico

To Whom it May Concern:

Mack Energy Corporation has retained Energy Staffing Services (ESS), to conduct a spill assessment, delineation, and remediation for the Thunderbay Fed Com #1H (hereafter known as the Thunderbay) for the produced water release that occurred on August 20th, 2018. Mack Energy provided the immediate notification email on August 20th of 2018, followed by the Initial C141 on August 31st, 2018. (Please see email notification and initial C141 attached herein) to the BLM and to the New Mexico Oil Conservation Division (NMOCD) and the Bureau of Land Management (BLM). The C141 was accepted as record on September 4th, 2018, with the incident number of NMAP1825441890.

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

Incident Description

On August 20th of 2018 it was found that a clamp on Pure-Line lay flat line was not securely fastened and drained a section of the line into the pasture area. Approximately 500bbls of produced water was released with recovering of 40bbls of standing fluid.

Site Characterization

The release at the Thunderbay occurred on Federal Land and is located at 33.002218 latitude and -104.056481 longitude (see Vertex Report), approximately 17.55 miles southeast of Hagerman, New Mexico. The C141 was reported with an incorrect GPS. The legal description of the site is Unit Letter E, Section 20, Township 15 South and Range 29 East. This site is in Chaves County, New Mexico. Site map attached.

The Thunderbay consists of pastureland. The elevation of the release is 3,844 ft. This area is historically or has been primarily dominated by black grama, bush muhly, creosotebush and other perennial forbs and grasses. (Please see the attached Rangeland and Vegetation Classification information).

The United States Department of Agriculture Natural Resources Conservation Service, indicates that the soil type found in the area of the Thunderbay, consists of 100% Tencee-Sotim Association Soils. (Soil Map Attached). In the area of the Thunderbay the FEMA National Flood Hazard Layer, indicates that there is 0.2% annual chance of a flood hazard in this area (see map attached).

There is "No potential" for Karst Geology to be present near the Thunderbay site, according to the *United States Department of the Interior, Bureau of Land Management*. Please find the Karst Map attached herein.

There is no surface water located near or around the Thunderbay. This site is not near a continuously flowing watercourse and or lakebed within ½ mile from the release. No other critical or community features at the Thunderbay were found. (Attached Watercourse Map).

The nearest and most recent water well to the site according to the *New Mexico Office of the State Engineer* is RA12428, which is located 7,569' from the site and shows to be drilled in 2016. This well is listed to have groundwater data at 125'bgs. The next well is L14514 POD1, drilled in 2018, found 7,707' from the site, with groundwater data at 77'bgs. The third well is RA09248, drilled in 1996, found at 9,483' from the site, with groundwater data to be at 45'bgs. An extended groundwater search was conducted using the *OSE POD Location Mapping System* and three other wells were found. One being inside the ½ mile radius, labelled LWD-03196-POD1, this well does not have any information regarding the depth of the well or drilling information. The other two wells (RA-12006-POD1 and RA-1200-POD1) also do not have any groundwater information available. Therefore, it has been determined that, no wells exist within a ½ mile radius of the Thunderbay. Please find the NMOSE, OSE POD and Ground Water Map attached to this report.

Closure Criteria Determination

The Closure Criteria for Soils impacted by a Release is shown in the below chart. No groundwater data was found within a ½ a mile radius from the release point, being on Federal Land and with having a "no (low) karst potential," the site fell under <50' to ground water.

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

Soil Remediation Action Levels

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

Soil Sampling Procedures

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

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

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

Volatile Organics by EPA 8021B

- Benzene, Toluene, Ethylbenzene, p.m. Xylene, o-Xylene and Total Xylenes Nonhalogenated Organics by EPA 8015D – GRO
 - Gasoline Range Organics (C6-C10)

Nonhalogenated Organics by EPA 8015D - DRO/ORO

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

Anions by EPA 300.0/9056A

• Chloride

Release Investigation Data Evaluation

The Thunderbay had previous excavation done by American Safety Services, Inc. (ASI), according to Vertex. After this timeframe in November of 2018, Vertex Resource Group was contracted by Mack Energy to complete additional site assessments and remediation fieldwork, to obtain closure for this release. Sometime around September 18, 2019 an impact map was uploaded showing the site had 80,000 sq. ft. of impacted surface. In December of 2019 Vertex delineated the site and submitted a Remediation Workplan (find attached). The Remediation Workplan was approved by the NMOCD on June 24th of 2021, under conditions of approval. The condition of approval is listed below:

- Samples are representative of more than 200 sq. ft. Please collect more confirmation samples, representing no more than 200 square feet, unless MACK chooses to provide a sampling plan for approval prior to conducting additional sampling.
- The OCD requests an attempt to be made in the center of the spill area. A bore sample be taken to prove contaminates have not penetrated past the rock layer.

No further delineation or remediation had taken place at this site. Therefore, Mack contracted ESS to further delineate the impacted area. Upon review of the previous documentation that was provided on the Thunderbay and the length of time, since the delineation it was then determined that a full delineation of the impacted area was to be performed. Upon arrival of the site, the visual impact of the release was visible, and this area was remapped. On page six

of Vertex report, it shows the Site Schematic map indicating the impacted area was 45,735 sq. ft. not 80,000 sq. ft. In the proposed remedial activities, it is suggested that 1.5'bgs would be excavated in the area of impact. Please see the impact map for details.

ESS began delineation of the impacted area on February 15th, 2022 after the one-call was cleared to begin excavation sampling. It was found that little to no contamination was found at the surface of the barren area except at SP5, SP18 and SP24. A total of 24 sample points were placed, mapped and GPS'd. Please see the field sample data along with confirmation from Envirotech Laboratories below:

| 1111 | | | 100 | L- | | | | | |
|-------|-------|------|-----|------|-------|-------|-------|-------|-------|
| SP ID | Depth | Titr | PID | BTEX | L-GRO | L-DRO | L-ORO | L-TPH | L-CHL |
| SP1 | SURF | 40 | ND | ND | ND | ND | ND | ND | ND |
| SP2 | SURF | 60 | ND | ND | ND | ND | ND | ND | 50.1 |
| SP3 | SURF | 80 | ND | ND | ND | ND | ND | ND | 64.4 |
| SP4 | SURF | 20 | ND | ND | ND | ND | ND | ND | ND |
| SP5 | SURF | 1600 | ND | ND | ND | ND | ND | ND | 1630 |
| SP6 | SURF | 440 | ND | ND | ND | ND | ND | ND | 428 |
| SP7 | SURF | 40 | ND | ND | ND | ND | ND | ND | 68.9 |
| SP8 | SURF | 20 | ND | ND | ND | ND | ND | ND | ND |
| SP9 | SURF | 480 | ND | ND | ND | ND | ND | ND | 425 |
| SP10 | SURF | 80 | ND | ND | ND | ND | ND | ND | ND |
| SP11 | SURF | 280 | ND | ND | ND | ND | ND | ND | 289 |
| SP12 | SURF | 40 | ND | ND | ND | ND | ND | ND | ND |
| SP13 | SURF | 500 | ND | ND | ND | ND | ND | ND | 514 |
| SP14 | SURF | 100 | ND | ND | ND | ND | ND | ND | ND |
| SP15 | SURF | 20 | ND | ND | ND | ND | ND | ND | 28.1 |
| SP16 | SURF | 20 | ND | ND | ND | ND | ND | ND | ND |
| SP17 | SURF | 200 | ND | ND | ND | ND | ND | ND | 163 |
| SP18 | SURF | 1880 | ND | ND | ND | ND | ND | ND | 1920 |
| SP19 | SURF | 20 | ND | ND | ND | ND | ND | ND | ND |
| SP20 | SURF | 40 | ND | ND | ND | ND | ND | ND | ND |
| SP21 | SURF | 260 | ND | ND | ND | ND | ND | ND | 232 |
| SP22 | SURF | 60 | ND | ND | ND | ND | ND | ND | 58.4 |
| SP23 | SURF | 140 | ND | ND | ND | ND | ND | ND | 128 |
| SP24 | SURF | 1800 | ND | ND | ND | ND | ND | ND | 1630 |

SURFACE SAMPLE LAB ANALYSIS

Further delineation of the site was completed by use of track-hoe due to the solid rock. A cap was found 2' thru 4' in depths across the impacted area. Once the cap was removed further delineation took place. It is evident that migration of contaminates had occurred.

The process of the delineation phase took several days due to the cap that was encountered. After vertical delineation was completed, horizontal delineation began. Below you find the vertical field final depth data and the lab analysis:

| SP ID | Depth | Titr | PID | L-BTEX | L-GRO | L-DRO | L-ORO | L-TPH | L-CHL |
|-------|-------|------|-----|--------|-------|-------|-------|-------|------------------|
| SP1 | 10' | 300 | ND | ND | ND | ND | ND | ND | 270 |
| SP2 | 6' | 400 | ND | ND | ND | ND | ND | ND | 380 |
| SP3 | 6' | 40 | ND | ND | ND | ND | ND | ND | ND |
| SP4 | 6' | 400 | ND | ND | ND | ND | ND | ND | 377 |
| SP5 | 6' | 200 | ND | ND | ND | ND | ND | ND | 1 9 3 |
| SP6 | 10' | 200 | ND | ND | ND | ND | ND | ND | 204 |
| SP7 | 6' | 300 | ND | ND | ND | ND | ND | ND | 234 |
| SP8 | 6' | 100 | ND | ND | ND | ND | ND | ND | 104 |
| SP9 | 8' | 40 | ND | ND | ND | ND | ND | ND | ND |
| SP10 | 10' | 460 | ND | ND | ND | ND | ND | ND | 434 |
| SP11 | 6' | 240 | ND | ND | ND | ND | ND | ND | 227 |
| SP12 | 4' | 240 | ND | ND | ND | ND | ND | ND | 138 |
| SP13 | 8' | 320 | ND | ND | ND | ND | ND | ND | 346 |
| SP14 | 4' | 100 | ND | ND | ND | ND | ND | ND | 94.8 |
| SP15 | 6' | 480 | ND | ND | ND | ND | ND | ND | 48 9 |
| SP16 | 8' | 240 | ND | ND | ND | ND | ND | ND | 265 |
| SP17 | 6' | 300 | ND | ND | ND | ND | ND | ND | 288 |
| SP18 | 4' | 120 | ND | ND | ND | ND | ND | ND | 101 |
| SP19 | 4' | 100 | ND | ND | ND | ND | ND | ND | 91.9 |
| SP20 | 6" | 260 | ND | ND | 25.4 | ND | 25.4 | ND | 279 |
| SP21 | 6' | 40 | ND | ND | ND | ND | ND | ND | 27.2 |
| SP22 | 4' | 140 | ND | ND | ND | ND | ND | ND | 125 |
| SP23 | 4' | 140 | ND | ND | ND | ND | ND | ND | 144 |
| SP24 | 4' | 160 | ND | ND | ND | ND | ND | ND | 146 |

DELINEATION VERTICAL SAMPLE DATA

| SP ID | Depth | Titr | PID | L-BTEX | L-GRO | L-DRO | L-ORO | L-TPH | L-CHI |
|----------|----------|----------|-----------|------------|------------------|---------------------|-----------|------------------------|-----------|
| SW1 | SURF | 160 | | ND | ND | ND | ND | ND | ND |
| | 2 | 160 | | ND | ND | ND | ND | ND | ND |
| | 4 | 80 | | | | | | | |
| | | | na grig (| | | 승규는 ' 등 | 10 20 30 | | 25 - II- |
| SW2 | SURF | 140 | | ND | ND | ND | ND | ND | 122 |
| | 2 | 560 | | | | | | | |
| | 4 | 320 | | | | | | | |
| | 6 | 200 | | ND | ND | ND | ND | ND | 210 |
| 17-24-24 | | | 1 | | | | | | |
| SW3 | SURF | 60 | | ND | ND | ND | ND | ND | 66.3 |
| | 1 | 60 | | | | | | | |
| | 2 | 60 | | ND | ND | ND | ND | ND | 60.2 |
| | 「キーあっ」 | | 23.16 | | | 74- jin | | | |
| SW4 | SURF | 80 | | ND | ND | ND | ND | ND | ND |
| | | 80 | | | | | | | |
| | 2 | 80 | | ND | ND | ND | ND | ND | ND |
| 1201 18 | | an Longs | 2 440 | | | | La Val VS | a contraction | |
| SW5 | SURF | 80 | | ND | ND | ND | ND | ND | ND |
| | | 80 | | | | | | | |
| | 2 | 80 | | ND | ND | ND | ND | ND | ND |
| | | 10 | - | | a filige a filig | 1.1012.10 | | Part of La | |
| SW6 | SURF | 60 | | ND | ND | ND | ND | ND | ND |
| | | 60 | | | | | | | |
| | 2 | 60 | | ND | ND | ND | ND | ND | ND |
| | | | | | | | | - 24 - 14 Z | 1.1.1.1 |
| SW7 | SURF | 140 | | ND | ND | ND | ND | ND | 110 |
| | | 100 | | | | | | | |
| | 2 | 20 | | ND | ND | ND | ND | ND | ND |
| | 1-2-1-2 | 8-16YG | | 1 5 5 6 18 | | State of the second | | | |
| SW8 | SURF | 160 | | ND | ND | ND | ND | ND | ND |
| | | 100 | | | | | | | |
| | 2 | 20 | | ND | ND | ND | ND | ND | ND |
| | DETING A | | | 19 N 575 | | | | (• • • • • • • • • • • | 1 - 1 - 3 |
| SW9 | SURF | 200 | | ND | ND | ND | ND | ND | 158 |
| | | 60 | | | | | | | |
| | 2 | 40 | | ND | ND | ND | ND | ND | 24.4 |
| | | P 34-7 | 2 | | | | | NE | NID |
| SW10 | SURF | 40 | | ND | ND | ND | ND | ND | ND |
| | | 40 | | | NIR | | ND | ND | 24.4 |
| | 2 | 40 | | ND | ND | ND | ND | ND | 31.4 |

Horizontal samples were then obtained, field evaluated and submitted to the lab for confirmation. Please see the horizontal data lab analysis below:

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| SW11 | SURF | 20 | ND | ND | ND | ND | ND | ND |
|-------|----------------|------|----|-----------|------------|----------------|----------|--------|
| | 1 | 20 | | | | | | |
| 1 | 2 | 20 | ND | ND | ND | ND | ND | ND |
| SW12 | SURF | 60 | ND | ND | ND | ND | ND | ND |
| 30012 | 1 | 40 | ND | | ND | ND | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND |
| 1 | | | | 10128-01 | | ingi con in 18 | - see la | 1 |
| SW13 | SURF | 1400 | ND | ND | ND | ND | ND | 1350 |
| | 2 | 880 | | | | | | |
| | 4 | 480 | | | | | | |
| | 6 | 480 | ND | ND | ND | ND | ND | ND |
| | | | | | 7 - Mary | | | |
| SW14 | SURF | 60 | ND | ND | ND | ND | ND | 49.1 |
| | 1 | 40 | - | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | 20.9 |
| SW15 | SURF | 20 | ND | ND | ND | ND | ND | ND |
| | 1 | 20 | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND |
| | 1000 100 N 100 | | | | | | A10 | |
| SW16 | SURF | 540 | ND | ND | ND | ND | ND | 515 |
| | 2 | 640 | | | | | | |
| | 4 | 880 | | | | | | - |
| | 6 | 480 | | | ND | NID | NID | 200 |
| | 8 | 300 | ND | ND | ND | ND | ND | 308 |
| SW17 | SURF | 20 | ND | ND | ND | ND | ND | ND |
| | 1 | 20 | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND |
| | | | | | | | | ND |
| SW18 | SURF | 160 | ND | ND | ND | ND | ND | ND |
| | 1 | 160 | ND | NID | ND | NID | ND | NID |
| | 2 | 160 | ND | ND | ND | ND | ND | ND |
| SW19 | SURF | 240 | ND | ND | ND | ND | ND | ND |
| | 1 | 240 | | | | | | |
| | 2 | 240 | ND | ND | ND | ND | ND | 22.3 |
| | 89319 | 1 | | 1 Net 313 | The second | ENVEX E | 15.7 | K. TSA |
| SW20 | SURF | 160 | ND | ND | ND | ND | ND | ND |
| | 1 | 160 | | | | | | |
| 2- | 2 | 160 | ND | ND | ND | ND | ND | 32.7 |
| SW21 | SURF | 160 | ND | ND | ND | ND | ND | ND |
| | 1 | 180 | | | | | | |
| | 2 | 160 | ND | ND | ND | ND | ND | 52.4 |

| 2455 建日 | | | 125 | o viti See | | | | | and the second |
|---------|------|-----|-----|------------|----|----|----|----|----------------|
| SW22 | SURF | 160 | | ND | ND | ND | ND | ND | 27.7 |
| | 1 | 120 | | | | | | | _ |
| | 2 | 80 | | ND | ND | ND | ND | ND | 65.2 |
| | | | | | | | | | |

Please find the delineation sample map attached to this report along with the delineation confirmation lab analysis reports.

Remedial Activities

Excavation began on February 23rd of 2022. In the area of SP1, SP6 and SP10 a total depth of 10'bgs was excavated, SP9 and SP16 to 8'bgs. In the areas of SP2 thru SP5, SP7 thru SP8, SP11, SP15, SP17, SP20 thru SP21 was excavated to 6'bgs. A total of 4'bgs was excavated in the areas of SP12, SP14, SP18 thru SP19, SP22 thru SP24. The impacted soil was excavated and hauled to Gandy Disposal.

ESS submitted the Composite Notification email on February 24th, followed by a request for variance taking the composite protocol from 200 sq. ft. to 500 sq. ft. on March 2nd. The NMOCD approved the Composite Variance on March 2nd. On March 7th, Matt Buckles of Mack also sent an email to the BLM of the composite sampling request. Please find emails attached herein.

ESS crews began the composite sampling process on March 7th of 2022. These samples were field tested and submitted to Envirotech Labs for confirmation. Please find the composite field sample data along with lab analysis below:

| SP ID | Depth | Titr | PID | L-BTEX | L-GRO | L-DRO | L-ORO | L-TPH | L-CHL |
|---------|-------|------|-----|--------|-------|-------|-------|-------|-------|
| COMP 1 | 8 | 480 | | ND | ND | ND | ND | ND | ND |
| COMP 2 | 4 | 400 | | ND | ND | ND | ND | ND | ND |
| COMP 3 | 4 | 400 | | ND | ND | ND | ND | ND | ND |
| COMP 4 | 6 | 160 | | ND | ND | ND | ND | ND | ND |
| COMP 5 | 6 | 80 | | ND | ND | ND | ND | ND | ND |
| COMP 6 | 2 | 240 | | ND | ND | ND | ND | ND | 245 |
| COMP 7 | 10 | 160 | | ND | ND | ND | ND | ND | 133 |
| COMP 8 | 10 | 400 | | ND | ND | ND | ND | ND | 419 |
| COMP 9 | 2 | 240 | | ND | ND | ND | ND | ND | ND |
| COMP 10 | 2 | 240 | | ND | ND | ND | ND | ND | ND |
| COMP 11 | 2 | 240 | | ND | ND | ND | ND | ND | ND |
| COMP 12 | 6 | 160 | | ND | ND | ND | ND | ND | ND |
| COMP 13 | 2 | 160 | | ND | ND | ND | ND | ND | ND |
| COMP 14 | 2 | 480 | | ND | ND | ND | ND | ND | ND |

| COMP 15 | 2 | 80 | ND | ND | ND | ND | ND | ND |
|---------|---|-----|----|----|----|----|----|------|
| COMP 16 | 2 | 160 | ND | ND | ND | ND | ND | ND |
| COMP 17 | 2 | 240 | ND | ND | ND | ND | ND | 262 |
| COMP 18 | 2 | 400 | ND | ND | ND | ND | ND | 27.5 |
| COMP 19 | 2 | 160 | ND | ND | ND | ND | ND | 24.1 |
| COMP 20 | 2 | 160 | ND | ND | ND | ND | ND | 24.6 |
| COMP 21 | 2 | 240 | ND | ND | ND | ND | ND | 35.9 |
| COMP 22 | 2 | 80 | ND | ND | ND | ND | ND | 22.8 |
| COMP 23 | 2 | 160 | ND | ND | ND | ND | ND | 23.1 |
| COMP 24 | 2 | 80 | ND | ND | ND | ND | ND | 62.2 |
| COMP 25 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 26 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 27 | 2 | 240 | ND | ND | ND | ND | ND | ND |
| COMP 28 | 2 | 480 | ND | ND | ND | ND | ND | ND |
| COMP 29 | 4 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 30 | 4 | 320 | ND | ND | ND | ND | ND | ND |
| COMP 31 | 2 | 320 | ND | ND | ND | ND | ND | ND |
| COMP 32 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 33 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 34 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 35 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 36 | 2 | 320 | ND | ND | ND | ND | ND | ND |
| COMP 37 | 2 | 320 | ND | ND | ND | ND | ND | ND |
| COMP 38 | 2 | 480 | ND | ND | ND | ND | ND | ND |
| COMP 39 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 40 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 41 | 2 | 240 | ND | ND | ND | ND | ND | ND |
| COMP 42 | 2 | 400 | ND | ND | ND | ND | ND | 25.3 |
| COMP 43 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 44 | 2 | 160 | ND | ND | ND | ND | ND | ND |
| COMP 45 | 2 | 240 | ND | ND | ND | ND | ND | ND |
| COMP 46 | 2 | 160 | ND | ND | ND | ND | ND | 24.6 |
| COMP 47 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 48 | 2 | 400 | ND | ND | ND | ND | ND | ND |
| COMP 49 | 2 | 240 | ND | ND | ND | ND | ND | 116 |
| COMP 50 | 2 | 240 | ND | ND | ND | ND | ND | 168 |
| COMP 51 | 2 | 160 | ND | ND | ND | ND | ND | 23.9 |
| COMP 52 | 2 | 240 | ND | ND | ND | ND | ND | 122 |
| COMP 53 | 2 | 240 | ND | ND | ND | ND | ND | 143 |
| COMP 54 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 55 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 56 | 2 | 240 | ND | ND | ND | ND | ND | 46.4 |
| COMP 57 | 2 | 240 | ND | ND | ND | ND | ND | 65.7 |

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| COMP 58 | 2 | 320 | ND | ND | ND | ND | ND | 139 |
|---------|---|-----|----|----|----|----|----|------|
| COMP 59 | 2 | 320 | ND | ND | ND | ND | ND | 154 |
| COMP 60 | 2 | 320 | ND | ND | ND | ND | ND | 203 |
| COMP 61 | 2 | 240 | ND | ND | ND | ND | ND | 48 |
| COMP 62 | 2 | 240 | ND | ND | ND | ND | ND | 56.6 |
| COMP 63 | 2 | 320 | ND | ND | ND | ND | ND | 137 |
| COMP 64 | 2 | 320 | ND | ND | ND | ND | ND | 167 |
| COMP 65 | 2 | 160 | ND | ND | ND | ND | ND | 24.8 |
| COMP 66 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 67 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 68 | 2 | 80 | ND | ND | ND | ND | ND | ND |
| COMP 69 | 2 | 160 | ND | ND | ND | ND | ND | 25.6 |
| COMP 70 | 2 | 160 | ND | ND | ND | ND | ND | 27 |
| COMP 71 | 5 | 160 | ND | ND | ND | ND | ND | 27 |
| COMP 72 | 2 | 240 | ND | ND | ND | ND | ND | 67 |
| COMP 73 | 2 | 240 | ND | ND | ND | ND | ND | 70.2 |
| COMP 74 | 5 | 240 | ND | ND | ND | ND | ND | 72.7 |
| COMP 75 | 2 | 240 | ND | ND | ND | ND | ND | 80.1 |
| COMP 76 | 2 | 320 | ND | ND | ND | ND | ND | 24.5 |
| COMP 77 | 2 | 320 | ND | ND | ND | ND | ND | 173 |
| COMP 78 | 2 | 320 | ND | ND | ND | ND | ND | 183 |
| COMP 79 | 2 | 320 | ND | ND | ND | ND | ND | 180 |
| COMP 80 | 2 | 240 | ND | ND | ND | ND | ND | 87.6 |
| COMP 81 | 2 | 240 | ND | ND | ND | ND | ND | 83.9 |
| COMP 82 | 2 | 320 | ND | ND | ND | ND | ND | 215 |
| COMP 83 | 2 | 240 | ND | ND | ND | ND | ND | 85.9 |
| COMP 84 | 2 | 320 | ND | ND | ND | ND | ND | 178 |
| COMP 85 | 2 | 320 | ND | ND | ND | ND | ND | 185 |
| COMP 86 | 2 | 320 | ND | ND | ND | ND | ND | 173 |
| COMP 87 | 2 | 240 | ND | ND | ND | ND | ND | 93.1 |
| COMP 88 | 2 | 240 | ND | ND | ND | ND | ND | 149 |
| COMP 89 | 2 | 240 | ND | ND | ND | ND | ND | 147 |
| COMP 90 | 2 | 240 | ND | ND | ND | ND | ND | 141 |
| COMP 91 | 2 | 160 | ND | ND | ND | ND | ND | 25.5 |
| COMP 92 | 2 | 160 | ND | ND | ND | ND | ND | ND |
| COMP 93 | 2 | 240 | ND | ND | ND | ND | ND | 146 |
| SW C1 | 2 | 20 | ND | ND | ND | ND | ND | ND |
| SW C2 | 2 | 180 | ND | ND | ND | ND | ND | 150 |
| SW C3 | 2 | 160 | ND | ND | ND | ND | ND | 148 |
| SW C4 | 2 | 20 | ND | ND | ND | ND | ND | ND |
| SW C5 | 2 | 20 | ND | ND | ND | ND | ND | ND |
| SW C6 | 2 | 20 | ND | ND | ND | ND | ND | ND |

Once ESS received the confirmed lab analysis of the excavation area that the full extent of the contaminated soil was removed, backfilling commenced. A total of 2,478 cubic yards of contaminated soil was disposed of. A total of 2,374 cubic yards of topsoil and 1,024 cubic yards of caliche was purchased and hauled back to the site and was stockpiled. Due to the large rocks pulled out from the cap, more topsoil was needed than expected for the 4' vadose zone. The site was contoured to its natural state.

On April 3rd ESS emailed the OCD and the BLM for the 48-hour seeding notification. The site was seeded with 100lbs of BLM #3 seed. The seed was hand broadcasted across the backfilled area.

Closure Request

On behalf of Mack Energy, ESS requests that this incident (NMAP1825441890), be closed for the release that occurred in the pasture area of the Thunderbay. Mack Energy and ESS certifies that all of the information provided and that is detailed in this report, is true and correct. We have complied with all applicable closure requirements for the release that occurred on the Thunderbay Fed Com #1H.

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

Sincerely,

stalie Grladden

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



Attachments:

Spill Notification Email

Initial C141

Site Map

Rangeland and Vegetation Classification

Soil Map

FEMA Flood Map

Karst Map

Surface Water Map

Groundwater Data and Map

OSE Groundwater Map

Vertex Remediation Plan w/conditions of Approval

Impact Map

Delineation Sample Map

Delineation Sample Data and Sample GPS

OCD – Composite Notification

Composite Sample Map

Composite Sample Data and Sample GPS

Lab Analysis

Remediation and Final Photos

Final C141

From:Matt BucklesTo:Pruett. Maria. EMNRDSubject:Fwd: Release NoticeDate:Tuesday, August 21, 2018 10:54:25 AM

From: Matt Buckles Sent: Monday, August 20, 2018 5:26 PM To: Tucker, Shelly (stucker@blm.gov<<u>mailto:stucker@blm.gov</u>>); 'Crystal.Weaver@state.nm.us<<u>mailto:Crystal.Weaver@state.nm.us</u>>' Cc: Lee Livingston; Jerry Sherrell Subject: Release Notice

Shelly and Crystal,

We had a line transporting treated produced water separate this morning around 10am on BLM land for our Thunder Bay Fed Com 1H API # 30-005-64308. The coordinates of the release are 33.0019167, -104.056111. I Will gather all the data and submit a C-141 shortly.

Thanks,

Matt Buckles Mack Energy Corporation 11344 Lovington Highway Artesia NM 88210 575-748-1288 Office
 From:
 Matt Buckles

 To:
 Pruett, Maria, EMNRD

 Subject:
 Fwd: Release Notice

 Date:
 Tuesday, August 21, 2018 10:54:25 AM

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Matt Buckles Mack Energy Corporation 11344 Lovington Highway Artesia NM 88210 575-748-1288 Office 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 | NMAP1825441890 |
|----------------|----------------|
| District RP | 2RP-4955 |
| Facility ID | N/A |
| Application ID | pMAP1824763569 |

Release Notification

Responsible Party

| Responsible Party Mack Energy Corporation | OGRID 013837 | | |
|---|--------------------------------|--|--|
| Contact Name Matt Buckles | Contact Telephone 575-748-1288 | | |
| Contact email mattbuckles@mec.com | Incident # (assigned by OCD) | | |
| Contact mailing address PO Box 960, Artesia, NM 88211 | | | |

Location of Release Source

Latitude 33.0019167

[NAD 83 in decimal degrees to 5 decimal places]

| Site Name Thunderbay | Site Type Pasture | |
|-----------------------------------|-----------------------------------|--|
| Date Release Discovered 8/20/2018 | API# (if applicable) 30-005-64308 | |
| Unit Latter Desting Termstin Dess | Country | |

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| E. | 20 | 15S | 29E | Chaves |

Surface Owner: State Federal Tribal Private (Name: _____

Nature and Volume of Release

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

| Crude Oil | Volume Released (bbls) | Volume Recovered (bbls) |
|-----------------------|--|--|
| Produced Water | Volume Released (bbls) 500 | Volume Recovered (bbls) 40 |
| | Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l? | Yes No |
| Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |
| Cause of Release Clar | np on Pureline's lay flat line was not secure | ly fastened and drained section of line. |
| | | |
| | | |
| | | |

Received by OCD: 6/15/2022 4:07:07 PM

| rm C-141 | State of New Mexico | Incident ID | NMAP1825441890 2RP-4955 N/A | |
|---|---------------------------------------|----------------|-----------------------------------|--|
| age 2 | Oil Conservation Division | District RP | | |
| | | Facility ID | | |
| | | Application ID | pMAP1824763569 | |
| release as defined by 19.15.29.7(A) NMAC? | unauthorized release was greater then | 25 bbis | | |
| | unauthorized release was greater then | 25 bbis | | |

Initial Response

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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

Muac

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: | Matt | Buckles |
|---------------|------|---------|
|---------------|------|---------|

email: mattbuckles@mec.com

| Title: | Project Manager |
|--------|-----------------|
| Date: | 8/31/2018 |

Telephone: 575-748-1288

OCD Only

Received by:

Date: 09/04/18



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🕴 THUNDERBAY RELEASE

THUNDERBAY RELEASE



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

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.

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

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.



THUNDERBAY FED COM 1H

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



THUNDERBAY FED COM 1H

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

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



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THUNDERBAY FED COM 1H

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

| Map unit symbol and soil | Ecological Site, Plant | Total d | Iry-weight proc | luction | Characteristic rangeland or forest understory vegetation | Compositio n | | |
|--------------------------|---------------------------------|-------------------|-----------------|---------------------|--|-----------------|------------|----------------------|
| name | Association, or Habitat Type | Favorable year | Normal year | Unfavorable year | | | Rangeland | Forest understory |
| | | Lb/ac | Lb/ac | Lb/ac | | Pct dry wt | Pct dry wt | |
| Tencee | Shallow (R042XC025NM) | 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 (R042XC004NM) | 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 | | |
| USDA Natural Re | sources | | We | b Soil Survey | уисса | 5 | | 6/6/202 |

THUNDERBAY FED COM 1H

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

Data Source Information

Soil Survey Area: Chaves County, New Mexico, Southern Part Survey Area Data: Version 16, Sep 12, 2021



Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey Received by OCD: 6/15/2022 4:07:07 PM



USDA Natural Resources Conservation Service Released to Imaging: 9/30/2022 10:09:16 AM Web Soil Survey National Cooperative Soil Survey 6/6/2022 Page 1 of 3

Soil Map—Chaves County, New Mexico, Southern Part (THUNDERBAY FED COM 1H)

| Area of Interest (AOI) Spoil Area | |
|---|---|
| Area of Interest (AOI) | The soil surveys that comprise your AOI were mapped at 1:24,000. |
| Area of interest (AOI) Image of interest (AOI) Stony Spot Soils Soil Map Unit Polygons Very Stony Spot Image of Map Unit Lines Image of Map Unit Lines Image of Map Unit Points Soil Map Unit Points Special Line Features Other Image of Map Unit Points Special Line Features Streams and Canals Image of Point Peatures Streams and Canals Transportation Image of Point Peatures Streams and Canals Image of Point Image of Point Peatures Streams and Canals Image of Point Image of Point Peatures Streams and Canals Image of Point Image of Point Points Streams and Canals Image of Point Image of Point Points Streams and Canals Image of Point Image of Point Points Image of Point Image of Point Image of Point Points Image of Point Image of Point Image of Point Points Image of Point Image of Point Image of Point Points Image of Point Image of Point Image of Point Points Image of Point Image of Point Image of Point Points Image of Point Image of Point <th> 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 so line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detaile 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 Mercat projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as t 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 of the version date(s) listed below. Soil Survey Area: Chaves County, New Mexico, Southern Pa Survey Area Data: Version 16, Sep 12, 2021 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Feb 5, 2021—Fei 2021 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 </th> | 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 so line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detaile 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 Mercat projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as t 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 of the version date(s) listed below. Soil Survey Area: Chaves County, New Mexico, Southern Pa Survey Area Data: Version 16, Sep 12, 2021 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Feb 5, 2021—Fei 2021 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 |

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Map Unit Legend

| Map Unit Symbol Map Unit Name | | Acres in AOI | Percent of AOI |
|-------------------------------|-----------------------|--------------|----------------|
| So | Sotim fine sandy loam | 0.3 | 4.6% |
| TS Tencee-Sotim association | | 5.4 | 95.4% |
| Totals for Area of Interest | | 5.7 | 100.0% |



Received by OCD: 6(15/2022 4:07:07,PM National Flood Hazard Layer FIRMette



Legend

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Page 29 of 508

104°3'41"W 33°0'23"N SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) Zone A. V. A9 With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS **Regulatory Floodway** 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 OTHER AREAS OF FLOOD HAZARD Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - — – – Channel, Culvert, or Storm Sewer GENERAL STRUCTURES LIIIII Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 35005C2400D 17.5 Water Surface Elevation AREAOFMeff 9/25/2009DHAZARD Chaves County **Coastal Transect** Base Flood Elevation Line (BFE) 350125 Limit of Study Jurisdiction Boundary --- Coastal Transect Baseline OTHER **Profile Baseline** FEATURES Hydrographic Feature **Digital Data Available** No Digital Data Available MAP PANELS 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 6/6/2022 at 1:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. 35005C2725D 9/25/2009 This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, Not Printed legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for 104°3'3"W 32°59'52"N Feet 1:6.000 unmapped and unmodernized areas cannot be used for regulatory purposes. Releasea to Imaging: 9/30/2022 90.09:16 AM 1,500 2.000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



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Legend Page 30 of 508

High
Low
Medium
THUNDERBAY RELEASE

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Google Earth Released to Imaging: 9/30/2022 10:09:16 AM Image Landsat / Copernicus



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 Page 31 of 508

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Google Earth <u>Released to Imaging: 9/30/2022 10:09:16 AM</u> mage Landsat / Copernicus

New Mexico Office of the State Engineer Wells with Well Log Information

| | | No wells found. |
|-------------------------------------|--------------------------|-----------------|
| UTMNAD83 Radius Search (in meters): | | |
| Easting (X): 588139 | Northing (Y): 3651928.13 | 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, or suitability for any particular purpose of the data.

6/6/22 11:52 AM

WELLS WITH WELL LOG INFORMATION

New Mexico Office of the State Engineer Wells with Well Log Information

| | | | No wells found. | | |
|-------------------------------------|---------------|------------|---------------------|--|--|
| UTMNAD83 Radius Search (in meters): | | | | | |
| Easting (X): 588139 | Northing (Y): | 3651928.13 | 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, or suitability for any particular purpose of the data.

6/6/22 11:53 AM

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 | (R=POI been rep O=orpha | olaced, | | | | | | | | | | | | | |
|---|-------------------------------|--|--------------------------|--------------|------------|----------|----------------------|-----------------|--------------------|---------------------------|-----------------|------------------|------------|--|-----------------|
| & no longer serves a C=the file is | | (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) | | | | , | | 3 UTM in meters | | (in feet) | | | | | |
| water right | closed) | POD | | (quarters | qqq | est to I | ugest) | (NAD8 | 5 UTW III IIIeters |) | | I | | · | License |
| POD Number | Code | | County | Source | | Sec 1 | ws Rng | Х | Y | Distance Start Date | Finish Date | Log File Date | Well | Depth Water Driller | Number |
| <u>RA 12428</u> | | RA | СН | Shallow | 4 2 1 | 21 | 5S 28E | 580579 | 3652317 🌍 | 7569 07/28/2016 | 08/04/2016 | 08/08/2016 | 170 | 125 DONALD KUEHN III | 1058 |
| <u>L 14514 POD1</u> | | L | LE | Shallow | 2 2 1 | 32 | 5S 36E | 595494 | 3649622 🌍 | 7707 08/09/2018 | 08/10/2018 | 08/17/2018 | 208 | 77 JOHN GOERTZEN | 1611 |
| <u>RA 09248</u> | | RA | СН | Shallow | 1 4 3 | 17 | 5S 28E | 578704 | 3652884* 🌍 | 9483 07/10/1996 | 07/13/1996 | 07/25/1996 | 150 | 45 RAYMOND ANDERSON | 1344 |
| <u>RA 10280</u> | | RA | СН | Shallow | 4 3 3 | 17 | 5S 28E | 578501 | 3652680* 🌍 | 9667 06/20/2002 | 07/15/2002 | 04/23/2003 | 70 | 40 CARREON, FERNANDO | 1490 |
| <u>RA 12429 POD1</u> | | RA | СН | Shallow | 1 1 4 | 32 | 5S 28E | 579093 | 3648401 🌍 | 9709 11/17/2016 | 11/17/2016 | 11/28/2016 | 62 | 27 EADES, ALAN | 1044 |
| Record Count: 5 | | | | | | | | | | | | | | | |
| UTMNAD83 Rad | ius Searc | <u>ch (in meter</u> | <u>:s):</u> | | | | | | | | | | | | |
| Easting (X): 588139 | | | Northing (Y): 3651928.13 | | | | Radius: 10000 | | | | | | | | |
| *UTM location was deriv | ved from 1 | PLSS - see H | lelp | | | | | | | | | | | | |
| The data is furnished by th any particular purpose of t | | E/ISC and is | accepted b | by the recip | bient with | the ex | pressed une | derstanding th | at the OSE/ISC n | ake no warranties, expres | ssed or implied | l, concerning th | e accuracy | , completeness, reliability, usability, or | suitability for |
| 6/6/22 11:53 AM | | | | | | | | | | | | | V | VELLS WITH WELL LOG INFOR | MATION |

New Mexico Office of the State Engineer Point of Diversion Summary

| Well Tag 20765 | PC L | DD Number 14514 POD1 | (quar | ters are s | NW 2=NE 3 mallest to la Sec Tw 32 15 | s Rng | NAD83 UT X 595494 | M in meters) Y 3649622 | • | | |
|--------------------------|---------|--------------------------------|-------------|------------|---|------------|--------------------------------|-------------------------------------|---------|--|--|
| Driller Licen | se: | 1611 | Driller Co | mpany | : GOER | TZEN DRIL | LING | | | | |
| Driller Name | : | JOHN GOERTZE | ΞN | | | | | | | | |
| Drill Start Da | ite: | 08/09/2018 | Drill Finis | sh Date | : 08 | /10/2018 | Plug | Date: | | | |
| Log File Date | e: | 08/17/2018 | PCW Rcv | Date: | | | Sour | ce: | Shallow | | |
| Pump Type: | | | Pipe Disc | harge | Size: | | Estimated Yield: | | | | |
| Casing Size: | | 5.00 | Depth We | ell: | 20 | 8 feet | Dept | h Water: | 77 feet | | |
| v | Vate | r Bearing Stratifi | cations: | Тор | Bottom | Descriptio | on | | | | |
| | | | | 104 | 125 | Sandstone | e/Gravel/ | /Conglome | rate | | |
| | | | | 125 | 150 | Sandstone | e/Gravel/ | /Conglomei | ate | | |
| | | | | 150 | 160 | Sandstone | e/Gravel/ | /Conglome | rate | | |
| | | | | 162 | 175 | Other/Unk | - | | | | |
| | | | | 175 | 185 | | | Conglome | | | |
| | | | | 185 | 202 | | | /Conglome | ate | | |
| | | | | 202 | 205 | Other/Unk | - | | | | |
| | | | | 205 | 208 | Other/Unk | nown | | | | |
| | | Casing Perfo | orations: | Тор | Bottom | | | | | | |
| | | | | 0 | 208 | | | | | | |

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New Mexico Office of the State Engineer **Point of Diversion Summary**

| Well Tag | POD Number LWD 03196 POD1 | (quarters are 1=NW 2= (quarters are smallest Q64 Q16 Q4 Sec 20 | to large | (NAD83 UTM in meters) X Y 588694 3651839* | | | |
|-----------------------------------|-------------------------------------|---|----------|---|--------------|--|--|
| Driller License: Driller Name: | | Driller Company: | | | | | |
| Drill Start Date: | | Drill Finish Date: | | Plug Date: | | | |
| Log File Date: | | PCW Rcv Date: | | Source: | | | |
| Pump Type: | | Pipe Discharge Size: | | Estimated Yield: | | | |
| Casing Size: | | Depth Well: | | | Depth Water: | | |

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY
| | (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters) | | | | | | | | | |
|----------------|--|-------------|---------|-------|------|---------|---------|--------------|------------|-------------|
| Well Tag | POD Number | | Q16 Q4 | | | , | (INAD8 | 3 U I N X | /i in mete | Y |
| wen rag | RA 09248 | 1 | 4 3 | | | 28E | 5787 | | 365288 | - |
| Driller Licen | se: 1344 | Driller Co | ompany | : AND | DER | SON, R | RAYMO | ND | | |
| Driller Name | : RAYMOND AN | NDERSON | | | | | | | | |
| Drill Start Da | ite: 07/10/1996 | Drill Fini | sh Date | : | 07/1 | 13/1996 | P | lug l | Date: | |
| Log File Date | e: 07/25/1996 | PCW Rcv | v Date: | | | | S | ourc | e: | Shallow |
| Pump Type: | | Pipe Dise | charge | Size: | | | E | stim | ated Y | ield: 2 GPM |
| Casing Size: | 4.50 | Depth W | ell: | | 150 | feet | D | epth | Water | : 45 feet |
| v | Vater Bearing Strat | ifications: | Тор | Botto | m | Descrip | otion | | | |
| | | | 50 | 6 | 60 | Sandsto | one/Gra | vel/0 | Conglor | nerate |
| | Casing Pe | rforations: | Тор | Botto | m | | | | | |
| | | | 45 | 10 | 00 | | | | | |

*UTM location was derived from PLSS - see Help

| | | | | | | , | | | |
|-------------------|---|---|---|--|--|---|--|--|--|
| | · · | | | | <i>,</i> | | | | |
| POD Number | Q64 | Q16 Q4 | Sec | Tws | Rng | Х | Y | · | |
| RA 12429 POD | 1 1 | 1 4 | 32 | 15S | 28E | 579093 | 3648401 | 9 | |
| se: 1044 | Driller Co | ompany | : EA | DES | WELL | DRILLING | & PUMP S | SERVICE | |
| EADES, ALA | ٨N | | | | | | | | |
| te: 11/17/2016 | Drill Finis | sh Date | : | 11/ [,] | 17/2016 | Plug | Date: | | |
| e: 11/28/2016 | PCW Rcv | / Date: | | | | Sour | ce: | Shallow | |
| | Pipe Disc | charge | Size: | | Estimated Yield: | | | | |
| 5.13 | Depth W | ell: | | 62 f | eet | Dept | h Water: | 27 feet | |
| later Bearing Str | atifications: | Тор | Botte | om | Descrip | otion | | | |
| | | 27 | | 33 | Sandsto | one/Gravel | Conglome | erate | |
| | | 33 | | 62 | Sandsto | one/Gravel | Conglome | erate | |
| Casing I | Perforations: | Тор | Botto | om | | | | | |
| | | | | | | | | | |
| | se: 1044 : EADES, ALA tte: 11/17/2016 e: 11/28/2016 5.13 Vater Bearing Str | POD Number Q64 RA 12429 POD1 1 se: 1044 Driller Co : EADES, ALAN ite: 11/17/2016 Drill Finis :: 11/28/2016 PCW Rcy Pipe Disc 11/28/2016 PCW Rcy | POD NumberQ64 Q16 Q4RA 12429 POD111se:1044Driller Company:EADES, ALANtte:11/17/2016Drill Finish Datee:11/28/2016PCW Rcv Date:Pipe Discharge S5.13Depth Well:Vater Bearing Stratifications:Top2733 | POD Number RA 12429 POD1Q64 Q16 Q4 Sec 1 1 4 32se:10441 4 32se:1044Driller Company: EA:EADES, ALANtte:11/17/2016Drill Finish Date: Pipe Discharge Size: 5.135.13Depth Well:Vater Bearing Stratifications:Top Botto 27 33 | POD NumberQ64 Q16 Q4 Sec TwsRA 12429 POD111432155se:1044Driller Company:EADES:EADES, ALANDrill Finish Date:11/2:11/28/2016PCW Rcv Date:11/2:Fipe Discharge Size:5.13Depth Well:62 f//dter Bearing Stratifications:Top Bottom27333362 | POD NumberQ64 Q16 Q4 Sec Tws RngRA 12429 POD11143215S28Ese:1044Driller Company:EADES WELL:EADES, ALANtte:11/17/2016Drill Finish Date:11/17/2016e:11/28/2016PCW Rcv Date:Fipe Discharge Size:5.13Depth Well:62 feet//ater Bearing Stratifications:TopBottomDescription2733Sandstor3362Sandstor | POD Number RA 12429 POD1Q64 Q16 Q4SecTwsRngXRA 12429 POD11143215S28E579093se:1044Driller Company:EADES WELL DRILLINGse:11/17/2016Drill Finish Date:11/17/2016Pluge:11/28/2016PCW Rcv Date:SourPipe Discharge Size:Estin5.13Depth Well:62 feetDeptVater Bearing Stratifications:TopBottomDescription2733Sandstone/Gravel/3362Sandstone/Gravel/ | POD Number Q64 Q16 Q4 Sec Tws Rng X Y RA 12429 POD1 1 1 4 32 15S 28E 579093 3648401 se: 1044 Driller Company: EADES WELL DRILLING & PUMP S : EADES, ALAN ate: 11/17/2016 Drill Finish Date: 11/17/2016 Plug Date: :: 11/28/2016 PCW Rcv Date: Source: Source: Pipe Discharge Size: Estimated Yiel 5.13 Depth Well: 62 feet Depth Water: //ater Bearing Stratifications: Top Bottom Description 27 33 Sandstone/Gravel/Conglome 33 62 Sandstone/Gravel/Conglome 33 62 Sandstone/Gravel/Conglome | |

| Well Tag | POD Number | (quarters (quarter Q64 Q 1 | s are sr | mallest | to lar | | (NAD83 UTM in meter | s) Y |
|----------------------------------|------------------------|---|----------|---------|------------------|---------|---------------------|----------------|
| _ | RA 10280 | 4 3 | 33 | 17 | 15S | 28E | 578501 3652680 |)* 🍚 |
| Driller License Driller Name: | : 1490 CARREON, FEF | | npany | : FEF | RNA | NDO'S V | VATER WELL | |
| Drill Start Date | e: 06/20/2002 | Drill Finish | Date | : | 07/ [.] | 15/2002 | Plug Date: | |
| Log File Date: | 04/23/2003 | PCW Rcv D | Date: | | | | Source: | Shallow |
| Pump Type: | SUBMER | Pipe Disch | arge S | Size: | 1.2 | 5 | Estimated Yie | eld: 10 GPM |
| Casing Size: | 5.00 | Depth Well | : | | 70 f | feet | Depth Water: | 40 feet |
| Wa | ter Bearing Stratif | ications: | Тор | Botto | m | Descrip | tion | |
| | | | 1 | | 70 | Sandsto | ne/Gravel/Conglom | nerate |
| | Casing Perf | orations: | Тор | Botto | m | | | |
| | | | 40 | | 70 | | | |

*UTM location was derived from PLSS - see Help



| | | (quarters are (quarters are | | | , | (NAD83 UT | | |
|-----------------------------------|---------------|--------------------------------|--------------------|-----|-----|------------|---------------|--|
| Well Tag | POD Number | Q64 Q16 (|)4 Sec | Tws | Rng | Х | Y | |
| | RA 12006 POD1 | 2 2 | 3 19 | 15S | 29E | 587049 | 3651703 🌍 | |
| Driller License: Driller Company: | | | | | | | | |
| Driller Na | me: | | | | | | | |
| Drill Start | Date: | Drill Finish | Drill Finish Date: | | | Plug Date: | | |
| Log File D | ate: | PCW Rev Da | ate: | | | Sou | irce: | |
| Pump Typ | e: | Pipe Dischar | ge Size: | | | Est | imated Yield: | |
| Casing Size | e: | Depth Well: | | | | De | oth Water: | |

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POINT OF DIVERSION SUMMARY



| | | `1 | rs are 1=1 ers are sn | | | SW 4=SE) st) | (NAD83 UT | | |
|--------------------------|---------------|-----------|--------------------------|-------|-----|-----------------|------------|---------------|--|
| Well Tag | POD Number | Q64 (| Q16 Q4 | Sec | Tws | Rng | Х | Y | |
| | RA 12007 POD1 | 4 | 2 3 | 19 | 15S | 29E | 586999 | 3651508 🌍 | |
| Driller License: Driller | | | Compa | ny: | | | | | |
| Driller Na | me: | | | | | | | | |
| Drill Start | Date: | Drill Fi | nish Da | te: | | | Plug Date: | | |
| Log File D | ate: | PCW R | cv Date | e: | | | Sou | irce: | |
| Pump Typ | e: | Pipe Dis | scharge | Size: | | | Est | imated Yield: | |
| Casing Siz | ٥. | Depth V | Vell: | | | | De | pth Water: | |

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POINT OF DIVERSION SUMMARY



| | | | (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters) | | | | | | | | | | |
|----------------|------|--------------------|--|----------|-------|------|--------|------|----------|-----------|---------|------------|------------------|
| Well Tag | PC | DD Number | | ` | | | | | s Rng | (| X | Y | |
| - | RA | A 12428 | | 4 | 2 | 1 | 21 | 158 | 28E | 580 | 0579 | 3652317 | |
| Driller Licens | 1058 | er Co | ompa | any | : K | EY'S | DRILLI | NG & | PUMF | P SERVICE | | | |
| Driller Name | : | DONALD KUEH | N III | | | | | | | | | | |
| Drill Start Da | ite: | 07/28/2016 | Drill | Fini | sh D | ate | : | 08/ | /04/2016 | 6 | Plug | Date: | |
| Log File Date | e: | 08/08/2016 | PCV | / Rcv | / Dat | te: | | | | | Sour | ce: | Shallow |
| Pump Type: | | | Pipe | Dise | char | ge | Size | | | | Estin | nated Yiel | d: 15 GPM |
| Casing Size: | | 4.50 | Dep | th W | ell: | | | 17 |) feet | | Dept | h Water: | 125 feet |
| N | Vate | r Bearing Stratifi | cation | s: | Т | ор | Bot | tom | Descri | ption | | | |
| | | | | | 1 | 25 | | 140 | Sandst | tone/G | iravel/ | Conglome | rate |
| | | | | | 1 | 40 | | 160 | Sandst | tone/G | iravel/ | Conglome | rate |
| | | | | | 1 | 60 | | 170 | Sandst | tone/G | iravel/ | Conglome/ | rate |
| | | Casing Perfe | oration | ns: | Т | ор | Bot | tom | | | | | |
| | | | | | 1 | 25 | | 170 | | | | | |



THUNDERBAY FED COM 1H GROUNDWATER MAP

Dexte

Legend

Page 43 of 508

RA09248 - 9483' FROM SITE - 45'DGW

- RA10280 9667' FROM SITE 45'DGW
- RA12428 7569' FROM SITE 125'DGW
- RA12429 POD1 9709' FROM SITE 27'DGW
- THUNDERBAY RELEASE

Hagerman

2 RA10280 - 9667' FROM SITE 45'DGW
RA09248 - 9483' FROM SITE - 45'DGW
CHUNDERBAY RELEASE
Lake Arthur
RA12428 - 7569' FROM SITE 125'DGW
L14514 POD1 - 7707' FROM SITE - 77'DGW
RA12429 POD1 - 9709' FROM SITE 27'DGW

82

249

Loco Hills



82

249

Maljamar

OSE POD Locations Map



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GIS WATERS PODs

Pending

0

New Mexico State Trust Lands Both Estates

OSE District Boundary SiteBoundaries



Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, U.S. Department of Energy Office of Legacy Management



Environmental Site Remediation Work Plan

VERTEX

General Information

| NMOCD District: | District 2 | Incident # | NMAP1825441890 |
|-----------------|-------------------------|----------------|----------------|
| Landowner: | Federal | RP # | 2RP-4955 |
| Client: | Mack Energy Corporation | Site Location: | Thunderbay |
| Date: | June 23, 2020 | Project #: | 19E-04217-004 |
| Client Contact: | Matt Buckles | Phone #: | (575) 748-1288 |
| Vertex PM: | Natalie Gordon | Phone #: | (505) 506-0040 |

Objective

The objective of this environmental remediation work plan is to identify areas of exceedance for constituents of concern found during spill assessment and site characterization activities and propose appropriate remediation techniques to address the open release at Thunderbay. This incident was discovered on August 20, 2018, and is the result of a clamp on Pureline's lay flat line that was not securely fastened, allowing a section of the line to drain. Approximately 500 barrels (bbls) of produced water were released into pasture area. Approximately 40 bbls of produced water were recovered. The release was reported to the New Mexico Oil Conservation Division (NM OCD) District 2 office and incident tracking number NMAP1825441890 was assigned to the spill. The original location and boundaries of this release, as mapped shortly after the incident, are identified on Figure 1 (Attachment 1).

Initial site research and characterization has been completed and a closure criteria determination worksheet is included in Attachment 2. The release at Thunderbay is not subject to the requirements of Paragraph (4) of Subsection C of 19.15.29.12 *New Mexico Administrative Code* (NMAC) and the closure criteria for the site are determined to be associated with the following constituent concentration limits.

| Table 1. Closure Criteria for Soils Impacted by a Release | | | | | | | | |
|---|---------------------------------------|-----------|--|--|--|--|--|--|
| Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/L TDS ¹ | Constituent | Limit | | | | | | |
| | Chloride | 600 mg/kg | | | | | | |
| < 50 feet | TPH ² (GRO + DRO + MRO) | 100 mg/kg | | | | | | |
| | BTEX ³ | 50 mg/kg | | | | | | |
| | Benzene | 10 mg/kg | | | | | | |

¹Total Dissolved Solids (TDS)

²Total petroleum hydrocarbons (TPH) = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO) ³Benzene, toluene, ethyl benzene and xylenes (BTEX)

Site Assessment/Characterization

The Thunderbay release characterization was originally completed by American Safety Services, Inc (ASI) in November 2018, after which some level of remediation was completed. However, the release was not closed with NM OCD. In December 2019, Mack Energy retained Vertex Resource Group (Vertex) to complete additional site assessment and remediation fieldwork, as necessary, to obtain closure of the incident with the requisite regulatory agencies. A second site assessment was completed to characterize any remaining contamination associated with this release.

A total of thirteen sample points were established across the release area as shown on Figure 2 (Attachment 1) and soil samples were collected from these locations at varying depths up to 3 feet below ground surface (bgs). Each soil sample was

Pige 2 of 23

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field screened, using an electrical conductivity (EC) meter to estimate the level of chloride in the soil. The results were then used to determine the horizontal extent of the release. Typically, this same method is used to determine the vertical extent of the release; however, at Thunderbay, there is a layer of rock refusal at approximately 1-1.5 feet bgs across much of the area that prevented soil sampling at deeper depths. Based on field screening and lab data from soil samples collected at this rock layer, chloride appears to have penetrated to that layer and remained there. Additional sampling of the rock itself is advised to demonstrate that contaminants have not permeated past the layer of refusal and can be done at the time of remediation fieldwork.

The NM OCD requires full release delineation to the extent possible and has provided guidance specific to this situation, whereby remediation to the rock layer is required and full documentation should be conducted to demonstrate that everything possible was done to clean up contaminants. The NM OCD response regarding this remediation process is included as Attachment 3.

Data from the field screening process have been compared to the above-noted closure and reclamation criteria to establish the appropriate level of remediation required. Field screening and laboratory results associated with the release characterization are presented in Table 2 (Attachment 4) and exceedances are identified in the table as bold with a grey background. Because this was a produced water release, the presence of hydrocarbons is considered to be negligible.

Proposed Remedial Activities

Vertex proposes areas identified with contaminant concentrations approaching, or above, closure criteria be remediated through excavation and removal of contaminated soil with the use of mechanical equipment, to a depth of approximately 1.5 feet bgs or to rock refusal. Excavation would be guided by an onsite Vertex environmental technician, who would be conducting field screening during the excavation activities. Approximately 2,550 cubic yards of contaminated soil are projected to be removed. Contaminated soils should be stored on a heavy-duty liner prior to disposal at an approved facility.

Once the environmental technician confirms removal of contaminated soil to below applicable closure and reclamation criteria as shown in Table 1, confirmatory sampling will be conducted. Five-point composite confirmatory samples will be collected from the base and sidewalls of the excavation, in accordance with the sampling plan detailed in Attachment 5. This sampling plan is based on a non-parametric statistical sampling design using the Hahn and Meeker method through the Visual Sample Plan (VSP) program that meets the Environmental Protection Agency's data quality assessment standards for composite sampling.

Confirmatory samples will be placed into laboratory-provided containers, preserved on ice and submitted to a National Environmental Laboratory Accreditation Program-approved laboratory for chemical analysis. Laboratory analyses will include Method 300.0 for chlorides, Method 8021B for volatile organics, including benzene and BTEX, and EPA Method 8015 for TPH, including MRO, DRO and GRO.

A GeoExplorer 7000 Series Trimble global positioning system (GPS) unit, or equivalent, will be used to map the approximate center of each of the five-point composite samples.

Following laboratory analysis of confirmatory samples, excavations will be backfilled with clean soil sourced locally. Because the native soil at Thunderbay is not currently four feet deep, the depth of clean soil meeting Table 1 criteria will likely be limited to no more than two feet, as required to reconstruct existing grade, and pending NM OCD and Bureau of Land Management (BLM) approval. The remediated area will be re-seeded with a BLM-approved seed mix at the appropriate time of year to take advantage of seasonal rains, in order to aid in the reestablishment of vegetation over the impacted area.

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Environmental Site Remediation Work Plan

VERTEX

Timeline for Completion

Remediation activities, as outlined in this workplan, are projected to be completed within 90 days of NM OCD approval of the sampling plan.

If there are any questions regarding this report, please contact Natalie Gordon at 505-506-0040.

Sincerely,

statue Andon

Natalie Gordon PROJECT MANAGER

Attachments

Attachment 1. Figures Attachment 2. Closure Criteria Determination Worksheet Attachment 3. NM OCD Guidance on Remediation of Soils on Solid Rock Attachment 4. Table 2 – Release Characterization Sampling – Field Screen and Laboratory Data Attachment 5. Sampling Plan

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ATTACHMENT 1

Released to Imaging: 6/24/2021 8:17:17 AM Released to Imaging: 9/30/2022 10:09:16 AM



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ATTACHMENT 2

01

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| Rankin | Ranking Criteria | | | | | | | | |
|---|---------------------|----|----|--|--|--|--|--|--|
| | <50 feet | 20 | | | | | | | |
| Depth to Groundwater | 50 to 99 feet | 10 | 20 | | | | | | |
| | >100 feet | 0 | | | | | | | |
| Wellhead Protection Area, | Yes | 20 | | | | | | | |
| <1,000 feet from a water source, or; <200 feet from private domestic water source. | No | 0 | 0 | | | | | | |
| Distance to Surface | <200 feet | 20 | | | | | | | |
| Distance to Surface | 200 to 1,000 feet | 10 | 0 | | | | | | |
| Water Body | >1,000 feet | 0 | | | | | | | |
| Total Rar | Total Ranking Score | | | | | | | | |

Based on evaluation of the scoring criteria, Thunderbay would have a Total Ranking Score of 20. This ranking is based on the following:

- The depth to the initial groundwater-bearing zone is less than 50 feet at the site.
- The impacted area is greater than 200 feet from a private domestic water source,
- Distance to the nearest surface water body is greater than 1,000 ft.

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ATTACHMENT 3

Received by OCD: 4/29/2021 12:43:42 PM

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Natalie Gordon

| From: | Dhugal Hanton <vertexresourcegroupusa@gmail.com></vertexresourcegroupusa@gmail.com> |
|----------|---|
| Sent: | Tuesday, May 12, 2020 4:30 PM |
| То: | Natalie Gordon |
| Subject: | Fwd: [EXT] Release characterization/delineation question |

----- Forwarded message ------From: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>> Date: Tue, May 12, 2020 at 4:11 PM Subject: RE: [EXT] Release characterization/delineation question To: Dhugal Hanton <<u>vertexresourcegroupusa@gmail.com</u>>, Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>, Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>, <u>rmann@slo.state.nm.us</u> <<u>rmann@slo.state.nm.us</u>>

Dhugal,

Rock Refusal (Remediation Process)

If rock refusal interferes with the remediation process, use a back-hoe/track-hoe to remove the rock. If the rock is immovable and target depth cannot be reached, use a hydrovac to clean the contaminated soil off of the rock surface and outline specific locations and steps taken on the Closure Report.

The OCD likes to see samples taken from the rock to see if the liquids have permeated the rock. This might consist of a 12-18" hole drilled with a rotary drill. If the drill sample doesn't show contaminants, spray the rock with Microblaze or other surfactants that will digest the organics (Get Approval by State/Federal Agency). At that point you've shown the OCD that you've done everything possible to clean up the contaminants.

Hopefully this helps.

Robert J Hamlet

State of New Mexico

Energy, Minerals, and Natural Resources

Oil Conservation Division

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811 S. First St., Artesia NM 88210

(575) 748-1283

Robert.Hamlet@state.nm.us

From: Dhugal Hanton <<u>vertexresourcegroupusa@gmail.com</u>>
Sent: Tuesday, May 12, 2020 2:27 PM
To: Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>; Hamlet, Robert, EMNRD
<<u>Robert.Hamlet@state.nm.us</u>>; Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; <u>rmann@slo.state.nm.us</u>
Subject: [EXT] Release characterization/delineation question

Hello District 2 and SLO reps,

I have a question regarding delineating a release vertically. When we try to vertically delineate a produced water release and hit a solid hardpan/refusal at approximately 1-2 feet below ground surface, are we supposed to try to drill or break through that rock layer? The soil collected and field screened/analyzed from immediately atop the refusal layer still shows chloride levels of greater than 10,000 mg/Kg so within closure criteria for the area, but NOT within reclamation standards of 600 mg/Kg for the off-pad portion.

Breaking through the solid layer opens a conduit for contamination to move deeper into the soil so it seems like a lessthan-great idea. However, fully delineating the release is a necessity.

Please advise the OCD preferred method for handling this type of situation.

Thank you,

Natalie

Natalie Gordon Project Manager

Vertex Resource Group Ltd. 213 S. Mesa Street Carlsbad, NM 88220

P 575.725.5001 ext 709 C 505.506.0040 F

www.vertex.ca

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ATTACHMENT 4

Released to Imaging: 6/24/2021 8:17:17 AM Released to Imaging: 9/30/2022 10:09:16 AM

Client Name: Mack Energy Corporation Site Name: Thunderbay NM OCD Incident Tracking Numbers: NMAP1825441890 Project #: 19E-04217-004 Lab Report: 2005973

| | | Table 2. Characteri | | | | ling Labora | tory Data - | | | | | _ | - |
|------------------------------------|------------|---------------------|-------------------------------------|---|--|-------------|--------------|----------------------------------|--------------------------------|-----------------------------------|--|---------------------------------------|-----------|
| Sample Description Field Screening | | | | ng | Petroleum Hydrocarbons Volatile Extractable | | | | | | | | |
| | | | 1 | | 1.00 | Vol | atile | - | | Extractable | | | Inorganic |
| Sample ID | Depth (ft) | Sample Date | Volatile Organic Compounds (PID) | Extractable Organic Compounds (Petro Flag) | Inorganics (Electroconduct[v ty) | Benzene | BTEX (Total) | Gasoline Range Organics (GRO) | Diesel Range Organics (DRO) | Motor OII Range Organics (MRO) | (GRO + DRO) | Total Petroleum Hydrocarbons (TPH) | Chloride |
| | - | | (ppm) | (ppm) | (ppm) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg |
| S\$20-01 | 0-0.5 | May 19, 2020 | - | - | 114 | × | - | | 3 | 1. 25 | | 1.1.1 | 88 |
| SS20-02 | 0-0.5 | May 19, 2020 | 4 | 141 | <0 | | × . | | | ÷. | | 1.19 | |
| SS20-03 | 0-0.5 | May 19, 2020 | - | - | <0 | - | 1944 - J | | 1 m 1 | | | 141 | <60 |
| SS20-04 | 0-0.5 | May 19, 2020 | | | <0 | - | - | | | | ÷ 1. | 1 . ÷ 1 | <60 |
| SS20-05 | 0-0_5 | May 19, 2020 | - | ~ | 1 | | - | | | 100 | | | 1.50 |
| \$\$20-06 | 0-0.5 | May 19, 2020 | 14- | | <0 | - | - | | - | 5 | - (÷ | 140 H | <61 |
| SS20-07 | 0-0.5 | May 19, 2020 | ÷ | - | <0 | . ÷ | 4 | ÷. | 3 | 10 | * | | - |
| BH20-01 | 0 | May 19, 2020 | | | 1,665 | <0.025 | <0.221 | <4.9 | <9.9 | <49 | <14.8 | <63.8 | 2,300 |
| BH20-01 | 0.5 | May 19, 2020 | | 1.11 | 650 | - | ÷ . | | - | - | | • | 1 |
| BH20-01 | 1 | May 19, 2020 | 1.04 | - 2- | 874 | <0.025 | <0.224 | <5.0 | <9.6 | 95 | <14.6 | 95 | 1,300 |
| BH20-02 | 0 | May 19, 2020 | - | ÷ | 278 | e | 10.19.0.1 | | 3 | 1 | + | | |
| BH20-02 | 0,5 | May 19, 2020 | 1-3-1 | | 1,703 | - | | - | | | 1-9-13 | 1.4 | |
| BH20-02 | 1.25 | May 19, 2020 | | 140 | 1,688 | | - | 4.00 | | | 71 | = | = |
| BH20-03 | 0 | May 19, 2020 | - | 10 | <0 | <0.025 | <0.221 | <4.9 | <9.6 | <48 | <14.5 | <62.5 | <60 |
| BH20-03 | 0.5 | May 19, 2020 | · · · · | | 95 | · · · · · | 1.000 | | | | - 11 Birds | ÷ | |
| BH20-03 | 1 | May 19, 2020 | - | - | 466 | | | - | | + | | [= e = - | |
| BH20-03 | 2 | May 19, 2020 | | 1.1 | 1,098 | ÷ | 1 - 6-21 T | + | ÷ | | 10.4 | 1. | 8 |
| BH20-03 | 3 | May 19, 2020 | | - | 128 | <0 025 | <0 225 | <5.0 | <9.4 | <47 | <14.4 | <61.4 | 210 |
| BH20-04 | 0 | May 19, 2020 | 100.00 | 1000 | 421 | - | | | ÷ | | 1 | | - |
| BH20-04 | 0.5 | May 19, 2020 | | | 1,167 | | - | | * | | ~ | + | |
| BH20-04 | 1 | May 19, 2020 | - 14 - 1 | | 1,645 | + | - | 3 | 0 | 14 | 1.0 | - | |
| BH20-05 | 0 | May 19, 2020 | 1.114 | - | 4,205 | | | 19 | - | | 3 | | |
| BH20-05 | 0.5 | May 19, 2020 | - <u>3</u> | | 1,924 | 3 | | - i | | er a-ret | had in the second s | | |
| BH20-05 | 1 | May 19, 2020 | 1.10 | in en i | 1,405 | 8 | | 100 | 1 | - | 100 | (E) | ñ |
| BH20-06 | 0 | May 19, 2020 | 342 | 4 | 6,877 | | - | ÷ | ÷ | ÷ | | | 9,700 |
| BH20-06 | 05 | May 19, 2020 | - e | | 2,188 | | | | 8 | | 11.76 | - (er | |
| BH20-06 | 1 | May 19, 2020 | | | 1,993 | 1 1 | | 4 | 4 | 4 | 10901 | | 2,900 |

"-" - Not applicable/assessed

Bold and shaded indicates exceedance outside of applied action level

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ATTACHMENT 5

Sampling to Compute a Nonparametric (Distribution-Free) One-Sided Upper Tolerance Limit to Test that a Large Portion of Room Surfaces Does Not Contain Contamination

Summary

This report summarizes the sampling design developed by VSP based on inputs provided by the VSP user. The following table summarizes the sampling design developed by VSP. A figure that shows the sample placement on the map is also provided below.

| SUMMARY OF S | SAMPLING DESIGN |
|--|--|
| Primary Objective of Design | Use a nonparametric (distribution-free) one-sided upper tolerance limit (UTL) to test if the true P th percentile of a population exceeds the action level |
| Required fraction of the population to be less than the action level | 0.955 (P=95.5) |
| Required percent confidence on the decision made using the UTL | 99% |
| Method used to compute the number of samples, <i>n</i> | Hahn and Meeker (1991, page 169) (See equations below) |
| Sample placement method | Simple random point sampling |
| Calculated total number of samples | 101 |
| Number of samples on map ^a | 101 |
| Number of selected sample areas that are not rooms | 1 |
| Total sampling surface area ^b | 50191.79 ft ² |
| Total cost of sampling ^c | \$11,807.00 |

^a This number may differ from the calculated number because of 1) grid edge effects, 2) adding judgment samples, or 3) selecting or unselecting sample areas (rooms).

^b This is the total surface area of all selected rooms and other selected sample areas on the map of the site.

^c Including measurement analyses and fixed overhead costs. See the Cost of Sampling section for an explanation of the costs presented here.



Floor Plan Map

Primary Sampling Objective

The primary objective of this sampling effort is to make a decision whether an unacceptably large portion (fraction) of a

Page 17 of 23

specified surface area (target population) is contaminated above a specified action level (AL) or is otherwise defective. It is presumed that suitable actions have been identified to be implemented for either way the decision may go.

Population Parameter of Interest

The population parameter of interest is the true P^{th} percentile of the population of contaminant concentrations, where 0 < P < 100, in this case, the 95.5th percentile (P = 95.5). The true P^{th} percentile is the value above which (100 - P)% of the population lies and below which $P^{\%}$ of the population lies. The objective is to reject the null hypothesis if the true P^{th} percentile exceeds the specified action level (AL). But, the true P^{th} percentile will never be known with 100% confidence because all possible measurements from the population cannot be obtained. Hence the decision whether to reject the null hypothesis is made using the computed upper tolerance limit (UTL) for the P^{th} percentile, that is, by computing the upper $100(1-\alpha)$ % confidence limit on the P^{th} percentile (see Decision Rule below). For the current design α is 0.01, which means that the decision will be made using the computed UTL for the 99% confidence limit on the 95.5th percentile.

Hypothesis Being Tested

The null hypothesis (baseline assumption) is as follows:

H_a: The true P^{th} percentile \leq AL

or equivalently,

 H_{o} : Less than *P*% of the population < AL

The H_o is rejected if UTL < AL, in which case the alternative hypothesis (H_a) is accepted as being true, where:

H_a: More than P% of the population < AL

Sampling Design Options

VSP offers many options to determine the locations at which measurements are made or samples are collected and subsequently measured. For this design, simple random point sampling was chosen. Locating the sample points randomly provides data that are separated by varying distances, providing good information about the spatial structure of the potential contamination. Knowledge of the spatial structure is useful for geostatistical analysis. However, it may not ensure that all portions of the site are equally represented.

Decision Rule and Number of Samples, n

The null hypothesis is rejected and the alternative hypothesis is accepted if the nonparametric (distribution-free) UTL for the P^{th} percentile is less than the specified action level (AL). The nonparametric UTL is simply the maximum of the *n* measurements obtained from the population of interest, where *n* is computed using the following equation

$$n = \frac{\ln(\alpha)}{\ln(P/100)}$$

(from Hahn and Meeker 1991, page 169). These authors discuss the statistical meaning, use, and computation of nonparametric tolerance limits and the number of samples required (pages 91, 92,169, and 326).

The following table displays the values of the input parameters used for this design/

| Parameter | Value |
|-------------------------|-----------|
| Input | - |
| Р | 95.5 |
| α | 0.01 (1%) |
| Confidence $(1-\alpha)$ | 99% |
| Output | |
| n | 101 |

Statistical Assumptions

- 1. Representative measurements have been obtained from a defined target population using simple random sampling or a systematic grid pattern that has a randomly selected starting location.
- 2. The *n* measurements are statistically independent, i.e., there is no spatial correlation (no spatial patterns) of

contaminant levels throughout the target population.

3. The maximum of the *n* measurements is not an invalid value, i.e., it is not a mistake or an unacceptably uncertain value due to faulty sample handling, transport, treatment, storage, or measurement.

Sensitivity Analysis

The sensitivity of the calculation of number of samples was explored by varying the required percent of the population to be less than the action level. and confidence level $(1-\alpha)$ (%). The following table shows the results of this analysis.

| | Ν | umber o | of Samp | les | |
|------|-------|---------|---------|-------|-------|
| | CL=99 | CL=97 | CL=95 | CL=93 | CL=91 |
| P=91 | 49 | 38 | 32 | 29 | 26 |
| P=95 | 90 | 69 | 59 | 52 | 47 |
| P=99 | 459 | 349 | 299 | 265 | 240 |

P = Required Percent of the Population to be Less Than the Action Level. CL = Confidence Level $(1-\alpha)$ (%)

Cost of Sampling

The total cost of the completed sampling program depends on several cost inputs, some of which are fixed, and others that are based on the number of samples collected and measured. Based on the numbers of samples determined above, the estimated total cost of sampling and analysis at this site is \$11,807.00, which averages out to a per sample cost of \$116.90. The following table summarizes the inputs and resulting cost estimates.

| COSTI | NFORMATION | l | |
|-------------------------------------|--------------|------------|-------------|
| Cost Details | Per Analysis | Per Sample | 101 Samples |
| Field collection costs | | \$7.00 | \$707.00 |
| Analytical costs (Analyte 1) | \$100.00 | \$100.00 | \$10,100.00 |
| Sum of Field & Analytical costs | | \$107.00 | \$10,807.00 |
| Fixed planning and validation costs | | | \$1,000.00 |
| Total cost | | | \$11,807.00 |

Recommended Data Analysis Activities

Post data collection activities generally follow those outlined in EPA's Guidance for Data Quality Assessment (EPA, 2000). The data analysts should become familiar with the context of the problem and goals for data collection and assessment. The *n* data should be verified and validated before being used to test the null hypothesis. The VSP user should enter the validated and verified *n* data values into the VSP dialog box and click on appropriate tabs to obtain the following statistical summaries of the data. If there is strong evidence that the *n* data are normally distributed, the VSP user may want to use VSP to determine the number of samples, *n*, required to compute the normal distribution UTL and then use that UTL (rather than the nonparametric UTL) to test the null hypothesis.

Summary statistics: *n*, minimum and maximum of the *n* measurements, range of the *n* data, mean, median, standard deviation, variance, skewness, percentiles, and the interquartile range

Statistical Tests of Normality Assumption: Shapiro-Wilk test (if $n \le 50$) (Gilbert 1987), Lilliefors test (if n > 50) (EPA 2000).

Graphical Displays of the Data: Histogram, box-and-whisker plots and quantile-quantile (probability) plots (EPA 2000).

References

EPA. 2000. *Guidance for Data Quality Assessment, Practical Methods for Data Analysis*, EPA QA/G-9, EPA/600/R-96/084, July 2000, Office of Environmental Information, U.S. Environmental Protection Agency.

Gilbert, R.O. 1987. Statistical Methods for Environmental Pollution Monitoring, Wiley & Sons, New York, NY

Hahn, G.J. and W.Q. Meeker. 1991. Statistical Intervals. Wiley & Sons, Inc, New York, NY.

Α

This report was automatically produced* by Visual Sample Plan (VSP) software version 7.12a.

This design was last modified 6/23/2020 2:47:25 PM.

Software and documentation available at http://vsp.pnnl.gov

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* - The report contents may have been modified or reformatted by end-user of software.

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| Form C-141 | State of New Mexico |
|------------|---------------------------|
| Page 3 | Oil Conservation Division |

| Incident ID | NMAP1825441890 |
|----------------|----------------|
| District RP | 2RP-4955 |
| Facility ID | |
| Application ID | pMAP1824763569 |

Site Assessment/Characterization

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? | (ft bgs) |
|--|------------|
| Did this release impact groundwater or surface water? | Yes X No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | 🗌 Yes 🗶 No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | 🗌 Yes 🗵 No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | 🗌 Yes 🗙 No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | 🗌 Yes 🗙 No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | Yes X No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | Yes X No |
| Are the lateral extents of the release within 300 feet of a wetland? | 🗌 Yes 🗶 No |
| Are the lateral extents of the release overlying a subsurface mine? | 🗋 Yes 🗴 No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | Yes X No |
| Are the lateral extents of the release within a 100-year floodplain? | Yes X No |
| Did the release impact areas not on an exploration, development, production, or storage site? | X Yes 🗌 No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

- X Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- I Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- NA Boring or excavation logs
- Photographs including date and GIS information
- X Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

| Pas | no | 2 | 1 | \overline{a} | f | 2 | 1 |
|-------|----|---|---|----------------|---|------------|---|
| - a i | 20 | 4 | 1 | U | | <i>L</i> . | Л |

| Received by OCD: 4/29/20 | 21 12:43:42 PM | | Page 21 |
|--------------------------|---------------------------|----------------|----------------|
| Form C-141 | State of New Mexico | Incident ID | NMAP1825441890 |
| Page 4 | Oil Conservation Division | District RP | 2RP-4955 |
| | | Facility ID | |
| | | Application ID | pMAP1824763569 |

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: Matt Buckles Title: Project Manager

| Signature: 118 | yærer | Date: | 8-7-2020 |
|----------------|---------------------|------------|--------------|
| email: | mattbuckles@mec.com | Telephone: | 575-748-1288 |
| OCD Only | | | |
| Received by: | | Date: | |

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| Form C-141 | State of New Mexico |
|------------|---------------------------|
| Page 5 | Oil Conservation Division |

| Incident ID | NMAP1825441890 |
|----------------|----------------|
| District RP | 2RP-4955 |
| Facility ID | |
| Application ID | pMAP1824763569 |

Remediation Plan

| X Detailed description of proposed remediation tech | hnique |
|--|---|
| X Scaled sitemap with GPS coordinates showing de | |
| Estimated volume of material to be remediated | |
| Closure criteria is to Table 1 specifications subjective criteria is to Table 1 specifications (rate if removed) | ct to 19.15.29.12(C)(4) NMAC liation plan timeline is more than 90 days OCD approval is required) |
| roposed schedule for remediation (note if remed | nation plan timeline is more than 90 days OCD approval is required) |
| Deferral Requests Only: Each of the following iter | ns must be confirmed as part of any request for deferral of remediation. |
| | |
| | er or around production equipment where remediation could cause a major facility |
| deconstruction. | |
| Extents of contamination must be fully delineated | 1. |
| _ | |
| _ Contamination does not cause an imminent risk to | o human health, the environment, or groundwater. |
| | |
| hereby certify that the information given above is tr | |
| | ue and complete to the best of my knowledge and understand that pursuant to OCD |
| ules and regulations all operators are required to repo | ort and/or file certain release notifications and perform corrective actions for releases |
| ules and regulations all operators are required to repo which may endanger public health or the environmen | ort and/or file certain release notifications and perform corrective actions for releases t. The acceptance of a C-141 report by the OCD does not relieve the operator of |
| ules and regulations all operators are required to repo which may endanger public health or the environmen iability should their operations have failed to adequa | ort and/or file certain release notifications and perform corrective actions for releases t. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, |
| ules and regulations all operators are required to repo which may endanger public health or the environmen iability should their operations have failed to adequa surface water, human health or the environment. In a | ort and/or file certain release notifications and perform corrective actions for releases t. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, iddition, OCD acceptance of a C-141 report does not relieve the operator of |
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| ules and regulations all operators are required to report which may endanger public health or the environment iability should their operations have failed to adequate urface water, human health or the environment. In a esponsibility for compliance with any other federal, service Printed Name: <u>Matt Buckles</u> | ort and/or file certain release notifications and perform corrective actions for releases it. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, iddition, OCD acceptance of a C-141 report does not relieve the operator of state, or local laws and/or regulations. Title: Project Manager |
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| ules and regulations all operators are required to report which may endanger public health or the environment iability should their operations have failed to adequa urface water, human health or the environment. In a esponsibility for compliance with any other federal, se Printed Name: <u>Matt Buckles</u> Signature: <u>Matt Buckles</u> | ort and/or file certain release notifications and perform corrective actions for releases t. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, ddition, OCD acceptance of a C-141 report does not relieve the operator of state, or local laws and/or regulations. Title: Project Manager Date: 8-7-2020 |
| ules and regulations all operators are required to repowhich may endanger public health or the environment iability should their operations have failed to adequa surface water, human health or the environment. In a responsibility for compliance with any other federal, service Name: Printed Name: Matt Buckles Signature: Matt Buckles | ort and/or file certain release notifications and perform corrective actions for releases t. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, ddition, OCD acceptance of a C-141 report does not relieve the operator of state, or local laws and/or regulations. Title: Project Manager Date: 8-7-2020 |
| Pules and regulations all operators are required to report which may endanger public health or the environment iability should their operations have failed to adequate surface water, human health or the environment. In a responsibility for compliance with any other federal, set Printed Name: Matt Buckles Printed Name: Matt Buckles Signature: MattBuckles Signature: MattBuckles DCD Only | ort and/or file certain release notifications and perform corrective actions for releases f. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, iddition, OCD acceptance of a C-141 report does not relieve the operator of state, or local laws and/or regulations. |
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| Printed Name: Matt Buckles Signature: Mattbuckles@mec.com | ort and/or file certain release notifications and perform corrective actions for releases t. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, iddition, OCD acceptance of a C-141 report does not relieve the operator of state, or local laws and/or regulations. |
| ules and regulations all operators are required to report which may endanger public health or the environment iability should their operations have failed to adequa surface water, human health or the environment. In a esponsibility for compliance with any other federal, see Printed Name: | ort and/or file certain release notifications and perform corrective actions for releases f. The acceptance of a C-141 report by the OCD does not relieve the operator of tely investigate and remediate contamination that pose a threat to groundwater, iddition, OCD acceptance of a C-141 report does not relieve the operator of state, or local laws and/or regulations. |

 District I

 1625 N, French Dr., Hobbs, NM 88240

 Phone:(575) 393-6161 Fax:(575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone:(575) 748-1283 Fax:(575) 748-9720

 District III

 1000 Rio Brazos Rd., Aztec, NM 87410

 Phone:(505) 334-6178 Fax:(505) 334-6170

 District IV

 1220 S, SI Francis Dr., Santa Fe, NM 87505

 Phone:(505) 476-3470 Fax:(505) 476-3462

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

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CONDITIONS

Action 26346

CONDITIONS

| Operator: | OGRID: |
|-----------------------|---|
| MACK ENERGY CORP | 13837 |
| | Action Number: |
| Artesia, NM 882110960 | 26346 |
| | Aclion Type: |
| | [C-141] Release Corrective Action (C-141) |

CONDITIONS

| | | 10 |
|----------|---|-----------|
| Created | Condition | Condition |
| By | | Date |
| chensley | Samples are representative of more than 200 square feet. Please collect more confirmation samples, representing no more than 200 square feet, unless MACK chooses to provide a sampling | 6/24/2021 |
| | plan for approval prior to conduction additional sampling. | |
| chensley | The OCD request an attempt be made in the center of the spill area. A bore sample be taken to prove contaminates have not penetrated past the rock layer. | 6/24/2021 |

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THUNDERBAY FED COM 1H IMPACT AREA MAP

Legend

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THUNDERBAY IMPACT AREA 44,701 SQ. FT.

FINDERBAY RELEASE

THUNDERBAY RELEASE

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SP2

W

SP6

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SP1

SP3

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SP5 0

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SP15

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Sp10

OSP9

SP12

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SP22

SP14 O

OSP13

SP17

SP23 OP24 O

SP18

Legend

SP20 O

SP19

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- HORIZONTAL SAMPLE POINTS
- THUNDERBAY IMPACT AREA 44,701 SQ. FT.

100 ft

VERTICAL SAMPLE POINTS

Released to Imaging: 9/30/2022 10:09:16 AM

| Company Name: | | | | | Location Name: | | THUNDER BAY FED COM 1 | | | Release Date: | 8/20/2018 |
|---------------|----------|---------|-----|--------|----------------|-------|-----------------------|-------|-------|---------------|-----------|
| DELINEAT | ION SAMP | LE DATA | | | | | | | | | |
| SP ID | Depth | Titr | PID | L-BTEX | L-GRO | L-DRO | L-ORO | L-TPH | L-CHL | Soil | Notes |
| SP1 | SURF | 40 | | ND | ND | ND | ND | ND | ND | | |
| | 2 | 640 | | | | | | | | | |
| | 4 | 800 | | | | | | | | | |
| | 6 | 680 | | ND | ND | ND | ND | ND | 696 | | |
| | 8 | 400 | | | | | | | | | |
| | 10 | 300 | | ND | ND | ND | ND | ND | 270 | | |
| | | | | | | | | | | | |
| SP2 | SURF | 60 | | ND | ND | ND | ND | ND | 50.1 | | |
| | 2 | 1000 | | | | | | | | | |
| | 4 | 400 | | | | | | | | | |
| | 6 | 400 | | ND | ND | ND | ND | ND | 380 | | |
| | | | | | | | | | | | |
| SP3 | SURF | 80 | | ND | ND | ND | ND | ND | 65.4 | | |
| | 1 | 1200 | | | | | | | | | |
| | 2 | 800 | | ND | ND | ND | ND | ND | 732 | | |
| | 4 | 400 | | | | | | | | | |
| | 6 | 40 | | ND | ND | ND | ND | ND | ND | | |
| | - | | - | _ | - | | | - | | | |
| SP4 | SURF | 20 | | ND | ND | ND | ND | ND | ND | | |
| | 2 | 1600 | | | | | | | | | |
| | 4 | 460 | | | | | | | | | |
| | 6 | 400 | | ND | ND | ND | ND | ND | 377 | | |
| | | | | | | | | | | | |
| SP5 | SURF | 1600 | | ND | ND | ND | ND | ND | 1630 | | |
| | 2 | 1440 | | | | | | | | | |
| | 4 | 240 | | | | | | | | | |
| | 6 | 200 | | ND | ND | ND | ND | ND | 193 | | |
| | | | 1 | | | | | | | | |
| SP6 | SURF | 440 | | ND | ND | ND | ND | ND | 428 | | |
| | 2 | 1200 | | | | | | | | | |
| | 4 | 1360 | | | | | | | | | |

| Page | 72 | of 508 |
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| | | |

| | 6 | 1120 | | | | | | | | | |
|------|------|------|--|----|----|----|----|----|------|--|--|
| | 8 | 320 | | | | | | | | | |
| | 10 | 200 | | ND | ND | ND | ND | ND | 204 | | |
| | | | | | | | | | | | |
| SP7 | SURF | 40 | | ND | ND | ND | ND | ND | 68.9 | | |
| | 2 | 840 | | | | | | | | | |
| | 4 | 400 | | | | | | | | | |
| | 6 | 300 | | ND | ND | ND | ND | ND | 234 | | |
| | | | | | | | | | | | |
| SP8 | SURF | 20 | | ND | ND | ND | ND | ND | ND | | |
| | 2 | 800 | | | | | | | | | |
| | 4 | 160 | | | | | | | | | |
| | 6 | 100 | | ND | ND | ND | ND | ND | 104 | | |
| | | | | | | | | | | | |
| SP9 | SURF | 480 | | ND | ND | ND | ND | ND | 425 | | |
| | 2 | 400 | | ND | ND | ND | ND | ND | 352 | | |
| | 4 | 600 | | | | | | | | | |
| | 6 | 240 | | | | | | | | | |
| | 8 | 40 | | ND | ND | ND | ND | ND | ND | | |
| | • | | | | | | | | | | |
| SP10 | SURF | 80 | | ND | ND | ND | ND | ND | ND | | |
| | 2 | 1600 | | | | | | | | | |
| | 4 | 1080 | | | | | | | | | |
| | 6 | 620 | | | | | | | | | |
| | 8 | 460 | | | | | | | | | |
| | 10 | 460 | | ND | ND | ND | ND | ND | 434 | | |
| | | | | | | | | | | | |
| SP11 | SURF | 280 | | ND | ND | ND | ND | ND | 289 | | |
| | 2 | 1040 | | | | | | | | | |
| | 4 | 320 | | | | | | | | | |
| | 6 | 240 | | ND | ND | ND | ND | ND | 227 | | |
| | | | | | | | | | | | |
| SP12 | SURF | 40 | | ND | ND | ND | ND | ND | ND | | |
| | 2 | 280 | | | | | | | | | |
| | | | | | | | | | 100 | |
|------|------|------|---|----|----|----|----|----|------|--|
| | 4 | 240 | | ND | ND | ND | ND | ND | 138 | |
| | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | |
| SP13 | SURF | 500 | | ND | ND | ND | ND | ND | 514 | |
| | 2 | 2080 | | | | | | | | |
| | 4 | 2400 | | | | | | | | |
| | 6 | 400 | | | | | | | | |
| | 8 | 320 | | ND | ND | ND | ND | ND | 346 | |
| | | | | - | | | | | | |
| SP14 | SURF | 100 | | ND | ND | ND | ND | ND | ND | |
| | 2 | 100 | | | | | | | | |
| | 4 | 100 | | ND | ND | ND | ND | ND | 94.8 | |
| | _ | - | - | - | - | - | - | _ | - | |
| SP15 | SURF | 20 | | ND | ND | ND | ND | ND | 28.1 | |
| | 2 | 600 | | | | | | | | |
| | 4 | 500 | | | | | | | | |
| | 6 | 480 | | ND | ND | ND | ND | ND | 489 | |
| | | | | | | | | | | |
| SP16 | SURF | 20 | | ND | ND | ND | ND | ND | ND | |
| | 2 | 1600 | | | | | | | | |
| | 4 | 720 | | | | | | | | |
| | 6 | 280 | | | | | | | | |
| | 8 | 240 | | ND | ND | ND | ND | ND | 265 | |
| | | | | | | | | | | |
| SP17 | SURF | 200 | | ND | ND | ND | ND | ND | 163 | |
| | 2 | 640 | | | | | | | | |
| | 4 | 400 | | | | | | | | |
| | 6 | 300 | | ND | ND | ND | ND | ND | 288 | |
| | | | | | | | | | | |
| SP18 | SURF | 1880 | | ND | ND | ND | ND | ND | 1920 | |
| | 2 | 400 | | | | | | | | |
| | 4 | 120 | | ND | ND | ND | ND | ND | 101 | |
| | | | | | | | | | | |
| SP19 | SURF | 20 | | ND | ND | ND | ND | ND | ND | |
| | 2 | 200 | | | | | | | | |
| | | - | | - | | - | | | | |

| Page 74 of 50 | Page | 74 | 0 | 15 | U | ð |
|---------------|------|----|---|----|---|---|
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| | 4 | 100 | | ND | ND | ND | ND | ND | 91.9 | | |
|-------|-------|------|-----|--------|-------|-------|-------|-------|-------|------|-------|
| | | | | | | | | | | | |
| SP20 | SURF | 40 | | ND | ND | ND | ND | ND | ND | | |
| | 2 | 620 | | | | | | | | | |
| | 4 | 300 | | | | | | | | | |
| | 6 | 260 | | ND | ND | 25.4 | ND | 25.4 | 279 | | |
| | | | | | | | | | | | |
| SP21 | SURF | 260 | | ND | ND | ND | ND | ND | 232 | | |
| | 2 | 680 | | | | | | | | | |
| | 4 | 160 | | | | | | | | | |
| | 6 | 40 | | ND | ND | ND | ND | ND | 27.2 | | |
| | | | | | | | | | | | |
| SP22 | SURF | 60 | | ND | ND | ND | ND | ND | 58.4 | | |
| | 2 | 240 | | | | | | | | | |
| | 4 | 140 | | ND | ND | ND | ND | ND | 125 | | |
| | | | | | | | | | | | |
| SP23 | SURF | 140 | | ND | ND | ND | ND | ND | 128 | | |
| | 2 | 140 | | | | | | | | | |
| | 4 | 140 | | ND | ND | ND | ND | ND | 144 | | |
| | | | | | | | | | | | |
| SP24 | SURF | 1800 | | ND | ND | ND | ND | ND | 1630 | | |
| | 2 | 320 | | | | | | | | | |
| | 4 | 160 | | ND | ND | ND | ND | ND | 146 | | |
| | | | | | | | | | | | |
| SP ID | Depth | Titr | PID | L-BTEX | L-GRO | L-DRO | L-ORO | L-TPH | L-CHL | Soil | Notes |
| SW1 | SURF | 160 | | ND | ND | ND | ND | ND | ND | | |
| | 2 | 160 | | ND | ND | ND | ND | ND | ND | | |
| | 4 | 80 | | | | | | | | | |
| | | | | | | | | | | | |
| SW2 | SURF | 140 | | ND | ND | ND | ND | ND | 122 | | |
| | 2 | 560 | | | | | | | | | |
| | 4 | 320 | | | | | | | | | |
| | 6 | 200 | | ND | ND | ND | ND | ND | 210 | | |
| | | | | | | | | | | | |

| SW3 | SURF | 60 | ND | ND | ND | ND | ND | 66.3 | |
|------|------|-----|--------|----|----|----|----|------|--|
| | 1 | 60 | | | | | | | |
| | 2 | 60 | ND | ND | ND | ND | ND | 60.2 | |
| | | | | | | | | | |
| SW4 | SURF | 80 | ND | ND | ND | ND | ND | ND | |
| | | 80 | | | | | | | |
| | 2 | 80 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW5 | SURF | 80 | ND | ND | ND | ND | ND | ND | |
| | | 80 | | | | | | | |
| | 2 | 80 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW6 | SURF | 60 | ND | ND | ND | ND | ND | ND | |
| | | 60 | | | | | | | |
| | 2 | 60 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW7 | SURF | 140 | ND | ND | ND | ND | ND | 110 | |
| | | 100 | | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW8 | SURF | 160 | ND | ND | ND | ND | ND | ND | |
| | | 100 | | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW9 | SURF | 200 | ND | ND | ND | ND | ND | 158 | |
| | | 60 | | | | | | | |
| | 2 | 40 | ND | ND | ND | ND | ND | 24.4 | |
| | | | | | | | | | |
| SW10 | SURF | 40 | ND | ND | ND | ND | ND | ND | |
| | | 40 | | | | | | | |
| | 2 | 40 | ND | ND | ND | ND | ND | 31.4 | |
| | | | | | | | | | |
| SW11 | SURF | 20 | ND | ND | ND | ND | ND | ND | |
| | 1 | 20 | | | | | | | |

| | 2 | 20 | ND | ND | ND | ND | ND | ND | |
|------|------|------|----|----|----|----|----|------|--|
| | | | | | | | | | |
| SW12 | SURF | 60 | ND | ND | ND | ND | ND | ND | |
| | 1 | 40 | | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW13 | SURF | 1400 | ND | ND | ND | ND | ND | 1350 | |
| | 2 | 880 | | | | | | | |
| | 4 | 480 | | | | | | | |
| | 6 | 480 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW14 | SURF | 60 | ND | ND | ND | ND | ND | 49.1 | |
| | 1 | 40 | | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | 20.9 | |
| | | | | | | | | | |
| SW15 | SURF | 20 | ND | ND | ND | ND | ND | ND | |
| | 1 | 20 | | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW16 | SURF | 540 | ND | ND | ND | ND | ND | 515 | |
| | 2 | 640 | | | | | | | |
| | 4 | 880 | | | | | | | |
| | 6 | 480 | | | | | | | |
| | 8 | 300 | ND | ND | ND | ND | ND | 308 | |
| | | | | | | | | | |
| SW17 | SURF | 20 | ND | ND | ND | ND | ND | ND | |
| | 1 | 20 | | | | | | | |
| | 2 | 20 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW18 | SURF | 160 | ND | ND | ND | ND | ND | ND | |
| | 1 | 160 | | | | | | | |
| | 2 | 160 | ND | ND | ND | ND | ND | ND | |
| | | | | | | | | | |
| SW19 | SURF | 240 | ND | ND | ND | ND | ND | ND | |

| | 1 | 240 | | | | | | | |
|------|------|-----|----|----|----|----|----|------|--|
| | 2 | 240 | ND | ND | ND | ND | ND | 22.3 | |
| | | | | | | | | | |
| SW20 | SURF | 160 | ND | ND | ND | ND | ND | ND | |
| | 1 | 160 | | | | | | | |
| | 2 | 160 | ND | ND | ND | ND | ND | 32.7 | |
| | | | | | | | | | |
| SW21 | SURF | 160 | ND | ND | ND | ND | ND | ND | |
| | 1 | 180 | | | | | | | |
| | 2 | 160 | ND | ND | ND | ND | ND | 52.4 | |
| | | | | | | | | | |
| SW22 | SURF | 160 | ND | ND | ND | ND | ND | 27.7 | |
| | 1 | 120 | | | | | | | |
| | 2 | 80 | ND | ND | ND | ND | ND | 65.2 | |
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DELINEATION GPS DATA MACK ENERGY THUNDERBAY FED COM #1H

| SAMPLE ID | LAT | LONG |
|-----------|-----------|-------------|
| SP1 | 33.002362 | -104.056956 |
| SP2 | 33.002414 | -104.05684 |
| SP3 | 33.002230 | -104.056898 |
| SP4 | 33.002302 | -104.056769 |
| SP5 | 33.002371 | -104.056651 |
| SP6 | 33.002116 | -104.056803 |
| SP7 | 33.002197 | -104.056666 |
| SP8 | 33.002272 | -104.056532 |
| SP9 | 33.002341 | -104.056397 |
| SP10 | 33.001995 | -104.056702 |
| SP11 | 33.002063 | -104.056555 |
| SP12 | 33.00213 | -104.056436 |
| SP13 | 33.002197 | -104.056309 |
| SP14 | 33.002289 | -104.056227 |
| SP15 | 33.001888 | -104.05661 |
| SP16 | 33.001947 | -104.056484 |
| SP17 | 33.002018 | -104.05636 |
| SP18 | 33.002093 | -104.056229 |
| SP19 | 33.002164 | -104.056117 |
| SP20 | 33.002224 | -104.056018 |
| SP21 | 33.00181 | -104.05654 |
| SP22 | 33.00186 | -104.056435 |
| SP23 | 33.001907 | -104.056329 |
| SP24 | 33.001942 | -104.056225 |
| SW1 | 33.001754 | -104.056577 |
| SW2 | 33.001908 | -104.05666 |
| SW3 | 33.002037 | -104.056775 |
| SW4 | 33.002144 | -104.05688 |
| SW5 | 33.002264 | -104.05698 |
| SW6 | 33.002369 | -104.057021 |
| SW7 | 33.00243 | -104.056874 |
| SW8 | 33.002467 | -104.05676 |
| SW9 | 33.002416 | -104.056631 |
| SW10 | 33.002373 | -104.056482 |
| SW11 | 33.002375 | -104.056325 |
| SW12 | 33.002366 | -104.056209 |
| SW13 | 33.002323 | -104.056096 |
| SW14 | 33.002252 | -104.056005 |
| SW15 | 33.002155 | -104.056028 |
| SW16 | 33.002103 | -104.056108 |
| SW17 | 33.002055 | -104.05619 |
| SW18 | 33.001992 | -104.056225 |

| SW19 | 33.001909 | -104.056196 |
|------|-----------|-------------|
| SW20 | 33.001874 | -104.056311 |
| SW21 | 33.001832 | -104.056409 |
| SW22 | 33.001787 | -104.056495 |
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| | | | | | | Tracking: | Importance: | Subject: | To: | Sent: | From: |
|------------------------|---|----------------------|-----------------------|-----------------------|-------------------------|-----------|-------------|--|--|-----------------------------------|-----------------|
| Dakoatah Montanez | mattbuckles@mec.com dakoatah@energystaffingllc.com | Hensley, Chad, EMNRD | Hamlet, Robert, EMNRD | Bratcher, Mike, EMNRD | ocdonline, emnrd, EMNRD | Recipient | High | RE: MACK ENERGY CORP - COMPOSITE SAMPLING NOTIFICATION - THUNDERBAY FED COM 1H | ocdonline, emnrd, EMNRD; Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Hensley, Chad, EMNRD mattbuckles@mec.com: dakoatah@energystaffingllc.com | Wednesday, March 2, 2022 11:41 AM | Natalie Gladden |
| Read: 3/7/2022 4:45 PM | | | | | | Read | | -Ication - Thunderbay Fed Com 1H | et, Robert, EMNRD; Hensley, Chad, EMNRD | | |

All,

composite sampling tomorrow at this site. The below 48-hour notification was sent on 2/24/22. ESS would like to request a variance for the composite sampling protocol from 200 sq. ft. to 500 sq. ft. The site measures 45,735 sq. ft. We will begin the

Natalie Gladden

Director of Environmental and Regulatory Services Energy Staffing Services, LLC. 2724 NW County Road

2724 NW County Ka Hobbs, NM 88240 Cell: 575-390-6397 Office: 575-393-904

Office: 575-393-9048 Email: natalie@energystaffinglle.com



Page 81 of 508



From: Natalie Gladden

Sent: Thursday, February 24, 2022 5:15 PM <Robert.Hamlet@state.nm.us>; Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us> To: ocdonline, emnrd, EMNRD <EMNRD.OCDOnline@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD

Cc: mattbuckles@mec.com; dakoatah@energystaffingllc.com; Eddie Gaytan <eddie@energystaffingllc.com>

Subject: MACK ENERGY CORP - COMPOSITE SAMPLING NOTIFICATION - THUNDERBAY FED COM 1H Importance: High

All,

Please use this email for the 48-hour composite sampling event notification. The release information is below:

Thunderbay Fed Com #1H API: 30-005-64308 Incident ID: NMAP1825441890 District RP: 2RP-4955 DOR: 8/20/2018

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Natalie Gladden

Director of Environmental and Regulatory Services Energy Staffing Services, LLC. 2724 NW County Road Hobbs, NM 88240 Cell: 575-390-6397

Email: natalie@energystaffingllc.com

Office: 575-393-9048

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Page 82 of 508



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Released to Imaging: 9/30/2022 10:09:16 AM

| From: | Matt Buckles <mattbuckles@mec.com></mattbuckles@mec.com> |
|--------------|---|
| Sent: | Monday, March 7, 2022 10:32 AM |
| To: | rflorez@blm.gov; Davis, Harley |
| C | Natalie Gladden |
| Subject: | FW: [EXTERNAL] RE: MACK ENERGY CORP - COMPOSITE SAMPLING NOTIFICATION - THUNDERBAY FED COM 1H |
| Attachments: | FW: Unauthorized Release Notice |

Ricky and Harley,

up to date. Let me know if you have any questions or concerns. We are working on completing reclamation on the Thunderbay Release (NMAP1825441890), (33.00191, -104.0561) from 08/2018, just wanted to keep you guys

Thanks, Matt Buckles Mack Energy 575-748-1288

From: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>

Sent: Wednesday, March 02, 2022 2:45 PM

To: Natalie Gladden <natalie@energystaffingllc.com>; ocdonline, emnrd, EMNRD <EMNRD.OCDOnline@state.nm.us>; Bratcher, Mike, EMNRD

<mike.bratcher@state.nm.us>; Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>

Cc: Matt Buckles <mattbuckles@mec.com>; Dakoatah Montanez <dakoatah@energystaffingllc.com>

Subject: RE: [EXTERNAL] RE: MACK ENERGY CORP - COMPOSITE SAMPLING NOTIFICATION - THUNDERBAY FED COM 1H

EXTERNAL EMAIL - Verify the sender and use caution before opening attachments or clicking links

Natalie,

analysis. If clean, layer clean rock with microbial strains to digest organics and hydrocarbons. Back-fill with clean material. This will ensure the release is 500 ft2 is approved. Please include a copy of this variance approval in the remedial and/or closure report to ensure the variance is documented in the project Chad Hensley is the reviewer on this incident, but is gone most of this week. Being the release measures 45,735 sq. ft., the variance for confirmation samples of vertically delineated file. If rock refusal is encountered, use a hydrovac to clean contaminated soil off rock. Use rotary drill to drill 18"-24" hole into the rock, pull sample and do lab

Regards,



EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210

Environmental Bureau

Robert Hamlet

Environmental Specialist - Advanced

Sent: Wednesday, March 2, 2022 11:41 AM From: Natalie Gladden <<u>natalie@energystaffingllc.com</u>> <<u>Robert.Hamlet@state.nm.us</u>>; Hensley, Chad, EMNRD <<u>Chad.Hensley@state.nm.us</u>> To: ocdonline, emnrd, EMNRD < EMNRD.OCDOnline@state.nm.us>; Bratcher, Mike, EMNRD < mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD

Cc: mattbuckles@mec.com; Dakoatah Montanez <<u>dakoatah@energystaffingllc.com</u>>

Subject: [EXTERNAL] RE: MACK ENERGY CORP - COMPOSITE SAMPLING NOTIFICATION - THUNDERBAY FED COM 1H Importance: High

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments

AII,

composite sampling tomorrow at this site. The below 48-hour notification was sent on 2/24/22 ESS would like to request a variance for the composite sampling protocol from 200 sq. ft. to 500 sq. ft. The site measures 45,735 sq. ft. We will begin the

Natalie Gladden

Director of Environmental and Regulatory Services Energy Staffing Services, LLC. 2724 NW County Road Hobbs, NM 88240

Cell: 575-390-6397



From: Natalie Gladden

<<u>Robert.Hamlet@state.nm.us</u>>; Hensley, Chad, EMNRD <<u>Chad.Hensley@state.nm.us</u>> Sent: Thursday, February 24, 2022 5:15 PM Cc: mattbuckles@mec.com; dakoatah@energystaffingllc.com; Eddie Gaytan <eddie@energystaffingllc.com> To: ocdonline, emnrd, EMNRD < EMNRD.OCDOnline@state.nm.us>; Bratcher, Mike, EMNRD < mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD

Subject: MACK ENERGY CORP - COMPOSITE SAMPLING NOTIFICATION - THUNDERBAY FED COM 1H Importance: High

All,

Please use this email for the 48-hour composite sampling event notification. The release information is below:

Thunderbay Fed Com #1H API: 30-005-64308 Incident ID: NMAP1825441890 District RP: 2RP-4955 DOR: 8/20/2018

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Natalie Gladden

Director of Environmental and Regulatory Services Energy Staffing Services, LLC. 2724 NW County Road Hobbs, NM 88240 Cell: 575-390-6397

Released to Imaging: 9/30/2022 10:09:16 AM

Office: 575-393-9048

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Released to Imaging: 9/30/2022 10:09:16 AM



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Company Name:

| company Name. | | MACK | | | Location | intaine. | THONDE | | • | Release Date. | |
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| | | | | | | | | | | | |
| SP ID | Depth | Titr | PID | L-BTEX | L-GRO | L-DRO | L-ORO | L-TPH | L-CHL | Soil | Notes |
| COMP 1 | 8 | 480 | | ND | ND | ND | ND | ND | ND | | |
| COMP 2 | 4 | 400 | | ND | ND | ND | ND | ND | ND | | |
| COMP 3 | 4 | 400 | | ND | ND | ND | ND | ND | ND | | |
| COMP 4 | 6 | 160 | | ND | ND | ND | ND | ND | ND | | |
| COMP 5 | 6 | 80 | | ND | ND | ND | ND | ND | ND | | |
| COMP 6 | 2 | 240 | | ND | ND | ND | ND | ND | 245 | | |
| COMP 7 | 10 | 160 | | ND | ND | ND | ND | ND | 133 | | |
| COMP 8 | 10 | 400 | | ND | ND | ND | ND | ND | 419 | | |
| COMP 9 | 2 | 240 | | ND | ND | ND | ND | ND | ND | | |
| COMP 10 | 2 | 240 | | ND | ND | ND | ND | ND | ND | | |
| COMP 11 | 2 | 240 | | ND | ND | ND | ND | ND | ND | | |
| COMP 12 | 6 | 160 | | ND | ND | ND | ND | ND | ND | | |
| COMP 13 | 2 | 160 | | ND | ND | ND | ND | ND | ND | | |
| COMP 14 | 2 | 480 | | ND | ND | ND | ND | ND | ND | | |
| COMP 15 | 2 | 80 | | ND | ND | ND | ND | ND | ND | | |
| COMP 16 | 2 | 160 | | ND | ND | ND | ND | ND | ND | | |
| COMP 17 | 2 | 240 | | ND | ND | ND | ND | ND | 262 | | |
| COMP 18 | 2 | 400 | | ND | ND | ND | ND | ND | 27.5 | | |
| COMP 19 | 2 | 160 | | ND | ND | ND | ND | ND | 24.1 | | |
| COMP 20 | 2 | 160 | | ND | ND | ND | ND | ND | 24.6 | | |
| COMP 21 | 2 | 240 | | ND | ND | ND | ND | ND | 35.9 | | |
| COMP 22 | 2 | 80 | | ND | ND | ND | ND | ND | 22.8 | | |
| COMP 23 | 2 | 160 | | ND | ND | ND | ND | ND | 23.1 | | |
| COMP 24 | 2 | 80 | | ND | ND | ND | ND | ND | 62.2 | | |
| COMP 25 | 2 | 400 | | ND | ND | ND | ND | ND | ND | | |
| COMP 26 | 2 | 400 | | ND | ND | ND | ND | ND | ND | | |
| COMP 27 | 2 | 240 | | ND | ND | ND | ND | ND | ND | | |
| COMP 28 | 2 | 480 | | ND | ND | ND | ND | ND | ND | | |
| COMP 29 | 4 | 400 | | ND | ND | ND | ND | ND | ND | | |
| COMP 30 | 4 | 320 | | ND | ND | ND | ND | ND | ND | | |
| COMP 31 | 2 | 320 | | ND | ND | ND | ND | ND | ND | | |

Location Name: THUNDER BAY COMP.

Release Date:

| COMP 32 | 2 | 80 | ND | ND | ND | ND | ND | ND | |
|---------|---|-----|----|----|----|----|----|------|--|
| COMP 33 | 2 | 80 | ND | ND | ND | ND | ND | ND | |
| COMP 34 | 2 | 400 | ND | ND | ND | ND | ND | ND | |
| COMP 35 | 2 | 400 | ND | ND | ND | ND | ND | ND | |
| COMP 36 | 2 | 320 | ND | ND | ND | ND | ND | ND | |
| COMP 37 | 2 | 320 | ND | ND | ND | ND | ND | ND | |
| COMP 38 | 2 | 480 | ND | ND | ND | ND | ND | ND | |
| COMP 39 | 2 | 400 | ND | ND | ND | ND | ND | ND | |
| COMP 40 | 2 | 400 | ND | ND | ND | ND | ND | ND | |
| COMP 41 | 2 | 240 | ND | ND | ND | ND | ND | ND | |
| COMP 42 | 2 | 400 | ND | ND | ND | ND | ND | 25.3 | |
| COMP 43 | 2 | 400 | ND | ND | ND | ND | ND | ND | |
| COMP 44 | 2 | 160 | ND | ND | ND | ND | ND | ND | |
| COMP 45 | 2 | 240 | ND | ND | ND | ND | ND | ND | |
| COMP 46 | 2 | 160 | ND | ND | ND | ND | ND | 24.6 | |
| COMP 47 | 2 | 80 | ND | ND | ND | ND | ND | ND | |
| COMP 48 | 2 | 400 | ND | ND | ND | ND | ND | ND | |
| COMP 49 | 2 | 240 | ND | ND | ND | ND | ND | 116 | |
| COMP 50 | 2 | 240 | ND | ND | ND | ND | ND | 168 | |
| COMP 51 | 2 | 160 | ND | ND | ND | ND | ND | 23.9 | |
| COMP 52 | 2 | 240 | ND | ND | ND | ND | ND | 122 | |
| COMP 53 | 2 | 240 | ND | ND | ND | ND | ND | 143 | |
| COMP 54 | 2 | 80 | ND | ND | ND | ND | ND | ND | |
| COMP 55 | 2 | 80 | ND | ND | ND | ND | ND | ND | |
| COMP 56 | 2 | 240 | ND | ND | ND | ND | ND | 46.4 | |
| COMP 57 | 2 | 240 | ND | ND | ND | ND | ND | 65.7 | |
| COMP 58 | 2 | 320 | ND | ND | ND | ND | ND | 139 | |
| COMP 59 | 2 | 320 | ND | ND | ND | ND | ND | 154 | |
| COMP 60 | 2 | 320 | ND | ND | ND | ND | ND | 203 | |
| COMP 61 | 2 | 240 | ND | ND | ND | ND | ND | 48 | |
| COMP 62 | 2 | 240 | ND | ND | ND | ND | ND | 56.6 | |
| COMP 63 | 2 | 320 | ND | ND | ND | ND | ND | 137 | |
| COMP 64 | 2 | 320 | ND | ND | ND | ND | ND | 167 | |
| COMP 65 | 2 | 160 | ND | ND | ND | ND | ND | 24.8 | |

| COMP 66 2 80 ND ND ND ND ND ND ND COMP 67 2 80 ND ND ND ND ND ND ND COMP 68 2 80 ND ND ND ND ND ND COMP 70 2 160 ND ND ND ND ND 27 COMP 71 5 160 ND ND ND ND ND 27 COMP 72 2 240 ND ND ND ND 72 2 COMP 73 2 240 ND ND ND ND 72.7 COMP 74 5 240 ND ND ND ND 83. COMP 73 2 320 ND ND ND ND 173 COMP 74 2 320 ND ND ND ND 173 COMP 72 < | | | | | | | | | | | |
|---|---------|---|-----|----|----|----|----|----|------|--|--|
| COMP 68 2 80 ND ND <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> | | | | | | | | | | | |
| COMP 69 2 160 ND ND <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | | | | |
| COMP 70 2 160 ND ND ND ND ND ND ND 27 COMP 71 5 160 ND ND ND ND ND ND 27 COMP 72 2 240 ND ND ND ND ND ND 77 COMP 73 2 240 ND ND ND ND ND 70.2 COMP 74 5 240 ND ND ND ND 77.7 COMP 75 2 240 ND ND ND ND 24.5 COMP 76 2 320 ND ND ND ND 173 COMP 78 2 320 ND ND ND ND ND 183 COMP 79 2 320 ND ND ND ND 183 COMP 81 2 240 ND ND ND ND 178 | | | | | | | | | | | |
| COMP 71 5 160 ND ND <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | | | | |
| COMP 72 2 240 ND ND <t< td=""><td>COMP 70</td><td></td><td>160</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td></td><td></td><td></td></t<> | COMP 70 | | 160 | ND | ND | ND | ND | ND | | | |
| COMP 73 2 240 ND ND ND ND ND ND 70.2 COMP 74 5 240 ND ND ND ND ND ND 70.2 COMP 75 2 240 ND ND ND ND ND ND ND COMP 76 2 320 ND ND ND ND ND 173 COMP 78 2 320 ND ND ND ND ND 173 COMP 79 2 320 ND ND ND ND ND 183 COMP 80 2 240 ND ND ND ND ND 183 COMP 81 2 240 ND ND ND ND ND 185 COMP 82 2 320 ND ND ND ND 178 COMP 84 2 320 ND ND ND ND | COMP 71 | 5 | 160 | ND | ND | ND | ND | ND | 27 | | |
| COMP 74 5 240 ND ND <t< td=""><td>COMP 72</td><td>2</td><td>240</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>67</td><td></td><td></td></t<> | COMP 72 | 2 | 240 | ND | ND | ND | ND | ND | 67 | | |
| COMP 75 2 240 ND ND <t< td=""><td>COMP 73</td><td>2</td><td>240</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>70.2</td><td></td><td></td></t<> | COMP 73 | 2 | 240 | ND | ND | ND | ND | ND | 70.2 | | |
| COMP 76 2 320 ND ND ND ND ND ND 24.5 COMP 77 2 320 ND ND ND ND ND ND 173 COMP 78 2 320 ND ND ND ND ND 183 COMP 79 2 320 ND ND ND ND ND 180 COMP 80 2 240 ND ND ND ND 87.6 COMP 81 2 240 ND ND ND ND 83.9 COMP 82 2 320 ND ND ND ND 85.9 COMP 84 2 320 ND ND ND ND 178 COMP 85 2 320 ND ND ND ND 173 COMP 86 2 320 ND ND ND ND 149 COMP 82 240 ND< | COMP 74 | 5 | 240 | ND | ND | ND | ND | ND | 72.7 | | |
| COMP 77 2 320 ND ND <t< td=""><td>COMP 75</td><td>2</td><td>240</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>80.1</td><td></td><td></td></t<> | COMP 75 | 2 | 240 | ND | ND | ND | ND | ND | 80.1 | | |
| COMP 78 2 320 ND ND <t< td=""><td>COMP 76</td><td>2</td><td>320</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>24.5</td><td></td><td></td></t<> | COMP 76 | 2 | 320 | ND | ND | ND | ND | ND | 24.5 | | |
| COMP 79 2 320 ND ND <t< td=""><td>COMP 77</td><td>2</td><td>320</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>173</td><td></td><td></td></t<> | COMP 77 | 2 | 320 | ND | ND | ND | ND | ND | 173 | | |
| COMP 80 2 240 ND ND <t< td=""><td>COMP 78</td><td>2</td><td>320</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>183</td><td></td><td></td></t<> | COMP 78 | 2 | 320 | ND | ND | ND | ND | ND | 183 | | |
| COMP 81 2 240 ND ND ND ND ND 83.9 COMP 82 2 320 ND ND ND ND ND 215 | COMP 79 | 2 | 320 | ND | ND | ND | ND | ND | 180 | | |
| COMP 82 2 320 ND ND ND ND ND 215 COMP 83 2 240 ND ND ND ND ND 85.9 COMP 84 2 320 ND ND ND ND ND 178 COMP 85 2 320 ND ND ND ND 178 COMP 86 2 320 ND ND ND ND 173 COMP 87 2 240 ND ND ND ND 173 COMP 87 2 240 ND ND ND ND 149 COMP 88 2 240 ND ND ND ND 147 COMP 90 2 240 ND ND ND ND 141 COMP 91 2 160 ND ND ND ND ND COMP 92 2 160 ND ND | COMP 80 | 2 | 240 | ND | ND | ND | ND | ND | 87.6 | | |
| COMP 83 2 240 ND ND ND ND ND ND 85.9 | COMP 81 | 2 | 240 | ND | ND | ND | ND | ND | 83.9 | | |
| COMP 84 2 320 ND ND ND ND ND ND 178 COMP 85 2 320 ND ND ND ND ND 185 COMP 86 2 320 ND ND ND ND ND 173 COMP 87 2 240 ND ND ND ND 93.1 COMP 88 2 240 ND ND ND ND 149 COMP 89 2 240 ND ND ND ND 141 COMP 90 2 240 ND ND ND ND 141 COMP 91 2 160 ND ND ND ND ND 25.5 COMP 93 2 240 ND ND ND ND ND ND SW C1 2 20 ND ND ND ND ND ND ND SW C3 | COMP 82 | 2 | 320 | ND | ND | ND | ND | ND | 215 | | |
| COMP 85 2 320 ND ND ND ND ND ND 185 COMP 86 2 320 ND ND ND ND ND 173 COMP 87 2 240 ND ND ND ND ND 93.1 COMP 88 2 240 ND ND ND ND ND 149 COMP 89 2 240 ND ND ND ND 147 COMP 90 2 240 ND ND ND ND ND 147 COMP 91 2 160 ND ND ND ND ND 141 COMP 92 2 160 ND ND ND ND ND 146 SW C1 2 20 ND ND ND ND ND 146 SW C2 2 180 ND ND ND ND ND 146 | COMP 83 | 2 | 240 | ND | ND | ND | ND | ND | 85.9 | | |
| COMP 86 2 320 ND ND ND ND ND 173 COMP 87 2 240 ND ND ND ND ND 93.1 COMP 88 2 240 ND ND ND ND 149 COMP 89 2 240 ND ND ND ND 147 COMP 90 2 240 ND ND ND ND 147 COMP 91 2 160 ND ND ND ND ND 141 COMP 92 2 160 ND ND ND ND ND 141 COMP 93 2 240 ND ND ND ND ND 146 SW C1 2 20 ND ND ND ND ND ND 146 SW C2 2 180 ND ND ND ND ND 150 | COMP 84 | 2 | 320 | ND | ND | ND | ND | ND | 178 | | |
| COMP 87 2 240 ND ND ND ND ND ND 93.1 COMP 88 2 240 ND ND ND ND ND 149 COMP 89 2 240 ND ND ND ND 147 COMP 90 2 240 ND ND ND ND 141 COMP 91 2 160 ND ND ND ND ND 25.5 COMP 92 2 160 ND ND ND ND ND ND COMP 93 2 240 ND ND ND ND ND ND SW C1 2 20 ND ND ND ND ND ND ND SW C2 2 180 ND ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND 148 | COMP 85 | 2 | 320 | ND | ND | ND | ND | ND | 185 | | |
| COMP 88 2 240 ND ND ND ND ND 149 COMP 89 2 240 ND ND ND ND ND 147 COMP 90 2 240 ND ND ND ND 147 COMP 90 2 240 ND ND ND ND 141 COMP 91 2 160 ND ND ND ND 25.5 COMP 92 2 160 ND ND ND ND ND 146 COMP 93 2 240 ND ND ND ND ND 146 SW C1 2 20 ND ND ND ND ND 146 SW C2 2 180 ND ND ND ND 150 SW C3 2 160 ND ND ND ND ND ND | COMP 86 | 2 | 320 | ND | ND | ND | ND | ND | 173 | | |
| COMP 89 2 240 ND ND ND ND ND 147 COMP 90 2 240 ND ND ND ND ND 141 COMP 91 2 160 ND ND ND ND ND 25.5 COMP 92 2 160 ND ND ND ND ND 25.5 COMP 93 2 240 ND ND ND ND ND ND SW C1 2 20 ND ND ND ND ND ND SW C2 2 180 ND ND ND ND 150 SW C3 2 160 ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND ND SW C5 2 20 ND ND ND <td< td=""><td>COMP 87</td><td>2</td><td>240</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>93.1</td><td></td><td></td></td<> | COMP 87 | 2 | 240 | ND | ND | ND | ND | ND | 93.1 | | |
| COMP 90 2 240 ND ND ND ND ND 141 COMP 91 2 160 ND ND ND ND ND 25.5 COMP 92 2 160 ND ND ND ND ND 25.5 COMP 92 2 160 ND ND ND ND ND ND COMP 93 2 240 ND ND ND ND ND 146 SW C1 2 20 ND ND ND ND ND ND SU SW C2 2 180 ND ND ND ND 150 SW C3 2 160 ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND | COMP 88 | 2 | 240 | ND | ND | ND | ND | ND | 149 | | |
| COMP 91 2 160 ND ND ND ND ND 25.5 COMP 92 2 160 ND | COMP 89 | 2 | 240 | ND | ND | ND | ND | ND | 147 | | |
| COMP 92 2 160 ND ND ND ND ND ND COMP 93 2 240 ND ND ND ND ND 146 SW C1 2 20 ND ND ND ND ND SU SU SW C2 2 180 ND ND ND ND ND 150 SW C3 2 160 ND ND ND ND 148 SW C4 2 20 ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND SU SU SU SU SU ND ND ND ND ND SU SU SU SU SU SU ND ND ND ND ND SU SU SU SU SU SU ND ND | COMP 90 | 2 | 240 | ND | ND | ND | ND | ND | 141 | | |
| COMP 93 2 240 ND ND ND ND 146 SW C1 2 20 ND ND ND ND ND ND ND SW C2 2 180 ND ND ND ND ND 150 SW C3 2 160 ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND 148 SW C5 2 20 ND ND ND ND ND ND SW C5 2 20 ND ND ND ND ND ND ND | COMP 91 | 2 | 160 | ND | ND | ND | ND | ND | 25.5 | | |
| SW C1 2 20 ND ND ND ND ND ND SW C1 2 20 ND ND ND ND ND ND SW C2 2 180 ND ND ND ND ND 150 SW C3 2 160 ND ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND ND SW C4 2 20 ND ND ND ND ND ND ND SW C4 2 20 ND ND ND ND ND ND ND SW C5 2 20 ND ND ND ND ND ND ND ND SW C5 2 20 ND N | COMP 92 | 2 | 160 | ND | ND | ND | ND | ND | ND | | |
| SW C2 2 180 ND ND ND ND 150 SW C3 2 160 ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND SW C5 2 20 ND ND ND ND ND | COMP 93 | 2 | 240 | ND | ND | ND | ND | ND | 146 | | |
| SW C2 2 180 ND ND ND ND 150 SW C3 2 160 ND ND ND ND 148 SW C4 2 20 ND ND ND ND ND SW C5 2 20 ND ND ND ND ND | SW C1 | 2 | 20 | ND | ND | ND | ND | ND | ND | | |
| SW C4 2 20 ND ND ND ND ND SW C5 2 20 ND ND ND ND ND | SW C2 | 2 | 180 | ND | ND | ND | ND | ND | 150 | | |
| SW C5 2 20 ND ND ND ND ND | SW C3 | 2 | 160 | ND | ND | ND | ND | ND | 148 | | |
| | SW C4 | 2 | 20 | ND | ND | ND | ND | ND | ND | | |
| SW C6 2 20 ND ND ND ND ND ND | | 2 | | | ND | ND | ND | ND | | | |
| | SW C6 | 2 | 20 | ND | ND | ND | ND | ND | ND | | |

COMPOSITE SAMPLE GPS DATA MACK ENERGY THUNDERBAY FED COM #1H

| SAMPLE ID | LAT | LONG |
|-----------|-----------|-------------|
| C1 | 33.002333 | -104.056993 |
| C2 | 33.002278 | -104.056942 |
| C3 | 33.002215 | -104.056893 |
| C4 | 33.002144 | -104.056844 |
| C5 | 33.002092 | -104.056781 |
| C6 | 33.002028 | -104.056727 |
| C7 | 33.001975 | -104.056671 |
| C8 | 33.001917 | -104.056622 |
| С9 | 33.001858 | -104.056581 |
| C10 | 33.001805 | -104.056555 |
| C11 | 33.001838 | -104.056497 |
| C12 | 33.001902 | -104.056540 |
| C13 | 33.001974 | -104.056591 |
| C14 | 33.002036 | -104.056651 |
| C15 | 33.002092 | -104.056704 |
| C16 | 33.002148 | -104.056765 |
| C17 | 33.002207 | -104.056812 |
| C18 | 33.002268 | -104.056861 |
| C19 | 33.002231 | -104.056909 |
| C20 | 33.002394 | -104.056912 |
| C21 | 33.002364 | -104.056855 |
| C22 | 33.002314 | -104.056818 |
| C23 | 33.002268 | -104.05678 |
| C24 | 33.002219 | -104.056741 |
| C25 | 33.002175 | -104.056699 |
| C26 | 33.002121 | -104.056661 |
| C27 | 33.002068 | -104.056598 |
| C28 | 33.002013 | -104.056553 |
| C29 | 33.001954 | -104.056505 |
| C30 | 33.001893 | -104.05646 |
| C31 | 33.001865 | -104.0564 |
| C32 | 33.001922 | -104.056395 |
| C33 | 33.001974 | -104.05644 |
| C34 | 33.002027 | -104.056487 |
| C35 | 33.002078 | -104.056523 |
| C36 | 33.002122 | -104.056564 |
| C37 | 33.002171 | -104.056597 |
| C38 | 33.002216 | -104.056639 |
| C39 | 33.002267 | -104.056675 |
| C40 | 33.002317 | -104.056711 |
| C41 | 33.002363 | -104.056761 |
| C42 | 33.002417 | -104.056821 |

| C43 | 33.002442 | -104.056768 |
|------------|-----------|-------------|
| C44 | 33.002411 | -104.056695 |
| C45 | 33.002359 | -104.056661 |
| C46 | 33.002307 | -104.056613 |
| C47 | 33.00227 | 104.056587 |
| C48 | 33.002223 | -104.05654 |
| C49 | 33.00218 | -104.056505 |
| C50 | 33.002143 | -104.056477 |
| C51 | 33.002102 | -104.05643 |
| C52 | 33.00206 | -104.056407 |
| C53 | 33.002019 | -104.056373 |
| C54 | 33.002019 | -104.056339 |
| | | |
| C55 | 33.001921 | -104.056307 |
| C56 | 33.001939 | -104.056233 |
| C57 | 33.001999 | -104.056267 |
| C58 | 33.002063 | -104.056315 |
| C59 | 33.002131 | -104.056371 |
| C60 | 33.002194 | -104.256422 |
| C61 | 33.002256 | -104.056468 |
| C62 | 33.002313 | -104.056526 |
| C63 | 33.002378 | -104.056598 |
| C64 | 33.002378 | -104.056531 |
| C65 | 33.002321 | -104.056444 |
| C66 | 33.002252 | -104.056388 |
| C67 | 33.002184 | -104.056335 |
| C68 | 33.002116 | -104.056283 |
| C69 | 33.002071 | -104.056217 |
| C70 | 33.002142 | -104.056241 |
| C71 | 33.002215 | -104.056306 |
| C72 | 33.002305 | -104.056379 |
| C73 | 33.002352 | -104.056372 |
| C74 | 33.002256 | -104.056281 |
| C75 | 33.002158 | -104.056198 |
| C76 | 33.002151 | -104.056074 |
| C77 | 33.002164 | -104.056138 |
| C78 | 33.002233 | -104.05621 |
| C79 | 33.002305 | -104.056268 |
| C80 | 33.002362 | -104.056303 |
| C81 | 33.002297 | -104.056203 |
| C81 | 33.002297 | -104.056111 |
| C82 C83 | 33.002233 | -104.056079 |
| | | |
| C84 | 33.002325 | -104.056193 |
| C85 | 33.002322 | -104.056147 |
| C86 | 33.002265 | -104.05606 |
| C87 | 33.001966 | -104.056176 |
| C88 | 33.002032 | -104.056199 |
| C89 | 33.002009 | -104.056128 |

| C90 | 33.001891 | -104.056672 |
|-----|-----------|-------------|
| C91 | 33.002092 | -104.056102 |
| C92 | 33.002326 | -104.056058 |
| C93 | 33.002268 | -104.055992 |
| SW1 | 33.001892 | -104.056644 |
| SW2 | 33.001914 | -104.056194 |
| SW3 | 33.002313 | -104.056078 |
| SW4 | 33.002417 | -104.056548 |
| SW5 | 33.002428 | -104.056895 |
| SW6 | 33.002209 | -104.056931 |
| | | |





5796 U.S. Hwy 64 Farmington, NM 87401

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





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Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay

Work Order: E202104

Job Number: 20046-0001

Received: 2/17/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 2/22/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 2/22/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E202104 Date Received: 2/17/2022 1:07:00PM

Natalie Gladden,



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Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/17/2022 1:07:00PM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | | Sample Summary | | | | | | | |
|--|---------------|--|---|----------|---------------------------------|--|--|--|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | Thunderbay 20046-0001 Natalie Gladden | | Reported: 02/22/22 09:14 | | | | |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container | | | | |
| SP 1 Surf | E202104-01A | Soil | 02/15/22 | 02/17/22 | Glass Jar, 4 oz. | | | | |
| SP 1 - 6' | E202104-02A | Soil | 02/15/22 | 02/17/22 | Glass Jar, 4 oz. | | | | |
| SP 2 Surf | E202104-03A | Soil | 02/15/22 | 02/17/22 | Glass Jar, 4 oz. | | | | |
| SP 2 - 6' | E202104-04A | Soil | 02/15/22 | 02/17/22 | Glass Jar, 4 oz. | | | | |



| | | ampic D | | | | | |
|--|--------------|------------|-------------------------------|----------|----------|----------|--------------------------------------|
| Mack Energy | Project Name | | Thunderbay | | | | D () |
| 7 W. Compress Road | Project Numb | | 20046-0001 Natalie Gladden | | | | Reported: 2/22/2022 9:14:40AM |
| Artesia NM, 88210 | Project Mana | ger: Nata | life Gladder | n | | | 2/22/2022 9:14:40AM |
| | | SP 1 Surf | | | | | |
| | | E202104-01 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilu | ition | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2208089 |
| Benzene | ND | 0.0250 | 1 | 1 | 02/17/22 | 02/18/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 1 | 02/17/22 | 02/18/22 | |
| Toluene | ND | 0.0250 | 1 | 1 | 02/17/22 | 02/18/22 | |
| o-Xylene | ND | 0.0250 | 1 | 1 | 02/17/22 | 02/18/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 1 | 02/17/22 | 02/18/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 1 | 02/17/22 | 02/18/22 | |
| Surrogate: Bromofluorobenzene | | 95.3 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 96.8 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2208089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 1 | 02/17/22 | 02/18/22 | |
| Surrogate: Bromofluorobenzene | | 95.3 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 96.8 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2208087 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 1 | 02/17/22 | 02/18/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 1 | 02/17/22 | 02/18/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | | 02/17/22 | 02/18/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2208090 |
| Chloride | ND | 20.0 | 1 | 1 | 02/17/22 | 02/18/22 | |

Sample Data



| Sample Data | | | | | | | | | |
|--|--|-------------------------|-----------------------------------|---------|---|----------|---------------------|--|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Nam Project Num Project Mana | ber: 2004 | nderbay 46-0001 Ilie Gladdo | | Reported: 2/22/2022 9:14:40AM | | | | |
| Ariesia NM, 88210 | Project Mana | - | line Gladdo | en | | | 2/22/2022 9:14:40AM | | |
| | | SP 1 - 6' E202104-02 | | | | | | | |
| | | | | | | | | | |
| Analyte | Result | Reporting Limit | Di | lution | Prepared | Analyzed | Notes | | |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2208089 | | |
| Benzene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | | | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | | | |
| Toluene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | | | |
| p-Xylene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | | | |
| o,m-Xylene | ND | 0.0500 | | 1 | 02/17/22 | 02/18/22 | | | |
| Fotal Xylenes | ND | 0.0250 | | 1 02 | | 02/18/22 | | | |
| Surrogate: Bromofluorobenzene | | 95.5 % | 70-130 | | 02/17/22 | 02/18/22 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 02/17/22 | 02/18/22 | | | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2208089 | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/17/22 | 02/18/22 | | | |
| Surrogate: Bromofluorobenzene | | 95.5 % | 70-130 | | 02/17/22 | 02/18/22 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 02/17/22 | 02/18/22 | | | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | : JL | | Batch: 2208087 | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/17/22 | 02/18/22 | | | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/17/22 | 02/18/22 | | | |
| Gurrogate: n-Nonane | | 110 % | 50-200 | | 02/17/22 | 02/18/22 | | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | RAS | | Batch: 2208090 | | |
| Chloride | 696 | 20.0 | | 1 | 02/17/22 | 02/18/22 | | | |



Sample Data

| | K. | sample D | ala | | | | |
|--|--------------|------------|-----------------|-------------|-----------|----------|---------------------|
| Mack Energy | Project Nam | e: Thu | nderbay | | | | |
| 7 W. Compress Road | Project Num | ber: 2004 | 46-0001 | | Reported: | | |
| Artesia NM, 88210 | Project Mana | ager: Nata | Natalie Gladden | | | | 2/22/2022 9:14:40AM |
| | | SP 2 Surf | | | | | |
| | | E202104-03 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilut | tion | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | 1 | Analyst: IY | | | Batch: 2208089 |
| Benzene | ND | 0.0500 | 2 | 2 | 02/17/22 | 02/18/22 | |
| Ethylbenzene | ND | 0.0500 | 2 | 2 | 02/17/22 | 02/18/22 | |
| Toluene | ND | 0.0500 | 2 | 2 | 02/17/22 | 02/18/22 | |
| p-Xylene | ND | 0.0500 | 2 | 2 | 02/17/22 | 02/18/22 | |
| p,m-Xylene | ND | 0.100 | 2 | 2 | 02/17/22 | 02/18/22 | |
| Total Xylenes | ND | 0.0500 | 2 | 2 | 02/17/22 | 02/18/22 | |
| Surrogate: Bromofluorobenzene | | 95.6 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.3 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | 1 | Analyst: IY | | | Batch: 2208089 |
| Gasoline Range Organics (C6-C10) | ND | 40.0 | 2 | 2 | 02/17/22 | 02/18/22 | |
| Surrogate: Bromofluorobenzene | | 95.6 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.3 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | 1 | Analyst: JL | | | Batch: 2208087 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | l | 02/17/22 | 02/18/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | | 02/17/22 | 02/18/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | | 02/17/22 | 02/18/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | 1 | Analyst: RA | AS | | Batch: 2208090 |
| Chloride | 50.1 | 20.0 | 1 | | 02/17/22 | 02/18/22 | |



| | | ample D | uu | | | | |
|--|---------------|------------|------------|----------|----------|----------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | | |
| 7 W. Compress Road | Project Numb | | 20046-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladde | en | | | 2/22/2022 9:14:40AM |
| | | SP 2 - 6' | | | | | |
| | | E202104-04 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2208089 |
| Benzene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/17/22 | 02/18/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/17/22 | 02/18/22 | |
| Surrogate: Bromofluorobenzene | | 95.6 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 96.6 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2208089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/17/22 | 02/18/22 | |
| Surrogate: Bromofluorobenzene | | 95.6 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 96.6 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/17/22 | 02/18/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2208087 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/17/22 | 02/18/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/17/22 | 02/18/22 | |
| Surrogate: n-Nonane | | 103 % | 50-200 | | 02/17/22 | 02/18/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | | | Batch: 2208090 |
| Chloride | 380 | 20.0 | | 1 | 02/17/22 | 02/18/22 | |



QC Summary Data

| | | QC DI | | iry Data | | | | | |
|----------------------------------|--------|------------------|-------|----------------|----------|-------------|---------------------------------------|--------------|------------------|
| Mack Energy | | Project Name: | | underbay | | | | | Reported: |
| 7 W. Compress Road | | Project Number: | 20 | 046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager: | Na | atalie Gladden | | | | 2/2 | 2/2022 9:14:40AM |
| | | Volatile Organic | Compo | unds by EPA | A 8260F | 3 | | | Analyst: IY |
| Analyte | | Reporting | Spike | Source | | Rec | | RPD | |
| | Result | Limit | Level | Result | Rec % | Limits % | RPD % | Limit % | Natas |
| | mg/kg | mg/kg | mg/kg | mg/kg | 70 | 70 | %0 | 70 | Notes |
| Blank (2208089-BLK1) | | | | | | | Prepared: 0 | 2/17/22 Anal | yzed: 02/18/22 |
| 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 | 0.469 | | 0.500 | | 93.7 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.481 | | 0.500 | | 96.2 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.505 | | 0.500 | | 101 | 70-130 | | | |
| LCS (2208089-BS1) | | | | | | | Prenared 0 | 2/17/22 Anal | yzed: 02/18/22 |
| | | | | | | | Trepared. 0 | | yzed. 02/10/22 |
| Benzene | 2.42 | 0.0250 | 2.50 | | 96.7 | 70-130 | | | |
| Ethylbenzene | 2.56 | 0.0250 | 2.50 | | 102 | 70-130 | | | |
| Toluene | 2.53 | 0.0250 | 2.50 | | 101 | 70-130 | | | |
| o-Xylene | 2.49 | 0.0250 | 2.50 | | 99.4 | 70-130 | | | |
| p,m-Xylene | 5.01 | 0.0500 | 5.00 | | 100 | 70-130 | | | |
| Total Xylenes | 7.49 | 0.0250 | 7.50 | | 99.9 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.494 | | 0.500 | | 98.7 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.482 | | 0.500 | | 96.3 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.518 | | 0.500 | | 104 | 70-130 | | | |
| Matrix Spike (2208089-MS1) | | | | Source: E | 202104-0 | 01 | Prepared: 02/17/22 Analyzed: 02/18/22 | | |
| Benzene | 2.61 | 0.0250 | 2.50 | ND | 104 | 48-131 | | | |
| Ethylbenzene | 2.77 | 0.0250 | 2.50 | ND | 111 | 45-135 | | | |
| Toluene | 2.74 | 0.0250 | 2.50 | ND | 110 | 48-130 | | | |
| o-Xylene | 2.72 | 0.0250 | 2.50 | ND | 109 | 43-135 | | | |
| p,m-Xylene | 5.41 | 0.0500 | 5.00 | ND | 108 | 43-135 | | | |
| Total Xylenes | 8.12 | 0.0250 | 7.50 | ND | 108 | 43-135 | | | |
| Surrogate: Bromofluorobenzene | 0.496 | | 0.500 | | 99.2 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.490 | | 0.500 | | 98.8 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.512 | | 0.500 | | 102 | 70-130 | | | |
| Matrix Spike Dup (2208089-MSD1) | | | | Source: E | 202104-0 | 01 | Prepared: 0 | 2/17/22 Anal | yzed: 02/18/22 |
| Benzene | 2.65 | 0.0250 | 2.50 | ND | 106 | 48-131 | 1.50 | 23 | , · · ···== |
| Benzene Ethylbenzene | 2.85 | | 2.50 | ND | 100 | 48-131 | 2.85 | 23 | |
| 5 | | 0.0250 | | | | | | | |
| Toluene | 2.80 | 0.0250 | 2.50 | ND | 112 | 48-130 | 2.16 | 24 | |
| o-Xylene | 2.77 | 0.0250 | 2.50 | ND | 111 | 43-135 | 1.77 | 27 | |
| p,m-Xylene | 5.55 | 0.0500 | 5.00 | ND | 111 | 43-135 | 2.72 | 27 | |
| Total Xylenes | 8.32 | 0.0250 | 7.50 | ND | 111 | 43-135 | 2.40 | 27 | |
| Surrogate: Bromofluorobenzene | 0.476 | | 0.500 | | 95.2 | 70-130 | | | |
| | | | 0.500 | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.498 | | 0.500 | | 99.5 | 70-130 | | | |



QC Summary Data

| | | QC D | u 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | ary Data | | | | | |
|--|--------|--|---|---|-----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 fatalie Gladden | | | | | Reported: 2/22/2022 9:14:40AM |
| | N | onhalogenated O | rganics | by EPA 801 | 5D - GR | 0 | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2208089-BLK1) | | | | | | | Prepared: 0 | 2/17/22 | Analyzed: 02/18/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.469 | | 0.500 | | 93.7 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.481 | | 0.500 | | 96.2 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.505 | | 0.500 | | 101 | 70-130 | | | |
| LCS (2208089-BS2) | | | | | | | Prepared: 0 | 2/17/22 | Analyzed: 02/18/22 |
| Gasoline Range Organics (C6-C10) | 65.6 | 20.0 | 50.0 | | 131 | 70-130 | | | L2 |
| Surrogate: Bromofluorobenzene | 0.477 | | 0.500 | | 95.3 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.472 | | 0.500 | | 94.4 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.518 | | 0.500 | | 104 | 70-130 | | | |
| Matrix Spike (2208089-MS2) | | | | Source: E | 202104-01 | l | Prepared: 0 | 2/17/22 | Analyzed: 02/18/22 |
| Gasoline Range Organics (C6-C10) | 62.3 | 20.0 | 50.0 | ND | 125 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.489 | | 0.500 | | 97.8 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.470 | | 0.500 | | 94.0 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.506 | | 0.500 | | 101 | 70-130 | | | |
| Matrix Spike Dup (2208089-MSD2) | | | | Source: E | 202104-01 | l | Prepared: 0 | 2/17/22 | Analyzed: 02/18/22 |
| Gasoline Range Organics (C6-C10) | 61.3 | 20.0 | 50.0 | ND | 123 | 70-130 | 1.56 | 20 | |
| Surrogate: Bromofluorobenzene | 0.487 | | 0.500 | | 97.3 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.523 | | 0.500 | | 105 | 70-130 | | | |
| | | | | | | | | | |



QC Summary Data

| | | QC DI | | aly Data | | | | | |
|---|-----------------|--|-------------------------|---|----------|--------------------|--------------|-------------------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 2/22/2022 9:14:40AM |
| | Nonh | alogenated Orga | anics by | y 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 (2208087-BLK1) | | | | | | | Prepared: 02 | 2/17/22 A | nalyzed: 02/20/22 |
| Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36) | ND ND | 25.0 50.0 | | | | | | | |
| Surrogate: n-Nonane | 51.9 | | 50.0 | | 104 | 50-200 | | | |
| LCS (2208087-BS1) | | | | | | | Prepared: 02 | 2/17/22 A | analyzed: 02/20/22 |
| Diesel Range Organics (C10-C28) | 486 | 25.0 | 500 | | 97.2 | 38-132 | | | |
| Surrogate: n-Nonane | 53.8 | | 50.0 | | 108 | 50-200 | | | |
| Matrix Spike (2208087-MS1) | | | | Source: E | 202069- | 22 | Prepared: 02 | 2/17/22 A | analyzed: 02/20/22 |
| Diesel Range Organics (C10-C28) | 509 | 25.0 | 500 | ND | 102 | 38-132 | | | |
| Surrogate: n-Nonane | 56.8 | | 50.0 | | 114 | 50-200 | | | |
| Matrix Spike Dup (2208087-MSD1) | | | | Source: E | 202069- | 22 | Prepared: 02 | 2/17/22 A | nalyzed: 02/20/22 |
| Diesel Range Organics (C10-C28) | 497 | 25.0 | 500 | ND | 99.4 | 38-132 | 2.34 | 20 | |
| Surrogate: n-Nonane | 55.7 | | 50.0 | | 111 | 50-200 | | | |



QC Summary Data

| | | | | | • | | | | |
|--|-----------------|--|-------------------------|--|--------------------------------------|---------------------|--------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | 'hunderbay 0046-0001 Jatalie Gladden | | | | | Reported: 2/22/2022 9:14:40AN |
| | | Anions | by EPA | 300.0/9056A | | | | | 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 (2208090-BLK1) | | | | | | | Prepared: 02 | 2/17/22 | Analyzed: 02/18/22 |
| Chloride LCS (2208090-BS1) | ND | 20.0 | | | | | Prepared: 02 | 2/17/22 | Analyzed: 02/18/22 |
| Chloride Matrix Spike (2208090-MS1) | 254 | 20.0 | 250 | Source: 1 | ¹⁰¹ E 202104- (| 90-110 01 | Prepared: 02 | 2/17/22 / | Analyzed: 02/18/22 |
| Chloride | 272 | 20.0 | 250 | ND | 109 | 80-120 | | | |
| Matrix Spike Dup (2208090-MSD1) | | | | Source: l | E202104-0 | 01 | Prepared: 02 | 2/17/22 | Analyzed: 02/18/22 |
| Chloride | 274 | 20.0 | 250 | ND | 110 | 80-120 | 1.02 | 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.



| Mack Energy | Project Name: | Thunderbay | |
|--------------------|------------------|-----------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Natalie Gladden | 02/22/22 09:14 |

L2 The LCS spike recovery was above acceptance limits. This analyte was not detected in the sample.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

RelProject Information

Page $_ \ of \ 1$

| ent: ^ | rack | Energu | 1 | | | 1 | | | Bill | То | | | | | La | b Us | e On | ly | | | | TA | | | EP | A Pro | ogram |
|-------------------|---------------------|---------------|-----------------|------------------------|------|-------------------|----------|-------------|-----------|----------------|-------------|------------|-----------------|-----------------|--------------|-------------|-------------|----------|---------------|--------------|----------|-------|------|-------------|-----|---------|--------------|
| oject: | Thunder Manager: | bay | | | | Atte | ntion: | ESS | | | 01 | _ | Lab | WO# | NN | | Job I | Numb | er | 1D | 2D | 3D | Star | ndard | CV | VA | SDWA |
| oject N dress: | lanager: | MI BO | chies | | | City | State | Z42 | 106 | ounty 5, Nr | n | | EX | Oa | 10 | 1 | Analy | Sis and | -000 Metho | d | X | | - | | - | - | RCRA |
| y, Stat | | | | | | Phor | | , | | | | | | | | | incig | | | | 1 | | | | | | |
| one: | | | | | - | Ema | il: No | ataii | e | | | | 015 | 015 | | | | | | | | | | | Sta | te | |
| ail: | ue by: | | - | | | | | | | | | | DRO/ORO by 8015 | GRO/DRO by 8015 | 8021 | 260 | 010 | 300.0 | | WN | X | | r | | UT | AZ | TX |
| Time | Date | Susar | No. of | | - | - | | | | | 1 | Lab | /ORC | /DRC | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride | | 1.000 | 1.1 | | . 1 | | | | |
| mpled | Sampled | Matrix | Containers | Sample ID | - | | | - | | | | Number | DRO | GRO | BTE | VOC | Met | Chlo | | BGDOC | BGDOC | | | - | Rem | arks | _ |
| | 2/15 | S | 1 | Sp | 1 | Sur | - £ | | | * | | 1 | | | | | | | | X | | | | | | | of |
| | (| 1 | (| SP | 1 | - 6 | ,' | | | | | 2 | | | | | | | | 1 | | | | | | | |
| | | 1 | | SP | 2 | S | orf | | | | | 3 | | | | | | | | 5 | | | | | | | |
| | | | | SP | 2 | - 6 | , | | | | | 4 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | |
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| | > | 1 | | | | | | | | | | | | | | | | | | 11 | | | | | | | |
| ditior | al Instruc | tions: | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | icity of this san | | | hat tamp | pering with | h or inte | entionally mi | islabelling | the sample | elocatio | on, | | | | | | | | | | ice the day | | sampled | d or receive |
| inquish | ed by: (Sign | ature) | Date | | Time | | | red by: (S | | | | Date 2.16 | 77 | Time | 32 | 5 | Por | aivad | on ice: | | ab U | se On | ly | | 100 | | |
| linquist | ed by: (Signa | | Date | | Time | <u>- pr</u> 50 | Receiv | ed by: (S | Signatu | el + | | Date | 12 | Time | 07 | | T1 | civeu | on ice. | T2 | | | - | ГЗ | | | |
| inquist | ed by: (Signa | ature) | Date | | Time | | Receiv | ved by: (S | Signatu | re) | | Date | ~ | Time | 0. | | 6 | Tem | 2°C | 4 | | | | | | | |
| nole Ma | trix: S - Soil, Se | d - Solid. Sg | - Sludge, A - A | Aqueous, O - Ot | ther | - | | | | | - | Containe | r Type | :g-g | glass. | | | | | per gla | iss, v · | VOA | | | | | |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy I | Date Received: | 02/17/22 13 | :07 | Work Order ID: E202104 |
|--|--|---|--|------------------|-----------------------------------|
| Phone: | (575) 390-6397 I | Date Logged In: | 02/17/22 13 | :50 | Logged In By: Caitlin Christian |
| Email: | | Due Date: | 02/18/22 17 | 7:00 (1 day TAT) | |
| Chain o | f Custody (COC) | | | | |
| 1. Does | the sample ID match the COC? | | Yes | | |
| 2. Does | the number of samples per sampling site location matcl | h the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: U | IPS |
| 4. Was th | he COC complete, i.e., signatures, dates/times, requeste | ed analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in t i.e, 15 minute hold time, are not included in this disucssion | | Yes | | Comments/Resolution |
| <u>Sample</u> | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | e COC indicate standard TAT, or Expedited TAT? | | Yes | | Sample times not provided on COC. |
| Sample | Cooler | | | | |
| 7. Was a | sample cooler received? | | Yes | | |
| 8. If yes, | , was cooler received in good condition? | | Yes | | |
| 9. Was tl | he sample(s) received intact, i.e., not broken? | | Yes | | |
| 10. Were | e custody/security seals present? | | No | | |
| 11. If ye | s, were custody/security seals intact? | | NA | | |
| 12. Was t | the sample received on ice? If yes, the recorded temp is 4°C, i. Note: Thermal preservation is not required, if samples are r minutes of sampling | | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sample te | emperature: 4° | 'C | | |
| | | | <u>U</u> | | |
| Sample | Container | · · · · · · _ | <u>c</u> | | |
| | <u>Container</u> aqueous VOC samples present? | 1 | <u>v</u> No | | |
| 14. Are a | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? | | | | |
| 14. Are a 15. Are ² | aqueous VOC samples present? | | No | | |
| 14. Are a 15. Are 16. Is the | aqueous VOC samples present? VOC samples collected in VOA Vials? | | No NA | | |
| 14. Are a 15. Are ⁷ 16. Is the 17. Was | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? | | No NA NA | | |
| 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1 | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? | | No NA NA NA | | |
| 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1 | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe | | No NA NA NA Yes | | |
| 14. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inform | rs collected? | No NA NA Yes Yes | | |
| 14. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inforr Sample ID? | rs collected? | No NA NA Yes Yes | | |
| 14. Are a 15. Are 2 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inforr Sample ID? Date/Time Collected? | rs collected? | No NA NA Yes Yes Yes No | | |
| 14. Are a 15. Are a 15. Is the 17. Was 18. Are a 19. Is the Field La 20. Were 21. G | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inforr Sample ID? Date/Time Collected? Collectors name? | rs collected? | No NA NA Yes Yes | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were S 10. Sample | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inforr Sample ID? Date/Time Collected? Collectors name? Preservation | rs collected? nation: | No NA NA Yes Yes No No | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were Sample 21. Does | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe bel e field sample labels filled out with the minimum inforr Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres | rs collected? nation: | No NA NA Yes Yes Yes No | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were 5 5 6 6 6 7 7 8 8 8 8 8 9 10 10 10 10 10 10 10 10 10 10 | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inforr Sample ID? Date/Time Collected? Collectors name? Preservation | rs collected? nation: served? | No NA NA Yes Yes No No | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were 21. Does 22. Are a 24. Is lab | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were presess sample(s) correctly preserved? b filteration required and/or requested for dissolved me | rs collected? nation: served? | No NA NA Yes Yes No No No | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were 20. Were 21. Does 22. Are a 24. Is lat <u>Multiph</u> | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were pres- sample(s) correctly preserved? b filteration required and/or requested for dissolved me tase Sample Matrix | rs collected? nation: served? tals? | No NA NA Yes Yes No No No No No | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were 21. Does 22. Are a 24. Is lat Multiph 26. Does | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved me tase Sample Matrix s the sample have more than one phase, i.e., multiphase | rs collected? nation: served? tals? ;? | No NA NA Yes Yes No No No No No | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were S 20. Were 21. Does 22. Are a 24. Is lat Multiph 26. Does 27. If ye | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were pres- sample(s) correctly preserved? b filteration required and/or requested for dissolved me tase Sample Matrix | rs collected? nation: served? tals? ;? | No NA NA Yes Yes No No No No No | | |
| 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were 20. Were 21. Does 22. Are a 24. Is lal Multiph 26. Does 27. If ye | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containe abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation is the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved me trase Sample Matrix is the sample have more than one phase, i.e., multiphase s, does the COC specify which phase(s) is to be analyze | rs collected? nation: served? tals? ;? ed? | No NA NA Yes Yes No No No No No | | |

Date

envirotech Inc.

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




5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: T

Thunderbay

Work Order: E202120

Job Number: 20046-0001

Received: 2/23/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 2/24/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 2/24/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E202120 Date Received: 2/23/2022 11:00:00AM

Natalie Gladden,



Page 110 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/23/2022 11:00:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

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Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | | sample sum | mai y | | |
|--------------------|---------------|------------------|-----------------|----------|------------------|
| Mack Energy | | Project Name: | Thunderbay | | Reported: |
| 7 W. Compress Road | | Project Number: | 20046-0001 | | |
| Artesia NM, 88210 | | Project Manager: | Natalie Gladden | | 02/24/22 16:40 |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| SP 22 - Surf | E202120-01A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SP 22 - 4' | E202120-02A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SP 23 - Surf | E202120-03A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SP 23 - 4' | E202120-04A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SP 24 - Surf | E202120-05A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SP 24 - 4' | E202120-06A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 1 Surf | E202120-07A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 1 - 2' | E202120-08A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 2 Surf | E202120-09A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 2 - 6' | E202120-10A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 3 Surf | E202120-11A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 3 - 2' | E202120-12A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 4 Surf | E202120-13A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 4 - 2' | E202120-14A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 5 Surf | E202120-15A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 5 - 2' | E202120-16A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 6 Surf | E202120-17A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 6 - 2' | E202120-18A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 7 Surf | E202120-19A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 7 - 2' | E202120-20A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 8 | E202120-21A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 8 - 2' | E202120-22A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 9 | E202120-23A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |
| SW 9 - 2' | E202120-24A | Soil | 02/21/22 | 02/23/22 | Glass Jar, 4 oz. |



| | 50 | ample D | ala | | | |
|--|---------------|--------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name: | Thu | nderbay | | | |
| 7 W. Compress Road | Project Numbe | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Nata | alie Gladden | | | 2/24/2022 4:40:04PN |
| | S | SP 22 - Surf | | | | |
| | | E202120-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | yst: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| foluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.2 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | vst: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | vst: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 84.5 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | yst: KL | | Batch: 2209025 |
| Chloride | 58.4 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |

Sample Data



Sample Data

| | D. | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manaş | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SP 22 - 4' | | | | |
| | | E202120-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.5 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.1 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | it: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 80.5 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | 125 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | | impic D | | | | |
|--|---|--------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | S | SP 23 - Surf | | | | |
| | | E202120-03 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.5 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.8 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 87.2 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2209025 |
| Chloride | 128 | 20.0 | 1 | 02/23/22 | 02/23/22 | |



Sample Data

| | 5 | ampic D | ala | | | |
|--|---|------------|------------------------------------|-------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SP 23 - 4' | | | | |
| | | E202120-04 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 92.0 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | Analyst: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.8 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| urrogate: n-Nonane | | 82.6 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | 144 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 56 | impic D | ala | | | |
|--|---|--------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | S | SP 24 - Surf | | | | |
| | - | E202120-05 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.3 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.0 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | ıt: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 83.7 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | 1630 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| D · (N | | | | | |
|--------|--|--|--|---|---|
| 5 | er: 2004 | | | | Reported: 2/24/2022 4:40:04PM |
| | SP 24 - 4' | | | | |
| | E202120-06 | | | | |
| | Reporting | | | | |
| Result | Limit | Dilution | Prepared | Analyzed | Notes |
| mg/kg | mg/kg | Analy | st: IY | | Batch: 2209018 |
| ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| | 90.7 % | 70-130 | 02/23/22 | 02/24/22 | |
| mg/kg | mg/kg | Analy | rst: IY | | Batch: 2209018 |
| ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| | 99.1 % | 70-130 | 02/23/22 | 02/24/22 | |
| mg/kg | mg/kg | Analy | rst: JL | | Batch: 2209030 |
| ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| | 66.4 % | 50-200 | 02/23/22 | 02/23/22 | |
| mg/kg | mg/kg | Analy | st: KL | | Batch: 2209025 |
| 146 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | Project Numbe Project Manage Result mg/kg ND ND ND ND ND ND ND ND ND ND ND ND ND | Project Number: 2004 Project Manager: Nata SF 24 - 4' E202120-06 E202120-06 Reporting Result Limit mg/kg mg/kg MD 0.0250 ND 20.0 gg/kg mg/kg Mg/kg Mg/kg ND 25.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 <td>Project Number: $20046-0001$ Project Manager: Natalie Gladden SP 24 - 4' E202120-06 E202120-06 E202120-06 Reporting Reporting Result Limit Dilution mg/kg mg/kg Analy ND 0.0250 1 ND 20.0 1 mg/kg mg/kg Analy ND 20.0 1 MD 25.0 1 ND 50.0 1 ND 50.200 1 MD 66.4 % 50-200</td> <td>Project Number: 20046-0001 Project Manager: Natalie Gladden SP 24 - 4' SP 24 - 4' E202120-06 Prepared E202120-06 Prepared Result Limit Dilution Prepared MD 0.0250 1 02/23/22 ND 0.0250 1 02/23/22 MD 20.0 1 02/23/22 MD 20.0 1 02/23/22 MD 25.0 1 02/23/22 MD 25.0 1 02/23/22 ND 25.0 1 02/23/22 MD 50.0 1</td> <td>Project Number: $20046-0001$ Project Manager: Natalie Gladden SP 24 - 4' SP 24 - 4' E202120-06 SP 24 - 4' Result Limit Dilution Prepared Analyzed MD 0.0250 1 02/23/22 02/24/22 ND 20.0 1 02/23/22 02/24/22 MD 20.0 1 02/23/22 02/24/22 MD 20.0 1 02/23/22 02/24/22 MD 25.0 1</td> | Project Number: $20046-0001$ Project Manager: Natalie Gladden SP 24 - 4' E202120-06 E202120-06 E202120-06 Reporting Reporting Result Limit Dilution mg/kg mg/kg Analy ND 0.0250 1 ND 20.0 1 mg/kg mg/kg Analy ND 20.0 1 MD 25.0 1 ND 50.0 1 ND 50.200 1 MD 66.4 % 50-200 | Project Number: 20046-0001 Project Manager: Natalie Gladden SP 24 - 4' SP 24 - 4' E202120-06 Prepared E202120-06 Prepared Result Limit Dilution Prepared MD 0.0250 1 02/23/22 ND 0.0250 1 02/23/22 MD 20.0 1 02/23/22 MD 20.0 1 02/23/22 MD 25.0 1 02/23/22 MD 25.0 1 02/23/22 ND 25.0 1 02/23/22 MD 50.0 1 | Project Number: $20046-0001$ Project Manager: Natalie Gladden SP 24 - 4' SP 24 - 4' E202120-06 SP 24 - 4' Result Limit Dilution Prepared Analyzed MD 0.0250 1 02/23/22 02/24/22 ND 20.0 1 02/23/22 02/24/22 MD 20.0 1 02/23/22 02/24/22 MD 20.0 1 02/23/22 02/24/22 MD 25.0 1 |



Sample Data

| | 5 | ampic D | aia | | | |
|--|---|------------|------------------------------------|-------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 1 Surf | | | | |
| | | E202120-07 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.6 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.1 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 83.6 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |

Sample Data

| | 5 | ampie D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 1 - 2' | | | | |
| | | E202120-08 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.7 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.6 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 83.5 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 5 | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 2 Surf | | | | |
| | | E202120-09 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.8 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.6 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2209030 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 89.1 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | 122 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | D | ample D | ata | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 2 - 6' | | | | |
| | | E202120-10 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.4 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.8 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 85.7 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2209025 |
| Chloride | 210 | 20.0 | 1 | 02/23/22 | 02/23/22 | |



Sample Data

| | b | ampic D | ata | | | |
|--|--------------|------------|--------------|----------|----------------|---------------------|
| Mack Energy | Project Name | e: Thu | nderbay | | | |
| 7 W. Compress Road | Project Numb | per: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | alie Gladden | | | 2/24/2022 4:40:04PM |
| | | SW 3 Surf | | | | |
| | | E202120-11 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.1 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2209030 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 86.7 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | 66.3 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 5 | ampie D | ala | | | |
|--|---|------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 3 - 2' | | | | |
| | | E202120-12 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 93.9 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2209030 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 91.3 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2209025 |
| Chloride | 60.2 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 4 Surf | | | | |
| | | E202120-13 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.4 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2209030 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 82.6 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 5 | ampie D | ala | | | |
|--|---|------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | per: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 4 - 2' | | | | |
| | | E202120-14 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 92.5 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2209030 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 80.6 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | D. | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 5 Surf | | | | |
| | | E202120-15 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.4 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | g Analyst: JL | | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 84.9 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 5 | ample D | ala | | | |
|--|--|------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 5 - 2' | | | | |
| | | E202120-16 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.3 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2209030 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 88.4 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

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|--|------------------------------|------------|--------------------|--------------------------------------|----------|----------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | | nderbay 46-0001 | Reported: 2/24/2022 4:40:04PM | | |
| Artesia NM, 88210 | Project Manag | | ilie Gladden | | | |
| | | SW 6 Surf | | | | |
| | | E202120-17 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 89.9 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.1 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 86.8 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |



Sample Data

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|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 6 - 2' | | | | |
| | | E202120-18 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 91.5 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | ıt: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/23/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 78.2 % | 50-200 | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
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Sample Data

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|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 7 Surf | | | | |
| | | E202120-19 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analyst | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.100 | 2 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 90.2 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 40.0 | 2 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst | t: JL | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 88.4 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analyst | t: KL | | Batch: 2209025 |
| Chloride | 110 | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| | | | | | | |



Sample Data

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|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 7 - 2' | | | | |
| | | E202120-20 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 90.4 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209018 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2209030 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 89.6 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: KL | | Batch: 2209025 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |



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|--|---------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | |
| 7 W. Compress Road | Project Numbe | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | alie Gladden | | | 2/24/2022 4:40:04PM |
| | | SW 8 | | | | |
| | | E202120-21 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209017 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.8 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209017 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 96.9 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2209031 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 88.0 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: KL | | Batch: 2209022 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
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Sample Data

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|--|--|------------|------------------------------------|---|----------|----------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 Ilie Gladden | Reported: 2/24/2022 4:40:04PM | | |
| | | SW 8 - 2' | | | | |
| | | E202120-22 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Ana | lyst: IY | | Batch: 2209017 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.1 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Ana | lyst: IY | | Batch: 2209017 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.8 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Ana | lyst: JL | | Batch: 2209031 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 83.8 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Ana | lyst: KL | | Batch: 2209022 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



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|--|---------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name: | : Thu | nderbay | | | |
| 7 W. Compress Road | Project Numb | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | ilie Gladden | | | 2/24/2022 4:40:04PM |
| | | SW 9 | | | | |
| | | E202120-23 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209017 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ithylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| oluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| -Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 93.9 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209017 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 98.5 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209031 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: n-Nonane | | 85.3 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2209022 |
| Chloride | 158 | 20.0 | 1 | 02/23/22 | 02/23/22 | |

Sample Data

| | 5 | ampie D | ata | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:40:04PM |
| | | SW 9 - 2' | | | | |
| | | E202120-24 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209017 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.0 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209017 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.4 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2209031 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 89.8 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: KL | | Batch: 2209022 |
| Chloride | 24.4 | 20.0 | 1 | 02/23/22 | 02/23/22 | M2 |



QC Summary Data

| | | QC D | u 1111110 | ing Duc | | | | | |
|-------------------------------------|--------------|----------------------------------|----------------|------------------------|--------------|------------------|--------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | hunderbay)046-0001 | | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | N | atalie Gladder | 1 | | | | 2/24/2022 4:40:04PM |
| | | Volatile O | rganics b | oy EPA 802 | 21B | | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209017-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| p-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.30 | | 8.00 | | 91.2 | 70-130 | | | |
| LCS (2209017-BS1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | 3.96 | 0.0250 | 5.00 | | 79.2 | 70-130 | | | |
| Ethylbenzene | 4.12 | 0.0250 | 5.00 | | 82.4 | 70-130 | | | |
| Toluene | 4.21 | 0.0250 | 5.00 | | 84.1 | 70-130 | | | |
| o-Xylene | 4.22 | 0.0250 | 5.00 | | 84.5 | 70-130 | | | |
| p,m-Xylene | 8.39 | 0.0500 | 10.0 | | 83.9 | 70-130 | | | |
| Total Xylenes | 12.6 | 0.0250 | 15.0 | | 84.1 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.63 | | 8.00 | | 95.3 | 70-130 | | | |
| Matrix Spike (2209017-MS1) | | | | Source: | E202119-0 | 01 | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | 3.83 | 0.0250 | 5.00 | ND | 76.6 | 54-133 | | | |
| Ethylbenzene | 3.99 | 0.0250 | 5.00 | ND | 79.8 | 61-133 | | | |
| Toluene | 4.07 | 0.0250 | 5.00 | ND | 81.4 | 61-130 | | | |
| p-Xylene | 4.10 | 0.0250 | 5.00 | ND | 81.9 | 63-131 | | | |
| p,m-Xylene | 8.13 | 0.0500 | 10.0 | ND | 81.3 | 63-131 | | | |
| Total Xylenes | 12.2 | 0.0250 | 15.0 | ND | 81.5 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.67 | | 8.00 | | 95.8 | 70-130 | | | |
| Matrix Spike Dup (2209017-MSD1) | | | | Source: | E202119-0 | 01 | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | 4.12 | 0.0250 | 5.00 | ND | 82.5 | 54-133 | 7.33 | 20 | |
| Ethylbenzene | 4.29 | 0.0250 | 5.00 | ND | 85.8 | 61-133 | 7.14 | 20 | |
| Toluene | 4.38 | 0.0250 | 5.00 | ND | 87.5 | 61-130 | 7.26 | 20 | |
| | 4.39 | 0.0250 | 5.00 | ND | 87.8 | 63-131 | 6.99 | 20 | |
| p-Xylene | | | | | | | | | |
| p-Xylene p,m-Xylene | 8.72 13.1 | 0.0500 | 10.0 15.0 | ND ND | 87.2 87.4 | 63-131 63-131 | 6.98 6.98 | 20 20 | |



QC Summary Data

| | | QC D | u | ing Date | и | | | | |
|-------------------------------------|--------|----------------------------------|----------------|------------------------|----------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | hunderbay 0046-0001 | | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | N | atalie Gladder | 1 | | | | 2/24/2022 4:40:04PM |
| | | Volatile O | rganics l | by EPA 802 | 21B | | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209018-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| o-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.51 | | 8.00 | | 93.9 | 70-130 | | | |
| LCS (2209018-BS1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | 4.02 | 0.0250 | 5.00 | | 80.5 | 70-130 | | | |
| Ethylbenzene | 4.19 | 0.0250 | 5.00 | | 83.9 | 70-130 | | | |
| Toluene | 4.28 | 0.0250 | 5.00 | | 85.6 | 70-130 | | | |
| o-Xylene | 4.29 | 0.0250 | 5.00 | | 85.8 | 70-130 | | | |
| p,m-Xylene | 8.53 | 0.0500 | 10.0 | | 85.3 | 70-130 | | | |
| Total Xylenes | 12.8 | 0.0250 | 15.0 | | 85.4 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.65 | | 8.00 | | 95.7 | 70-130 | | | |
| Matrix Spike (2209018-MS1) | | | | Source: | E202120- | 02 | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Benzene | 4.09 | 0.0250 | 5.00 | ND | 81.9 | 54-133 | | | |
| Ethylbenzene | 4.25 | 0.0250 | 5.00 | ND | 85.1 | 61-133 | | | |
| Toluene | 4.35 | 0.0250 | 5.00 | ND | 87.0 | 61-130 | | | |
| o-Xylene | 4.36 | 0.0250 | 5.00 | ND | 87.2 | 63-131 | | | |
| p,m-Xylene | 8.65 | 0.0500 | 10.0 | ND | 86.5 | 63-131 | | | |
| Total Xylenes | 13.0 | 0.0250 | 15.0 | ND | 86.7 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.66 | | 8.00 | | 95.7 | 70-130 | | | |
| Matrix Spike Dup (2209018-MSD1) | | | | | E202120- | | | | analyzed: 02/24/22 |
| Benzene | 4.01 | 0.0250 | 5.00 | ND | 80.2 | 54-133 | 2.08 | 20 | |
| Ethylbenzene | 4.18 | 0.0250 | 5.00 | ND | 83.7 | 61-133 | 1.66 | 20 | |
| Toluene | 4.26 | 0.0250 | 5.00 | ND | 85.2 | 61-130 | 2.04 | 20 | |
| o-Xylene | 4.29 | 0.0250 | 5.00 | ND | 85.8 | 63-131 | 1.51 | 20 | |
| | 8.51 | 0.0500 | 10.0 | ND | 85.1 | 63-131 | 1.69 | 20 | |
| p,m-Xylene Total Xylenes | 12.8 | 0.0250 | 15.0 | ND | 85.3 | 63-131 | 1.63 | 20 | |



OC Summary Data

| | | QC 5 | umm | ii y Data | | | | | |
|--|--------|--|----------------|--|--------------------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 2/24/2022 4:40:04PM |
| | No | nhalogenated (| Organics | by EPA 801 | 5D - Gl | RO | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209017-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.18 | | 8.00 | | 102 | 70-130 | | | |
| LCS (2209017-BS2) | | | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | 47.7 | 20.0 | 50.0 | | 95.4 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.01 | | 8.00 | | 100 | 70-130 | | | |
| Matrix Spike (2209017-MS2) | | | | Source: H | E 202119- (|)1 | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | 44.0 | 20.0 | 50.0 | ND | 88.0 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.83 | | 8.00 | | 97.9 | 70-130 | | | |
| Matrix Spike Dup (2209017-MSD2) | | | | Source: I | E 202119- (|)1 | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | 49.7 | 20.0 | 50.0 | ND | 99.4 | 70-130 | 12.1 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.97 | | 8.00 | | 99.6 | 70-130 | | | |



OC Summary Data

| | | QC D | uIIIII | il y Data | | | | | |
|--|-----------------|--|-------------------------|--|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 2/24/2022 4:40:04PM |
| | Noi | nhalogenated C | Organics | by EPA 801 | 5D - Gl | RO | | | 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 (2209018-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.97 | | 8.00 | | 99.6 | 70-130 | | | |
| LCS (2209018-BS2) | | | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/24/22 |
| Gasoline Range Organics (C6-C10) | 48.5 | 20.0 | 50.0 | | 97.0 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.00 | | 8.00 | | 99.9 | 70-130 | | | |
| Matrix Spike (2209018-MS2) | | | | Source: E | 202120- | 02 | Prepared: 0 | 2/23/22 A | nalyzed: 02/24/22 |
| Gasoline Range Organics (C6-C10) | 45.3 | 20.0 | 50.0 | ND | 90.6 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.03 | | 8.00 | | 100 | 70-130 | | | |
| Matrix Spike Dup (2209018-MSD2) | | | | Source: E | 202120- | 02 | Prepared: 0 | 2/23/22 A | nalyzed: 02/24/22 |
| Gasoline Range Organics (C6-C10) | 48.6 | 20.0 | 50.0 | ND | 97.1 | 70-130 | 6.96 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.96 | | 8.00 | | 99.5 | 70-130 | | | |



QC Summary Data

| | | QC BI | u | ary Data | | | | | |
|---|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 2/24/2022 4:40:04PM |
| | Nonh | alogenated Orga | anics by | v 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 (2209030-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36) | ND ND | 25.0 50.0 | | | | | | | |
| Surrogate: n-Nonane | 42.4 | | 50.0 | | 84.8 | 50-200 | | | |
| LCS (2209030-BS1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 507 | 25.0 | 500 | | 101 | 38-132 | | | |
| Surrogate: n-Nonane | 45.6 | | 50.0 | | 91.2 | 50-200 | | | |
| Matrix Spike (2209030-MS1) | | | | Source: E | 202120- | 07 | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 489 | 25.0 | 500 | ND | 97.8 | 38-132 | | | |
| Surrogate: n-Nonane | 42.1 | | 50.0 | | 84.3 | 50-200 | | | |
| Matrix Spike Dup (2209030-MSD1) | | | | Source: E | 202120- | 07 | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 494 | 25.0 | 500 | ND | 98.7 | 38-132 | 0.993 | 20 | |
| Surrogate: n-Nonane | 45.1 | | 50.0 | | 90.3 | 50-200 | | | |



QC Summary Data

| | | QC D | | aly Data | | | | | |
|--|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 2/24/2022 4:40:04PM |
| | Nonh | alogenated Org | anics b | y 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 (2209031-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 53.3 | | 50.0 | | 107 | 50-200 | | | |
| LCS (2209031-BS1) | | | | | | | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 474 | 25.0 | 500 | | 94.8 | 38-132 | | | |
| Surrogate: n-Nonane | 38.7 | | 50.0 | | 77.4 | 50-200 | | | |
| Matrix Spike (2209031-MS1) | | | | Source: E | 202120- | 21 | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 471 | 25.0 | 500 | ND | 94.3 | 38-132 | | | |
| Surrogate: n-Nonane | 43.9 | | 50.0 | | 87.8 | 50-200 | | | |
| Matrix Spike Dup (2209031-MSD1) | | | | Source: E | 202120- | 21 | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 486 | 25.0 | 500 | ND | 97.2 | 38-132 | 3.03 | 20 | |
| Surrogate: n-Nonane | 46.5 | | 50.0 | | 93.0 | 50-200 | | | |



QC Summary Data

| | | $\mathbf{x} \in \mathbf{z}$ | •••••• | | | | | | |
|--|-----------------|--|-------------------------|--|-----------|--------------------|--------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 0046-0001 Vatalie Gladder | 1 | | | | Reported: 2/24/2022 4:40:04PM |
| | | Anions | by EPA | 300.0/9056 A | 4 | | | | Analyst: KL |
| Analyte | Result mg/kg | Reporting Limit mg/kg | Spike Level mg/kg | Source Result mg/kg | Rec % | Rec Limits % | RPD % | RPD Limit % | Notes |
| Blank (2209022-BLK1) | | | | | | | Prepared: 02 | 2/23/22 <i>I</i> | Analyzed: 02/23/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2209022-BS1) | | | | | | | Prepared: 02 | 2/23/22 A | Analyzed: 02/23/22 |
| Chloride | 247 | 20.0 | 250 | | 98.8 | 90-110 | | | |
| Matrix Spike (2209022-MS1) | | | | Source: | E202059-0 | 01 | Prepared: 02 | 2/23/22 A | Analyzed: 02/23/22 |
| Chloride | 258 | 20.0 | 250 | ND | 103 | 80-120 | | | |
| Matrix Spike Dup (2209022-MSD1) | | | | Source: | E202059-0 | 01 | Prepared: 02 | 2/23/22 A | Analyzed: 02/23/22 |
| Chloride | 258 | 20.0 | 250 | ND | 103 | 80-120 | 0.0466 | 20 | |


QC Summary Data

| | | | | | • | | | | |
|-----------------------------------|--------|----------------------------------|----------------|-------------------------|-----------|---------------|-------------|------------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | 2 | `hunderbay 0046-0001 | | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | N | latalie Gladden | | | | | 2/24/2022 4:40:04PM |
| | | Anions | by EPA | 300.0/9056A | | | | | Analyst: KL |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209025-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | Analyzed: 02/23/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2209025-BS1) | | | | | | | Prepared: 0 | 2/23/22 <i>I</i> | Analyzed: 02/23/22 |
| Chloride | 267 | 20.0 | 250 | | 107 | 90-110 | | | |
| Matrix Spike (2209025-MS1) | | | | Source: l | E202120-(| 01 | Prepared: 0 | 2/23/22 A | Analyzed: 02/23/22 |
| Chloride | 356 | 20.0 | 250 | 58.4 | 119 | 80-120 | | | |
| Matrix Spike Dup (2209025-MSD1) | | | | Source: l | E202120-(| 01 | Prepared: 0 | 2/23/22 <i>I</i> | Analyzed: 02/23/22 |
| Chloride | 342 | 20.0 | 250 | 58.4 | 113 | 80-120 | 4.04 | 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.



| Mack Energy | Project Name: | Thunderbay | |
|--------------------|------------------|-----------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Natalie Gladden | 02/24/22 16:40 |

- M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
- M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



RelProject Information

Page ___

| lient: M | hack 1 | Energy | 4 | | Bill To | | | | | | e On | | - | | TA | and the second sec | | rogram |
|----------------|------------------|--------------|------------------------|---|---|----------------------------|-----------|-----------------|--------------|-------------|-------------|---------------|-------------|--------|-------------|--|---------------|----------------|
| oject: | Thunder | Bay | - | | Attention: ES3 | | Lab | wo# | - | - | | Number | | 2D | 3D | Standard | CWA | SDWA |
| | lanager: | M. BUC | kles | | Address: 2427 W Cou City, State, Zip Hobbs , N | nty | Eó | 100 | 20 | 20 | aD | 044-00 | DI | X | 1 1 | | | DODA |
| dress: | | | | | City, State, Zip Hobbs , N | M 88240 | | _ | | | Analy | ysis and Me | thod | 1 | 1 1 | | | RCRA |
| | e, Zip RC | swell, | NM | | Phone: | _ | | 1.00 | | | | | | 1 | | and the second | Ctata | |
| one: | | | | | Email: Natalie | | 8015 | 3015 | | | | | | | | NM CO | State | TYL |
| nail: | | | | | | | λq | by 8 | 021 | 260 | 10 | 300.0 | WN | X | 1 1 | | UT AL | |
| port d | | - | 1 | | | Lab | ORO | DRO | by 8 | by 8: | ls 60 | ide | | | | | | |
| Time ampled | Date Sampled | Matrix | No. of Containers | Sample ID | | Number | DRO/ORO | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride | BGDOC | BGDOC | | _ | Remarks | |
| | 2/21 | S | 1 | SP 22 | - Surf | 1 | | | | | | | X | | | | | 35.4 |
| | (| 1 | 1 | SP 22 | | 2 | | | | | | | (| | | | | |
| | | | (| | - SURF | 3 | | | | | | | | | | | | |
| | | | $\left \right\rangle$ | | 3 - 4' | 4 | | | | | | | | | | | | |
| | | | | | 1 - Surf | 5 | | | | | | | | | | | | |
| | | | $\left \right\rangle$ | | 4 - 4' | 6 | | | | | | | | | | | | |
| - | | | | SW I | Surp | 7 | | | | | | | | | | | | |
| | | | | | - 2' | 8 | 2 | | | | | | 1 | | | | | |
| | | \backslash | + | | | 9 | | | | | | 1.0 | | | | 5 | | |
| | | 16 | - (- | SW 2 | - 10 10' | 10 | | | | | | | | | | | | |
| ditior | al Instruc | tions: | | 000 2 | a ll | | | - | - | - | - | | | _ | | | | |
| | | | | ticity of this sample. I may be grounds for le | am aware that tampering with or intention gal action. <u>Sampled by:</u> | ally mislabelling the same | le locat | ion, | | | | | | | | ceived on ice the day 6 °C on subsequent da | | led or receive |
| | ed by: (Sign | | / Date | e Time | Received by: (Signature) | Date | | Time | 50 | 0 | Rec | ceived on i | | Lab L | Jse On N | lly | | |
| linquish | ed by: (Sign | lature / | Date | e 22.22 / | 545 Cartler Chit | 1 2.22 In 2/23 | 122 | Time | 1:0 | 0 | T1 | | T2 | - | | T3 | | |
| linquist | ed by: (Sign | ature) | Date | e Time | Received by: (Signature) | Date | | Time | | | | G Temp °C | 4 | | | | | |
| mnle Ma | triv: S - Soil S | d - Solid Se | - Sludge A - | Aqueous, O - Other | | Contain | er Typ | e:g- | glass | , p - p | | plastic, ag - | | ass, v | - VOA | | | |
| te: Sam | ples are dis | carded 30 | days after n | esults are reported | unless other arrangements are made. | Hazardous samples w | ill be re | turne | d to c | lient o | or disp | osed of at th | e client ex | xpense | e. The | report for the an | alysis of the | above |

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Reproject Information

Page _____ of _____ Receive

| Chent. Macc. Encirgy Attention: ESS Project: Thunder Bay Attention: ESS Project: Manager: M. Buckles Address: 2427 W. County | roject: Thu | CICE | | X | | Bill To | | | | La | ab Us | se Or | ly | | | | TAT | T | EPA P | rogram |
|--|-------------------|--------------|------------------|--------------|--------------------|---|--|----------|--------|--------|---------|--------------|------------------|--------------|-----------|----------|-------------|----------------------|----------------|----------------|
| Totel Manager, M., Buckless Markets: 247/1 Microscope Participation Participation Thy, State, Zin, Postue II, NM City, State, Zin, Postue Zin, Holdss, NM 88240 Phone: | | under | Ban | 3 | | Attention: ESS | | Lab | WO# | • | | | | | 1D | 2D | 3D | Standard | CWA | SDWA |
| uddress: Analysis and wetting Image: State Zip CoSupel1, NM whose and watch Image: State Zip CoSupel1, NM Image: State Zip CoSupel1, NM Image: State Zip CoSupel1, NM whose and watch Image: State Zip CoSupel1, NM image: State Zip CoSupel1, NM Image: State Zip CoSupel1, NM | roject Mana | ager: A | M. BUC | kles | | Address: 2427 W Count | ry | Εó | loa | 12 | 0 | | | | | \times | | - | | DCDA |
| Phone: Imail: Matcule Imail: Matcu | ddress: | | | 10.1 | | City, State, Zip Hobbs , NM | 88240 | - | - | - | - | Analy | /sis and | d Metho | od T | - | | - | | RCRA |
| Phone: Imme Date Date <thdate< th=""> Date Date</thdate<> | ity, State, Z | ip Ros | swell, | NM | | Phone: | | | | | | | 1.5 | 100 | | | | - | State | - |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | hone: | | | | | Email: Natalie | | 8015 | 8015 | | | | | | | | | NMI CO | | TXI |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | | | | | | by a | by 8 | 021 | 260 | 010 | 300. | | NM | × | | | 01 /12 | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | | | | | Lab | ORC | DRC | by 8 | by 8 | als 60 | ride | | S | N | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | Matrix | | Sample ID | | | DRO/ | GRO/ | BTEX | VOC | Meta | Chlor | - | BGD | BGDC | | | Remarks | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | 2 | 121 | S | 1 | SW | 3 Such | 11 | | | | | | | | X | | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | 1 | 1 | | SW | 3-21 | 12 | | | | | | | | 1 | | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | $\left(\right)$ | | Sul | | 13 | | | | | | | | 1 | | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | |)_ | | SW | 4 2006 | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | - | - | - | | 1 | | | 1 | | | | | |
| Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. 1 an aware that tampering with or intentionally anglabelling there sample location, SW 7 -2' Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. 1 an aware that tampering with or intentionally anglabelling there sample location, Sampled by: (Signature) Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. 1 an aware that tampering with or intentionally anglabelling there sample location, Sampled by: (Signature) Date Time Relinquished by: (Signature) Date Date Time Received by: (Signature) | | (| | | SW | 4-2' | | - | - | - | + | - | $\left \right $ | | ++ | - | | - | | |
| Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally abilitabelling. Hor Sample I acation, Sampled by: (Signature) 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally abilitabelling. Hor Sample I acation, Sampled by: (Signature) 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally abilitabelling. Hor Sample I acation, Sampled by: (Signature) 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally abilitabelling. Hor Sample I acation, Sampled by: (Signature) 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally abilitabelling. Hor Sample I acation, Sampled by: (Signature) 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally abilitabelling. Hor Sample I acation, Sampled by: (Signature) 1, (field sampler), (Signature) Date 1, (field sampler), (Signature) Date 1, (field sampler), (Signature) Date 1, (Signature) Dat | | | | | SW | 5 Surb | The sector | | - | - | | - | | | + | - | | | _ | |
| Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally asiglabelling the sample location, Sampled by: Owned the same sampled or packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally asiglabelling the sample location, Sampled by: Owned the sampled or packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Relinquished by: (Signature) Date Date 1/me 2/2/1 154/5 Constituted by: (Signature) Date Date 1/me Relinquished by: (Signature) Date | | / | | | SW | 5-2' | 16 | | | | | | | | | | | | | 1 |
| Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mighabelling. Hor sample location, samples requiring thermal preservation must be received on ice the day they are sampled or packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Additional Instructions: 1, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mighabelling. Hor sample location, sampled by: (Signature) Relinquished by: (Signature) Date Time Relinquished by: (Signature) Date Time Received by: (Signature) Date | | 1 | | | SW | 65.00 | 17 | | | | | | | | 11 | | | | | |
| Additional Instructions: 1; (field sampler), attest to the validity and authenticity of this sample. 1 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: Samples requiring thermal preservation must be received on ice the day they are sampled or packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Relinquished by: (Signature) Date Time 1: Time Relinquished by: (Signature) Date Time 1: Time Relinquished by: Signature) Date Time Received by: Signature) Date Time AVG | | 1 | | | | 6-2' | 18 | | | | | | | | | | | | | |
| Additional Instructions: I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Outful | | 5 | | | | | 19 | | | 1 | | | | | | | | | | |
| Additional Instructions: I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Outful | | | | +/ | SW | · Surb | | - | | - | 1 | 1 | 1 | | | | | | | |
| 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: ONUM Samples requiring thermal preservation must be received on ice the day they are sampled or packed in ice at an avg temp above 0 but less than 6°C on subsequent days. Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Lab Use Only Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time Time Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time Time Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time< | | | L C | | SW | 1-2 | 20 | | _ | 12- | | _ | 1 | | | - | | | | |
| I, (field sampler), attest to the validity and authenticity of this sample. Tam aware that tampering with of internet approximately some packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. date or time of collection is considered fraud and may be grounds for legal action. Sampled by: (Signature) Date Time Lab Use Only Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Lab Use Only Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time Time Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time Time Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time Time Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time Time Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Time Time Received by: (Signature) Date Time Received by: (Signature) Date Time AVG Temp °C | | | | | | the transition of the state of | w micloballing the same | le loca | tion | | | Sam | ples requi | iring therma | al preser | vation m | ust be re | ceived on ice the da | y they are sam | pled or receiv |
| Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Lab Use Only Relinquished by: (Signature) Date 5:22 pn Image: Signature) Date Time Lab Use Only Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Received op:: (Signature) Date Time Received op:: (Signature) Date Time T1 T2 T3 Relinquished by: (Signature) Date Time Received by: (Signature) Date Time T1 T2 T3 Relinquished by: (Signature) Date Time Received by: (Signature) Date Time AVG Temp °C_4 Second Attacks & Solid Second Secon | l, (field sampler | r), attest t | o the validit | y and auther | nticity of this sa | the for legal action Sampled by: | inu aude | 4 | , | | | pack | ed in ice | at an avg te | mp abov | e O but | less than (| 6 °C on subsequent o | days. | |
| Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Received by: (Signature) Date Time | Relinquished | by: (Sign | atore)/ | | | Time Received by: (Signature) | / Date | | | | | | | l on loo | | | | nly | | |
| Belinguished by: (Signature) Date Time Received by: (Signature) Date Time AVG Temp °C Secure Matrix 5, Seil, Sd., Seil, Sd., Seild Sg., Sludge, An Aqueous, O - Other Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA | Relinquished | by: (Sign | nature) | Da | L/ L/ te | Time Received by: (Signature) | Date | | Tim | e | | | | | | | 1 | | | |
| Beingurshed by: (Signature) Date Inne Received by: (Signature) AVG Temp °C AVG Temp °C Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA | Y | -h | M | | | 1545 Coutter Ch | the ald: | 120 | Tim | 1:0 | D | _ <u></u> T1 | | - | <u></u> | | | | | |
| Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA | Belinguished | by: Sign | nature) | Da | te | Received by: (Signature) | Date | | | | | A | G Ten | np°C_ | 4 | | | | | |
| Building the state of the state | Sample Matrix | s-Soil 9 | Sd - Solid Se | - Sludge, A | - Aqueous. O - C | Dther | Contain | er Ty | pe:g | - glas | s, p - | poly/ | plastic | , ag - an | nber g | lass, v | - VOA | | | |
| Note: Samples are discarded 30 days after results are reported unless other analgements are made in the made analysis and the made in the same and the same an | Nato: Sample | os are dis | scarded 30 | days after | results are rep | ported unless other arrangements are made. H | lazardous samples w | ill be r | return | ed to | client | or dis | posed o | of at the o | lient e | xpens | e. The | report for the a | nalysis of th | e 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. | samples is ap | pplicable | only to the | ose sample | s received by t | the laboratory with this COC. The liability of the | a laboratory is limited | to the | e amo | unt pa | aid for | r on th | e repor | t. | | | | | | |

Reproject Information

Chain of Custody

Page ______ of _____ Receiv

| oiect: | | | | | Bill To | | 1 | | La | ab Us | se Or | lv | | | 1.000 | TAT | EPA P | rogram |
|-----------------|-------------------|------------------|------------------------|-------------------------|--|-----------------|-----------------|-----------------|--------------|-------------|-------------|-----------|-----------|------------------|------------|--|----------------|-----------------|
| Ulett. | Tourder | Paul | 1 | | Attention: ES3 | | Lab | WO# | | | Job | Numbe | | 1D | 2D 30 | Standard | CWA | SDWA |
| oiect M | lanager: (| M. Ruc | kles | | Address: 2477 W County | | Eé | 200 | Da | | | 046 | | | \times | | | |
| ddress: | ianager. (| 1. 000 | | | City, State, Zip Hobbs , NM 88 | 5240 | | | | | Anal | ysis and | Metho | b | | - | | RCRA |
| tv. Stat | e, Zip Ro | swell. | NM | | Phone: | | | | | | | 1.0 | 1 | | | | | |
| hone: | | <u></u> | | | Email: Natalie | | 015 | 015 | | | | 1.1 | | | | 1111 | State | TTVI |
| mail | | | | | | | oy 8(| by 8(| 121 | 00 | 9 | 300.0 | | WN | × | NM CO | UT AZ | |
| eport d | ue by: | | | | | - | ROI | ROI | y 80 | / 826 | 601 | de 3(| | 1.00 | ¥ | | | |
| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride | | BGDOC | BGDOC | | Remarks | |
| | 2/21 | S | 1 | SW 8 | | 21 | | | | | | | | X | | | | _ |
| | 1 | 1 | 1 | SW 8 | | 22 | | | | | | | | (| | | | |
| | | $\left(\right)$ | | SW 9 | | 23 | | | | | | | | | | | | |
| | | | + | SW 9 | - 7' | 24 | | | | | | | | | 12 | | | |
| | $\left \right $ | | +(- | 300 1 | 2 | | | | | | | | | \mathbf{T} | | | | |
| 1 | <u> </u> | | $\left \right\rangle$ | | | 10 | | + | | - | - | | | ++ | | | | + |
| _ | <u> (</u> | $\left \right $ | | | | | - | - | - | - | + | | - | + | | | | |
| | | | - (- | | | | - | - | - | - | - | + | | +(- | | | | |
| | | | 11 | 1 | | 16.16 | | - | - | _ | - | | - | $\left \right $ | | | | |
| | | | | | | 1.50 | | | | - | - | - | _ | (| | | | |
| |) | 1 | 1 | | | | | | | | | | |) | | | | |
| Additio | nal Instru | ctions: | 1 | | | | | | | | | | | | | | | |
| I, (field sar | npler), attest i | to the validi | ty and authe | enticity of this sample | I am aware that tampering with or intentionally mislate legal action. Sampled by: | elling the same | ble loca | ation, | 7 | | | | | | | e received on ice the da han 6 °C on subsequent | | pled or receive |
| Relinquis | hed by: (Sigr | | / Da | ate 2/21 | | Date 2:22 | | Tim | | 93 | Re | ceived | on ice: | 1 | Lab Use | Only | | |
| | hed by: (Sigi | nature) | Da | ate Tim | e Received by: (Signature) | Date 2/2 | | Tim | 11:0 | | | | | | | T3 | | |
| Retinqui | hed by: Sig | nature) | | ate Tim | | Date | 2100 | Tim | | v | | | | 4 | - | | | |
| 0 | V | | | | | | - | _ | | - | | /G Tem | | harri | - | 04 | | - |
| Sample N | latrix: S - Soil, | Sd - Solid, S | g - Sludge, A | - Aqueous, O - Other | | Contair | er Ty | pe: g | - glas | is, p - | poly, | plastic, | , ag - am | iber gi | ass, v - V | UA The report for the a | nalusis of th | a shove |
| Nata Ca | malar ara di | iscorded 30 | davs after | results are report | ed unless other arrangements are made. Hazardo | ous samples w | to the | return | ed to | client | or als | posea o | t. | nent e | vhenze. | the report for the a | inarysis of th | |
| samples | is applicable | e only to th | ose sample | es received by the l | aboratory with this COC. The liability of the labora | tory is limited | to th | e anto | unt p | | onti | ie report | | - | - | | | |
| | | | | | | | | | | | 6 | 3 | 0 | n | M | iro | to | C |
| | | | | | | | | | | | 0 | - | 5 | | V | | | 6 |
| | | | | | Page | e 41 of 42 | | | | | | | | | | | | |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| | Mack Energy Da | ate Received: | 02/23/22 1 | 1:00 | Work 0 | Order ID: | E202120 |
|--|---|--------------------------------|--|------------------|----------------|---------------|-------------------|
| Phone: | (575) 390-6397 Da | ate Logged In: | 02/22/22 1 | 5:41 | Logge | d In By: | Caitlin Christian |
| Email: | Natalie@energystaffingllc.com De | le Date: | 02/24/22 1 | 7:00 (1 day TAT) | | | |
| Chain o | f Custody (COC) | | | | | | |
| 1. Does | the sample ID match the COC? | | Yes | | | | |
| 2. Does | the number of samples per sampling site location match | the COC | Yes | | | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: U | <u>PS</u> | | |
| 4. Was th | he COC complete, i.e., signatures, dates/times, requested | l analyses? | No | | | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion. | e field, | Yes | | | <u>Commen</u> | ts/Resolution |
| <u>Sample</u> | <u>Turn Around Time (TAT)</u> | | | | | | |
| 6. Did th | ne COC indicate standard TAT, or Expedited TAT? | | Yes | | No sample time | s provic | ded on COC. |
| Sample | Cooler | | | | | | |
| 7. Was a | sample cooler received? | | Yes | | | | |
| 8. If yes, | , was cooler received in good condition? | | Yes | | | | |
| 9. Was th | he sample(s) received intact, i.e., not broken? | | Yes | | | | |
| 10. Were | e custody/security seals present? | | No | | | | |
| 11. If ye | s, were custody/security seals intact? | | NA | | | | |
| 12. Was t | the sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re- | , | Yes | | | | |
| 13 If no | minutes of sampling visible ice, record the temperature. Actual sample ter | nnerature: 4º | С | | | | |
| | Container | | <u> </u> | | | | |
| | aqueous VOC samples present? | | No | | | | |
| | VOC samples collected in VOA Vials? | | NA | | | | |
| | e head space less than 6-8 mm (pea sized or less)? | | NA | | | | |
| | | | | | | | |
| | a trip blank (TB) included for VOC analyses? | | | | | | |
| 17. Was | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? | | NA | | | | |
| 17. Was 18. Are 1 | non-VOC samples collected in the correct containers? | collected? | | | | | |
| 17. Was 18. Are 1 19. Is the | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers | collected? | NA Yes | | | | |
| 17. Was 18. Are 1 19. Is the Field La | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers | | NA Yes | | | | |
| Was Are 1 Is the Field La Were | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel | | NA Yes | | | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? | | NA Yes Yes | | | | |
| 17. Was 18. Are n 19. Is the Field La 20. Were | non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? | | NA Yes Yes Yes | | | | |
| 17. Was 18. Are a 19. Is the Field La 20. Were Sample | non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> | ation: | NA Yes Yes No No | | | | |
| 17. Was 18. Are a 19. Is the Field La 20. Were 3 0 0 5 5 0 0 5 5 0 0 0 5 5 0 0 0 5 10 0 0 0 | non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers ubel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese | ation: | NA Yes Yes No No | | | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were Sample 21. Does 22. Are 5 | non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers ubel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese sample(s) correctly preserved? | ation: erved? | NA Yes Yes No No No | | | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lat | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta | ation: erved? | NA Yes Yes No No | | | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lat Multiph | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta tase Sample Matrix | ation: erved? ıls? | NA Yes Yes No No NA No | | | | |
| 17. Was 18. Are n 19. Is the Field La 20. Were 20. Were 21. Does 22. Are s 24. Is lat Multiph 26. Does | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta tase Sample Matrix s the sample have more than one phase, i.e., multiphase? | ation: erved? ils? | NA Yes Yes No No NA No | | | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lat Multiph 26. Does | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta tase Sample Matrix | ation: erved? ils? | NA Yes Yes No No NA No | | | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lat Multiph 26. Does 27. If ye | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta mase Sample Matrix s the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyzed tract Laboratory | ation: erved? ils? d? | NA Yes Yes No No NA No | | | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 5 24. Is lat <u>Multiph</u> 26. Does 27. If ye <u>Subcont</u> 28. Are 5 | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta tase Sample Matrix s the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyzed | ation: erved? ils? d? | NA Yes Yes No No NA No | | | | |

e

Date

envirotech Inc.

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

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5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: T

Thunderbay

Work Order: E202121

Job Number: 20046-0001

Received: 2/23/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 2/24/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 2/24/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E202121 Date Received: 2/23/2022 11:05:00AM

Natalie Gladden,



Page 152 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/23/2022 11:05:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | Sample Sum | mary | | |
|---------------|---|--|--|---|
| | Project Name: Project Number: Project Manager: | Thunderbay 20046-0001 Natalie Gladden | | Reported: 02/24/22 16:43 |
| Lab Sample ID | Matrix | Sampled | Received | Container |
| E202121-01A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-02A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-03A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-04A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-05A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-06A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-07A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-08A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-09A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-10A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-11A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-12A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-13A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-14A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-15A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-16A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-17A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| E202121-18A | Soil | 02/17/22 | 02/23/22 | Glass Jar, 4 oz. |
| | E202121-01A E202121-02A E202121-03A E202121-03A E202121-05A E202121-05A E202121-06A E202121-07A E202121-09A E202121-09A E202121-10A E202121-11A E202121-12A E202121-13A E202121-15A E202121-16A E202121-17A | Lab Sample ID Matrix E202121-01A Soil E202121-01A Soil E202121-02A Soil E202121-03A Soil E202121-03A Soil E202121-04A Soil E202121-05A Soil E202121-05A Soil E202121-05A Soil E202121-06A Soil E202121-07A Soil E202121-07A Soil E202121-08A Soil E202121-10A Soil E202121-10A Soil E202121-13A Soil E202121-13A Soil E202121-15A Soil | Project Number: Project Manager: 20046-0001 Natalie Gladden Lab Sample ID Matrix Sampled E202121-01A Soil 02/17/22 E202121-02A Soil 02/17/22 E202121-03A Soil 02/17/22 E202121-04A Soil 02/17/22 E202121-04A Soil 02/17/22 E202121-05A Soil 02/17/22 E202121-07A Soil 02/17/22 E202121-08A Soil 02/17/22 E202121-08A Soil 02/17/22 E202121-09A Soil 02/17/22 E202121-10A Soil 02/17/22 E202121-11A Soil 02/17/22 E202121-13A Soil 02/17/22 | Project Name: Project Number: Project Manager: Thunderbay 20046-0001 Natalie Gladden Lab Sample ID Matrix Sampled Received E202121-01A Soil 02/17/22 02/23/22 E202121-02A Soil 02/17/22 02/23/22 E202121-03A Soil 02/17/22 02/23/22 E202121-04A Soil 02/17/22 02/23/22 E202121-05A Soil 02/17/22 02/23/22 E202121-05A Soil 02/17/22 02/23/22 E202121-05A Soil 02/17/22 02/23/22 E202121-05A Soil 02/17/22 02/23/22 E202121-07A Soil 02/17/22 02/23/22 E202121-07A Soil 02/17/22 02/23/22 E202121-08A Soil 02/17/22 02/23/22 E202121-07A Soil 02/17/22 02/23/22 E202121-10A Soil 02/17/22 02/23/22 E202121-11A Soil 02/17/22 02/23/22 E202121-13A Soil 0 |



| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Num Project Mana | ber: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:43:27PM |
|--|---|------------|------------------------------------|----------|----------|---|
| | | SP 3 Surf | | | | |
| | | E202121-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| olatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | yst: IY | | Batch: 2209019 |
| enzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| thylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| oluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| -Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| otal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 95.6 % | 70-130 | 02/23/22 | 02/23/22 | |
| onhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | yst: IY | | Batch: 2209019 |
| asoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Anal | yst: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: n-Nonane | | 83.2 % | 50-200 | 02/23/22 | 02/24/22 | |
| anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | yst: RAS | | Batch: 2209024 |
| hloride | 65.4 | 20.0 | 1 | 02/23/22 | 02/23/22 | |

Sample Data



Sample Data

| | b | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 4 Surf | | | | |
| | | E202121-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 95.4 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 83.7 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2209024 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 5 Surf | | | | |
| | | E202121-03 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.7 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 82.3 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209024 |
| Chloride | 1630 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 3 | ample D | ลเล | | | | |
|--|--------------|----------------------------|--------------|----------|----------|---------------------|--|
| Mack Energy | Project Name | e: Thu | nderbay | | | | |
| 7 W. Compress Road | Project Numb | Project Number: 20046-0001 | | | | | |
| Artesia NM, 88210 | Project Mana | ger: Nata | alie Gladden | | | 2/24/2022 4:43:27PM | |
| | | SP 6 Surf | | | | | |
| | | E202121-04 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209019 | |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | | |
| Foluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.6 % | 70-130 | 02/23/22 | 02/23/22 | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209019 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/23/22 | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2209029 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | | |
| Surrogate: n-Nonane | | 85.5 % | 50-200 | 02/23/22 | 02/24/22 | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2209024 | |
| Chloride | 428 | 20.0 | 1 | 02/23/22 | 02/23/22 | | |
| | | | | | | | |



Sample Data

| | 5 | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | ber: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 7 Surf | | | | |
| | | E202121-05 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Benzene | ND | 0.0500 | 2 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0500 | 2 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0500 | 2 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0500 | 2 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.100 | 2 | 02/23/22 | 02/23/22 | |
| Fotal Xylenes | ND | 0.0500 | 2 | 02/23/22 | 02/23/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.2 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 40.0 | 2 | 02/23/22 | 02/23/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 83.9 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209024 |
| Chloride | 68.9 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 5 | ampic D | | | | |
|--|--|------------|------------------------------------|-------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 8 Surf | | | | |
| | | E202121-06 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.1 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | kg Analyst: JL | | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 85.5 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209024 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |



Sample Data

| | D | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 9 Surf | | | | |
| | | E202121-07 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/23/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.8 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | g Analyst: JL | | Batch: 2209029 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 76.3 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209024 |
| Chloride | 425 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |



Sample Data

| | 5 | ampic D | aia | | | |
|--|---|------------|------------------------------------|-------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 10 Surf | | | | |
| | | E202121-08 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.6 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 86.0 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2209024 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| | | | | | | |

Sample Data

| | 0 | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 11 Surf | | | | |
| | | E202121-09 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.9 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | ıt: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 84.6 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209024 |
| Chloride | 289 | 20.0 | 1 | 02/23/22 | 02/23/22 | |
| nioriae | 209 | 20.0 | 1 | 02123122 | 02123122 | |



Sample Data

| | 5 | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 12 Surf | | | | |
| | | E202121-10 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| oluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| -Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 94.6 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 85.6 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2209024 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| | | | | | | |



Sample Data

| | D. | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 13 Surf | | | | |
| | | E202121-11 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.9 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.8 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 82.8 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2209024 |
| Chloride | 514 | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 14 Surf | | | | |
| | | E202121-12 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 93.9 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | it: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 86.5 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209024 |
| Chloride | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| | | | | | | |



Sample Data

| | 6 | ample D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | ber: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 15 Surf | | | | |
| | | E202121-13 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.1 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.4 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 93.7 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2209024 |
| Chloride | 28.1 | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| | | | | | | |



Sample Data

| | 3 | ample D | ลเล | | | |
|--|---------------|------------|-------------|----------|----------|---------------------|
| Mack Energy | Project Name: | Thu | nderbay | | | |
| 7 W. Compress Road | Project Numb | Reported: | | | | |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladden | | | 2/24/2022 4:43:27PM |
| | | SP 3 - 2' | | | | |
| | | E202121-14 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.0 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.8 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 86.2 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2209024 |
| Chloride | 732 | 20.0 | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | 5 | ample D | ala | | | |
|--|---------------------------------|------------|--------------------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Number | | nderbay 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | | lie Gladden | | | 2/24/2022 4:43:27PM |
| | | SP 5 - 6' | | | | |
| | | E202121-15 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2209019 |
| Benzene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| foluene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.100 | 2 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.8 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: IY | | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 40.0 | 2 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 86.7 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209024 |
| Chloride | 193 | 20.0 | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | 6 | ample D | ala | | | | | |
|--|------------------------------|------------|--------------------|------------|---------------------|----------------|--|--|
| Mack Energy 7 W. Compress Road | Project Name Project Numl | | nderbay 46-0001 | | | Reported: | | |
| Artesia NM, 88210 | Project Mana | iger: Nata | alie Gladden | | 2/24/2022 4:43:27PM | | | |
| | | SP 4 - 6' | | | | | | |
| | | E202121-16 | | | | | | |
| | | Reporting | | | | | | |
| Analyte | Result | Limit | Dilutior | n Prepared | Analyzed | Notes | | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Ana | alyst: IY | | Batch: 2209019 | | |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | | | |
| Ithylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | | | |
| oluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | | | |
| -Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | | | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | | | |
| Total Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | | | |
| urrogate: 4-Bromochlorobenzene-PID | | 92.9 % | 70-130 | 02/23/22 | 02/24/22 | | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Ana | alyst: IY | | Batch: 2209019 | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | | | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/23/22 | 02/24/22 | | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Ana | alyst: JL | | Batch: 2209029 | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | | | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | | | |
| urrogate: n-Nonane | | 87.3 % | 50-200 | 02/23/22 | 02/24/22 | | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Ana | alyst: RAS | | Batch: 2209024 | | |
| Chloride | 377 | 20.0 | 1 | 02/23/22 | 02/24/22 | | | |
| | | | | | | | | |



Sample Data

| | 6 | ample D | ala | | | | | | |
|--|------------------------------|------------|--------------------|----------|----------|---------------------|--|--|--|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | er: 2004 | nderbay 46-0001 | | | Reported: | | | |
| Artesia NM, 88210 | Project Manag | ger: Nata | alie Gladden | | | 2/24/2022 4:43:27PM | | | |
| | | SP 7 - 6' | | | | | | | |
| | | E202121-17 | | | | | | | |
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes | | | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 | | | |
| Benzene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | | | | |
| Ethylbenzene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | | | | |
| Toluene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | | | | |
| p-Xylene | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | | | | |
| o,m-Xylene | ND | 0.100 | 2 | 02/23/22 | 02/24/22 | | | | |
| Fotal Xylenes | ND | 0.0500 | 2 | 02/23/22 | 02/24/22 | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.4 % | 70-130 | 02/23/22 | 02/24/22 | | | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2209019 | | | |
| Gasoline Range Organics (C6-C10) | ND | 40.0 | 2 | 02/23/22 | 02/24/22 | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/24/22 | | | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2209029 | | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | | | | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | | | | |
| Surrogate: n-Nonane | | 94.6 % | 50-200 | 02/23/22 | 02/24/22 | | | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2209024 | | | |
| Chloride | 234 | 20.0 | 1 | 02/23/22 | 02/24/22 | | | | |
| | | | | | | | | | |



Sample Data

| | 5 | ample D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/24/2022 4:43:27PM |
| | | SP 9 - 2' | | | | |
| | | E202121-18 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | yst: IY | | Batch: 2209019 |
| Benzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Foluene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/23/22 | 02/24/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.9 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | yst: IY | | Batch: 2209019 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Anal | yst: JL | | Batch: 2209029 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 98.8 % | 50-200 | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | yst: RAS | | Batch: 2209024 |
| Chloride | 352 | 20.0 | 1 | 02/23/22 | 02/24/22 | |
| | | | | | | |



QC Summary Data

| | | QC D | u | ing Dutt | • | | | | |
|-------------------------------------|----------------------|--------------------|------------------|------------------|-------------|------------------|--------------|----------------|---------------------|
| Mack Energy | | Project Name: | | hunderbay | | | | | Reported: |
| 7 W. Compress Road | | Project Number: | | 0046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager: | N | atalie Gladden | | | | | 2/24/2022 4:43:27PM |
| | | Volatile O | rganics b | by EPA 802 | 1B | | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209019-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Benzene | ND | 0.0250 | | | | | | | · · |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| o-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.61 | 0.0250 | 8.00 | | 95.1 | 70-130 | | | |
| LCS (2209019-BS1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Benzene | 4.43 | 0.0250 | 5.00 | | 88.6 | 70-130 | | | |
| Ethylbenzene | 4.67 | 0.0250 | 5.00 | | 93.4 | 70-130 | | | |
| Toluene | 4.88 | 0.0250 | 5.00 | | 97.6 | 70-130 | | | |
| o-Xylene | 4.64 | 0.0250 | 5.00 | | 92.7 | 70-130 | | | |
| p,m-Xylene | 9.48 | 0.0500 | 10.0 | | 94.8 | 70-130 | | | |
| Total Xylenes | 14.1 | 0.0250 | 15.0 | | 94.1 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.27 | | 8.00 | | 90.9 | 70-130 | | | |
| Matrix Spike (2209019-MS1) | | | | Source:] | E202121- | 03 | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | 4.54 | 0.0250 | 5.00 | ND | 90.8 | 54-133 | | | |
| Ethylbenzene | 4.85 | 0.0250 | 5.00 | ND | 97.0 | 61-133 | | | |
| Toluene | 5.02 | 0.0250 | 5.00 | ND | 100 | 61-130 | | | |
| o-Xylene | 4.81 | 0.0250 | 5.00 | ND | 96.2 | 63-131 | | | |
| p,m-Xylene | 9.86 | 0.0500 | 10.0 | ND | 98.6 | 63-131 | | | |
| Total Xylenes | 14.7 | 0.0250 | 15.0 | ND | 97.8 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.63 | | 8.00 | | 95.3 | 70-130 | | | |
| Matrix Spike Dup (2209019-MSD1) | | | | Source: 1 | E202121- | 03 | Prepared: 0 | 2/23/22 A | analyzed: 02/23/22 |
| Benzene | 4.68 | 0.0250 | 5.00 | ND | 93.5 | 54-133 | 2.88 | 20 | |
| | | | | | 00.7 | 61-133 | 2.72 | 20 | |
| | 4.98 | 0.0250 | 5.00 | ND | 99.7 | 01-155 | 2.72 | 20 | |
| Ethylbenzene | | 0.0250 0.0250 | 5.00 5.00 | ND ND | 103 | 61-130 | 2.72 | 20 | |
| Ethylbenzene Toluene o-Xylene | 4.98 | | | | | | | | |
| Ethylbenzene Toluene | 4.98 5.16 | 0.0250 | 5.00 | ND | 103 | 61-130 | 2.72 | 20 20 20 | |
| Ethylbenzene Toluene o-Xylene | 4.98 5.16 4.94 | 0.0250 0.0250 | 5.00 5.00 | ND ND | 103 98.8 | 61-130 63-131 | 2.72 2.63 | 20 20 | |



OC Summary Data

| | | QC D | umm | ii y Data | | | | | |
|--|-----------------|--|-------------------------|--|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 2/24/2022 4:43:27PM |
| | Noi | nhalogenated (| Organics | by EPA 801 | 5D - G | RO | | | 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 (2209019-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.08 | | 8.00 | | 101 | 70-130 | | | |
| LCS (2209019-BS2) | | | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | 44.6 | 20.0 | 50.0 | | 89.2 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.24 | | 8.00 | | 103 | 70-130 | | | |
| Matrix Spike (2209019-MS2) | | | | Source: I | 202121- | 03 | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | 46.6 | 20.0 | 50.0 | ND | 93.2 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.30 | | 8.00 | | 104 | 70-130 | | | |
| Matrix Spike Dup (2209019-MSD2) | | | | Source: I | 202121- | 03 | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Gasoline Range Organics (C6-C10) | 46.4 | 20.0 | 50.0 | ND | 92.9 | 70-130 | 0.336 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.18 | | 8.00 | | 102 | 70-130 | | | |



QC Summary Data

| | | QC D | u 111111 | ary Data | | | | | |
|--|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 2/24/2022 4:43:27PM |
| | Nonh | alogenated Org | anics by | y 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 (2209029-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 44.2 | | 50.0 | | 88.3 | 50-200 | | | |
| LCS (2209029-BS1) | | | | | | | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 507 | 25.0 | 500 | | 101 | 38-132 | | | |
| Surrogate: n-Nonane | 40.0 | | 50.0 | | 79.9 | 50-200 | | | |
| Matrix Spike (2209029-MS1) | | | | Source: F | 202121- | 10 | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 499 | 25.0 | 500 | ND | 99.7 | 38-132 | | | |
| Surrogate: n-Nonane | 42.9 | | 50.0 | | 85.7 | 50-200 | | | |
| Matrix Spike Dup (2209029-MSD1) | | | | Source: E | 202121- | 10 | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 490 | 25.0 | 500 | ND | 97.9 | 38-132 | 1.79 | 20 | |
| Surrogate: n-Nonane | 40.8 | | 50.0 | | 81.6 | 50-200 | | | |



QC Summary Data

| | | $\mathbf{x} \mathbf{v} \mathbf{v}$ | u | ary Date | | | | | |
|--|-----------------|---|-------------------------|---|------------------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager | 2 | Thunderbay 20046-0001 Vatalie Gladder | 1 | | | | Reported: 2/24/2022 4:43:27PM |
| | | Anions | by EPA | 300.0/90564 | ۱ | | | | 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 (2209024-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Chloride LCS (2209024-BS1) | ND | 20.0 | | | | | Prepared: 0 | 2/23/22 A | nalyzed: 02/23/22 |
| Chloride | 252 | 20.0 | 250 | G | 101 | 90-110 | D 10 | 2/22/22 | 1 1 02/24/22 |
| Matrix Spike (2209024-MS1) | | | | | E202121- | | Prepared: 0 | 2/23/22 A | nalyzed: 02/24/22 |
| Chloride | 386 | 20.0 | 250 | 65.4 | 128 E202121-0 | 80-120 | Dranarad: 0 | א ררוברור | M2 .nalyzed: 02/24/22 |
| Matrix Spike Dup (2209024-MSD1) | | | | | - | - | | | |
| Chloride | 400 | 20.0 | 250 | 65.4 | 134 | 80-120 | 3.50 | 20 | M2 |

QC Summary Report Comment:

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



| Mack Energy | Project Name: | Thunderbay | |
|--------------------|------------------|-----------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Natalie Gladden | 02/24/22 16:43 |

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



| liont: M | acic E | ecau | | | | Bill To | | T | | 12 | ab Us | o On | h. | - | | TAT | | FDA D | rogram |
|-----------------------------|---------------------|------------------|------------|---------------------------------------|------------------|--|---------------------------|-----------------|-----------------|--------------|-------------|--|----------------|---------------|--------|-------|---|------------------------------------|----------------|
| roject: | Thunder | hau | | | Att | ention: E.SS | | Lah | WO# | | | | Number | 1D | 2D] | | Standard | CWA | SDWA |
| oject N | Thunder Nanager: | M. BU | cKle | 5 | Add | Iress: 2427 Comm , State, Zip Hobbs, M | ty Rd | Ea | WO# | 112 | 1- | | 46-00 | | X | | | | |
| dress: | | | | | City | , State, Zip HOBbs, N | 1 M | | | | | Analy | sis and Me | thod | | | - | | RCRA |
| | e, Zip La | ke Ar | thur, | NM | Pho | one: | | | | | | | | 1.1 | | | | Chatta | |
| one: nail: | | | | | Em | ail: Natalie | | 8015 | 8015 | - | | | 0 | | | | NM CO | State | TX |
| port d | ue by: | | | | | | | O by | Vd O | 8021 | 3260 | 010 | 300. | NM | × | | | | |
| Time | Date | | No. of | Camala ID | | | Lab | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC | Я | | PL- | Remarks | |
| ampled | Sampled | Matrix | Containers | Sample ID | | | Numbe | DRC | GRC | BTE | VOC | Met | Chic | BGC | BGDOC | | 1 | Remarks | P |
| | 2/17 | 2 | 1 | SP | 3 50 | re | 1 | 15 | | | | | 100 | \mathbf{X} | 1 | | | | |
| | 1 | , | | SP | | | 2 | | | | | | | 1 | | | | | |
| | | -(| 1 | - | 4 SU | | | - | | | | | | \rightarrow | | _ | | | |
| | | | | SP | 5 JUN | - t | 3 | | | | | | | | - | | | | |
| | |) | | SP | 6 Sur | f | 4 | | | | | | | | | | | | |
| | (| 1 | 1 | SP | | | 5 | | | | | | | 1 | | | 1 | | |
| | | $\left \right $ | -(- | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | 7 Sur | | 1 | - | - | | | - | | \rightarrow | | | - | | |
| | | | | SP | 8 Sur | 4 | 6 | - | | | | | - | (| | _ | _ | | |
| | (| | | SP | 9 501 | r | 17 | | | | | | | $ \rangle$ | | | | | |
| | | | 1 | SP | 10 SU | orf | 8 | 1 | | | | T | | 5 | | | | | |
| | (| | | SP | 11 50 | | 9 | | | | | | | 5 | | | | | |
| |) | / | 12 | SP | 12 5 | | 10 | - | - | - | - | - | | -5 | | | - | | |
| 1.1 | | | | 54 | 16 3 | UCY | 10 | 1 | | _ | _ | | | | | | _ | | |
| | al Instruc | | | | | | | | | | | | | | | | | | |
| field sam | pler), attest to | o the validity | and authe | nticity of this sa | mple. I am aware | that tampering with or intentiona Sampled by: | Ily mislabelling the same | le locati | on, | | | 1. | | | | | ed on ice the day i on subsequent da | a set of the set of the set of the | led or receive |
| | ed by: (Signa | | Da | te | Time | Received by: (Signature) | Date | | Time | | | | | l | ab Use | Only | | - | |
| and and 2/17 S:10PM Som for | | | | | 1 2:22 | :22 | - | 500 | 0 | Rece | eived on i | ce: 🜔 | VIN | | | | | | |
| linquish | ed by: (Signa | ature | Da | | Time 1545 | Received by: (Signature) | ten 2/23 | 120 | Time | :05 | - | T1 | | T2 | | | <u>T3</u> | | |
| linquish | ed by: (Signa | ature) | Da | | Time | Received by: (Signature) | Date | | Time | | | 0 | | | | | | | |
| | | | | | | | | - | | | | _ | Temp °C | | | | | | |
| | | | | Aqueous, O - C | | ner arrangements are made. | | | | | | | astic, ag - | | | | ort for the and | lucis of the | abovo |
| | | | | | | ith this COC. The liability of the | | | | | | | | e chent ex | Jense. | merep | ort for the affe | inysis or the | above |

Rel^project Information

| | | F | | | | | | - | | | 1 | - | 1 | | _ | | | | | | | |
|------------------|---|-----------------|----------------------|------------------------|--|---|---------------------------------|---|-----------------|--------------|---------------|--|--|-----------|--------|-------|-----------|-------------|-----------------|--|--|--|
| ent: N | hack Thund lanager: | erbar | 39 | | Atte | Bill To | | Lab Use Only Lab WO# Job Numl E202121 20040 | | | | | | 1D | | TAT | ndard | EPA Program | | | | |
| oject N | lanager: | M. BU | ckles | , | Add | ress: 2.427 COUN | ty | Fo | 205 | 212 | 1 | 20 | 046-0001 | 10 | X | 5 514 | naara | Curr | 50111 | | | |
| dress: | | | | | City | ntion: ESS ress: 2427 Coun State, Zip Hobbs | NM | | | | | | sis and Meth | | | | | | RCRA | | | |
| | e, Zip La | ake A | rthur | , NM | Pho | ne: | | | | | | | | | | | | | | | | |
| one: nail: | | | | | Ema | iii: Natalie | | 8015 | 8015 | | | | | | 6.1 | | NMLCO | State | | | | |
| port di | ue bv: | | | | | | | O by | Vd O | 8021 | 3260 | 010 | 300. | NM | X | | \times | | | | | |
| Time ampled | Date Sampled | Matrix | No. of Containers | Sample ID | | | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC | BGDOC | | | Remarks | s | | | |
| | 2/17 | S | 1. | Sp | 13 SU | rf | IT | | | | | | | X | | | | | | | | |
| | (| 1 | (| SP | 14 30 | | 12 | | | | | | | 1 | | | | | | | | |
| | | | | SP | 15 50 | rf | 13 | | | | | | | | | - | | | | | | |
| | / | | | SP | 3-2' | | 14 | | | | | | | | | | | | | | | |
| | | (| | SP | 5-6' | | 15 | | | | | | | | | | | | | | | |
| | | \backslash | | - | 4-6' | | 16 | | | | | | | | | | | | | | | |
| | \langle | | | | 7 - 6' | | 17 | | | | | | | _(| | | | | | | | |
| | | | | SP | 9 - 2' | | 18 | | | | | | | | | | | | _ | | | |
| | 5 | \rightarrow | (| | | | | - | | | | | | | | - | <u>.</u> | | _ | | | |
| | - | (| | 2 | | | | | | | | | |) | | | | | | | | |
| dition | al Instruc | tions: | | | | | | | | | | | | | | | | | | | | |
| | | | | | | hat tampering with or intentional | mislabelling the samp | le locati | on, | | | | es requiring therm d in ice at an avg t | | | | | | pled or receive | | | |
| en als restances | and some many second | | d fraud and Date | | s for legal action. Time | Received by: Signature) | Date | | Time | - | | | | L | ab Use | Only | | - | | | | |
| | ine Time Received by: (Signature) Date 2/17 5:10 PM | | h 2:22. | 22 | 1. | 500 | 2 | Rece | eived on ice | - | N | and a second | | | | | | | | | | |
| linquish | ed by: (Sign | ature) | Dat | .22.22 | Time -1545 | Received by: (Signature) | ten Date | 22 | Time | 1:05 | - | T1 | | <u>T2</u> | | | <u>T3</u> | | | | | |
| linquish | ed by: (Sign | ature) | Dat | e | Time | Received by: (Signature) | Date | | Time | | | AVG | G Temp °C_ | 4 | | | | | | | | |
| nple Mat | rix: S - Soil, S | d - Solid, Sg - | Sludge, A - | Aqueous, O - Ot | ther | | Containe azardous samples wi | | | | p - pc | oly/p | lastic, ag - ar | | | | | _ | | | | |

Page 180 of 508
Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy Da | ate Received: | 02/23/22 1 | 1:05 | Work Order ID: E202121 |
|------------|--|----------------|-------------|-------------------|----------------------------------|
| Phone: | (575) 390-6397 Da | ate Logged In: | 02/23/22 08 | 8:13 | Logged In By: Caitlin Christian |
| Email: | Natalie@energystaffingllc.com D | ue Date: | 02/24/22 1 | 7:00 (1 day TAT) | |
| Chain of | f Custody (COC) | | | | |
| 1. Does t | the sample ID match the COC? | | Yes | | |
| 2. Does t | the number of samples per sampling site location match | the COC | Yes | | |
| 3. Were s | samples dropped off by client or carrier? | | Yes | Carrier: <u>U</u> | JPS |
| 4. Was th | ne COC complete, i.e., signatures, dates/times, requested | l analyses? | No | | |
| 5. Were a | all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion. | e field, | Yes | | Comments/Resolution |
| Sample ' | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | e COC indicate standard TAT, or Expedited TAT? | | Yes | | No sample times provided on COC. |
| Sample | <u>Cooler</u> | | | | |
| 7. Was a | sample cooler received? | | Yes | | |
| 8. If yes, | was cooler received in good condition? | | Yes | | |
| 9. Was tł | ne sample(s) received intact, i.e., not broken? | | Yes | | |
| 10. Were | e custody/security seals present? | | No | | |
| 11. If yes | s, were custody/security seals intact? | | NA | | |
| 12. Was t | he sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re minutes of sampling | · | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sample ter | nperature: 4° | С | | |
| | Container | | _ | | |
| | aqueous VOC samples present? | | No | | |
| | VOC samples collected in VOA Vials? | | NA | | |
| 16. Is the | e 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 1 | non-VOC samples collected in the correct containers? | | Yes | | |
| 19. Is the | appropriate volume/weight or number of sample containers | s collected? | Yes | | |
| Field La | bel | | | | |
| 20. Were | e field sample labels filled out with the minimum inform | ation: | | | |
| | Sample ID? | | Yes | | |
| | Date/Time Collected? | | No | I | |
| | Collectors name? | | No | | |
| | <u>Preservation</u> s the COC or field labels indicate the samples were prese | erved? | No | | |
| | sample(s) correctly preserved? | | NA | | |
| | o filteration required and/or requested for dissolved meta | als? | No | | |
| | ase Sample Matrix | ····· | 110 | | |
| | s the sample have more than one phase, i.e., multiphase? | | Na | | |
| | s, does the COC specify which phase(s) is to be analyzed | | No NA | | |
| | | u. | NA | | |
| | ract Laboratory | | λт. | | |
| | 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 | r: na |

B

Date

envirotech Inc.

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





5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: T

Thunderbay

Work Order: E202122

Job Number: 20046-0001

Received: 2/23/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 2/24/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 2/24/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E202122 Date Received: 2/23/2022 11:05:00AM

Natalie Gladden,



Page 183 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/23/2022 11:05:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | | Sample Sum | mary | | |
|--|---------------|--|---|----------|---------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | Thunderbay 20046-0001 Natalie Gladden | | Reported: 02/24/22 16:46 |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| P 18 - Surf | E202122-01A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| SP 17 - Surf | E202122-02A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 13 - 8' | E202122-03A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 11 - 6' | E202122-04A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 15 - 6' | E202122-05A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 17 - 6' | E202122-06A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 20 - 6' | E202122-07A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 19 - 4' | E202122-08A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 12 - 4' | E202122-09A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 16 - Surf | E202122-10A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 14 - 4' | E202122-11A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 16 - 8' | E202122-12A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 10 - 10' | E202122-13A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 6 - 10' | E202122-14A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 21 - 6' | E202122-15A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 18 - 4' | E202122-16A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 19 - Surf | E202122-17A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 20 - Surf | E202122-18A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |
| P 21 - Surf | E202122-19A | Soil | 02/18/22 | 02/23/22 | Glass Jar, 4 oz. |



| | | impic D | | | | | |
|--|---|--------------------|-----------------------------------|----------|----------|----------------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 1lie Gladde | n | | | Reported: 2/24/2022 4:46:41PM |
| | S | SP 18 - Surf | | | | | |
| | | E202122-01 | | | | | |
| Analyte | Result | Reporting Limit | | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 89.4 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.1 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 89.4 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.1 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORC |) mg/kg | mg/kg | mg/kg Analyst: JL | | | Batch: 2209028 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 97.7 % | 50-200 | | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 1920 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |

Sample Data



| | St | ample D | ara | | | | |
|--|--------------------------------|--------------|---|-------------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numbe | | Thunderbay 20046-0001 Natalie Gladden | | | | Reported: |
| Artesia NM, 88210 | Project Manag | | | | | | 2/24/2022 4:46:41PM |
| | S | SP 17 - Surf | | | | | |
| | - | E202122-02 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.1 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.1 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 91.6 % | 50-200 | | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 163 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | 50 | ample D | ala | | | | |
|--|---------------|----------------------------|---------------|---------|----------|----------------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | | |
| 7 W. Compress Road | 5 | Project Number: 20046-0001 | | | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Nata | ilie Gladde | en | | | 2/24/2022 4:46:41PM |
| | | SP 13 - 8' | | | | | |
| | | E202122-03 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 93.3 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 98.4 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | g Analyst: IY | | | Batch: 2209020 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 93.3 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 98.4 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | mg/kg A | | : JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 97.1 % | 50-200 | | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2209023 |
| Chloride | 346 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | 50 | ample D | ala | | | | |
|--|---------------|------------|-------------------|---------|----------|----------------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | | |
| 7 W. Compress Road | Project Numbe | 5 | | | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Nata | lie Gladde | en | | | 2/24/2022 4:46:41PM |
| | | SP 11 - 6' | | | | | |
| |] | E202122-04 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 89.7 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 89.7 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | mg/kg Analyst: JL | | | Batch: 2209028 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/23/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 98.7 % | 50-200 | | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2209023 |
| Chloride | 227 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ampic D | | | | | |
|--|---|------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 Ilie Gladdo | en | | | Reported: 2/24/2022 4:46:41PM |
| | | SP 15 - 6' | | | | | |
| | | E202122-05 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/23/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: n-Nonane | | 92.8 % | 50-200 | | 02/23/22 | 02/23/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 489 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | uu | | | | |
|--|---|------------|-----------------------------------|-------------|----------|----------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladde | en | | | Reported: 2/24/2022 4:46:41PM |
| | | SP 17 - 6' | | | | | |
| | | E202122-06 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 89.2 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.4 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 89.2 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.4 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 98.8 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 288 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | uu | | | | |
|--|--|------------|-------------|---------|----------|----------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | | |
| 7 W. Compress Road | Project Number: 20046-0001 Project Manager: Natalie Gladden | | | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | llie Gladde | en | | | 2/24/2022 4:46:41PM |
| | | SP 20 - 6' | | | | | |
| | | E202122-07 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 90.3 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 90.3 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | л | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | 25.4 | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 105 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | RAS | | Batch: 2209023 |
| Chloride | 279 | 100 | | 5 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | uu | | | | |
|--|---|------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladde | en | | | Reported: 2/24/2022 4:46:41PM |
| | | SP 19 - 4' | | | | | |
| | | E202122-08 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 91.2 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 91.2 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 97.3 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 91.9 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | D | ample D | uu | | | | |
|--|------------------------------|------------|--------------------|----------|----------|----------|----------------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | | nderbay 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Mana | | ilie Gladde | 'n | | | 2/24/2022 4:46:41PM |
| Alusia IVII, 00210 | Tiojeet Mana | gei. Nati | ine Gladde | 11 | | | 2/20/2022 1.10.111 M |
| | | SP 12 - 4' | | | | | |
| | | E202122-09 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0500 | | 2 | 02/23/22 | 02/23/22 | |
| Ethylbenzene | ND | 0.0500 | | 2 | 02/23/22 | 02/23/22 | |
| Toluene | ND | 0.0500 | | 2 | 02/23/22 | 02/23/22 | |
| o-Xylene | ND | 0.0500 | | 2 | 02/23/22 | 02/23/22 | |
| o,m-Xylene | ND | 0.100 | | 2 | 02/23/22 | 02/23/22 | |
| Total Xylenes | ND | 0.0500 | | 2 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 94.2 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 106 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: Toluene-d8 | | 99.7 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 40.0 | | 2 | 02/23/22 | 02/23/22 | |
| Surrogate: Bromofluorobenzene | | 94.2 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 106 % | 70-130 | | 02/23/22 | 02/23/22 | |
| urrogate: Toluene-d8 | | 99.7 % | 70-130 | | 02/23/22 | 02/23/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | ЛL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 97.7 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 138 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



| | 5 | ample D | ala | | | | |
|--|--------------|--------------|------------|---------|----------|----------|---------------------|
| Mack Energy | Project Name | e: Thu | nderbay | | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | ilie Gladd | en | | | 2/24/2022 4:46:41PM |
| | | SP 16 - Surf | | | | | |
| | | E202122-10 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | : JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 96.5 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2209023 |
| Chloride | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | | | | | |
|--|---------------------------------|------------|------------------------|----------|----------|----------|---|
| Mack Energy | Project Name: | | nderbay | | | | |
| 7 W. Compress Road Artesia NM, 88210 | Project Number Project Manag | | 46-0001 ilie Gladde | an | | | Reported: 2/24/2022 4:46:41PM |
| Alusia INN, 80210 | i lojeet Mallag | - | | -11 | | | 2/24/2022 4.40.411 W |
| | | SP 14 - 4' | | | | | |
| | | E202122-11 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.9 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.9 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 97.5 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | RAS | | Batch: 2209023 |
| Chloride | 94.8 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | | | | | |
|--|------------------------------|------------|--------------------|----------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | | nderbay 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | | ilie Gladd | en | | | 2/24/2022 4:46:41PM |
| | | SP 16 - 8' | | | | | |
| | | E202122-12 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | : ЛL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 93.8 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 265 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | | | | | |
|--|---------------------------------|-------------|--------------------|----------|----------|----------|---|
| Mack Energy | Project Name: | | nderbay 16-0001 | | | | Der erte de |
| 7 W. Compress Road Artesia NM, 88210 | Project Number Project Manag | | lie Gladde | en | | | Reported: 2/24/2022 4:46:41PM |
| Antoia 1010, 60210 | - | | | | | | £,2,7,2022 1.10.111 M |
| | | SP 10 - 10' | | | | | |
| | | E202122-13 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.3 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.3 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | : JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 101 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 434 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



| | | ample D | uu | | | | |
|--|--------------------------------|------------|--------------------|----------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numbe | | nderbay 16-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | | lie Gladde | en | | | 2/24/2022 4:46:41PM |
| | j8 | | | | | | |
| | | SP 6 - 10' | | | | | |
| | | E202122-14 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 91.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 98.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 91.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 98.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 100 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 204 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | uu | | | | |
|--|---|------------|-----------------------------------|----------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 ilie Gladdo | en | | | Reported: 2/24/2022 4:46:41PM |
| Alusia IVW, 00210 | i iojeet Mailag | - | ine Gladu | | | | E/202022 1.10.111 M |
| | | SP 21 - 6' | | | | | |
| | | E202122-15 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 89.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 99.2 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 89.8 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 99.2 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | : JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 98.4 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 27.2 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



Sample Data

| | | ample D | uu | | | | |
|--|--|------------|-----------------------------------|-------------|----------|----------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 1lie Gladdo | en | | | Reported: 2/24/2022 4:46:41PM |
| | | SP 18 - 4' | | | | | |
| | | E202122-16 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.5 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 98.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 92.5 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 98.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | : JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 98.6 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 101 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



| | | impic D | uu | | | | |
|--|---|--------------------|-----------------------------------|------------|----------|----------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladde | n | | | Reported: 2/24/2022 4:46:41PM |
| | S | SP 19 - Surf | | | | | |
| | | E202122-17 | | | | | |
| Analyte | Result | Reporting Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst:] | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 90.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 90.1 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | IL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst:] | RAS | | Batch: 2209023 |
| Chloride | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



| | | ample D | uu | | | | |
|--|---|--------------|-----------------------------------|----------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 16-0001 Ilie Gladde | en | | | Reported: 2/24/2022 4:46:41PM |
| | S | SP 20 - Surf | | | | | |
| | | E202122-18 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 90.2 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 90.2 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 93.2 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



| | | imple D | | | | | |
|--|---------------------------------|--------------|-----------------------|----------|----------|----------|---|
| Mack Energy | Project Name: | | nderbay | | | | D (1) |
| 7 W. Compress Road | Project Numbe Project Manage | | l6-0001 lie Gladde | | | | Reported: 2/24/2022 4:46:41PM |
| Artesia NM, 88210 | Project Manage | er: Inata | life Gladde | :11 | | | 2/24/2022 4.40.411 M |
| | S | SP 21 - Surf | | | | | |
| |] | E202122-19 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Benzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Toluene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 02/23/22 | 02/24/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 91.0 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.5 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2209020 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: Bromofluorobenzene | | 91.0 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Surrogate: Toluene-d8 | | 99.5 % | 70-130 | | 02/23/22 | 02/24/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2209028 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 02/23/22 | 02/24/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 02/23/22 | 02/24/22 | |
| Surrogate: n-Nonane | | 89.7 % | 50-200 | | 02/23/22 | 02/24/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2209023 |
| Chloride | 232 | 20.0 | | 1 | 02/23/22 | 02/24/22 | |



QC Summary Data

| | | | | iry Data | | | | | |
|---|--------|------------------|--------------|----------------|--------------|--------|-------------|--------------|-------------------|
| Mack Energy | | Project Name: | Th | underbay | | | | | Reported: |
| 7 W. Compress Road | | Project Number: | 20 | 046-0001 | | | | | - |
| Artesia NM, 88210 | | Project Manager: | Na | atalie Gladden | | | | 2/2 | 24/2022 4:46:41PM |
| | | Volatile Organic | Analyst: IY | | | | | | |
| Analyte | | Reporting | Spike | Source | | Rec | | RPD | |
| - | Result | Limit | Level | Result | Rec | Limits | RPD | Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209020-BLK1) | | | | | | | Prepared: 0 | 2/23/22 Ana | lyzed: 02/24/22 |
| 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 | 0.450 | | 0.500 | | 89.9 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.496 | | 0.500 | | 99.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.500 | | 0.500 | | 99.9 | 70-130 | | | |
| LCS (2209020-BS1) | | | | | | | Prepared: 0 | 2/23/22 Anal | lyzed: 02/24/22 |
| Benzene | 2.43 | 0.0250 | 2.50 | | 97.0 | 70-130 | - | | |
| Ethylbenzene | 2.54 | 0.0250 | 2.50 | | 102 | 70-130 | | | |
| Toluene | 2.54 | 0.0250 | 2.50 | | 102 | 70-130 | | | |
| | 2.38 | 0.0250 | 2.50 | | 98.1 | 70-130 | | | |
| o-Xylene | 4.92 | | 5.00 | | 98.1 98.4 | 70-130 | | | |
| p,m-Xylene | 4.92 | 0.0500 0.0250 | 5.00 7.50 | | 98.4 98.3 | 70-130 | | | |
| Total Xylenes | | 0.0230 | 0.500 | | 96.3 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.482 | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.483 | | 0.500 | | 96.6 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.533 | | 0.500 | | 107 | 70-130 | | | |
| Matrix Spike (2209020-MS1) | | | | Source: E | | | Prepared: 0 | 2/23/22 Ana | lyzed: 02/24/22 |
| Benzene | 2.61 | 0.0250 | 2.50 | ND | 105 | 48-131 | | | |
| Ethylbenzene | 2.71 | 0.0250 | 2.50 | ND | 108 | 45-135 | | | |
| Toluene | 2.69 | 0.0250 | 2.50 | ND | 108 | 48-130 | | | |
| o-Xylene | 2.67 | 0.0250 | 2.50 | ND | 107 | 43-135 | | | |
| p,m-Xylene | 5.32 | 0.0500 | 5.00 | ND | 106 | 43-135 | | | |
| Total Xylenes | 7.98 | 0.0250 | 7.50 | ND | 106 | 43-135 | | | |
| Surrogate: Bromofluorobenzene | 0.488 | | 0.500 | | 97.6 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.488 | | 0.500 | | 97.6 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.511 | | 0.500 | | 102 | 70-130 | | | |
| Matrix Spike Dup (2209020-MSD1) | | | | Source: E | | | | | lyzed: 02/24/22 |
| Benzene | 2.55 | 0.0250 | 2.50 | ND | 102 | 48-131 | 2.32 | 23 | |
| Ethylbenzene | 2.91 | 0.0250 | 2.50 | ND | 116 | 45-135 | 7.17 | 27 | |
| Toluene | 2.58 | 0.0250 | 2.50 | ND | 103 | 48-130 | 4.12 | 24 | |
| o-Xylene | 3.08 | 0.0250 | 2.50 | ND | 123 | 43-135 | 14.4 | 27 | |
| p,m-Xylene | 6.14 | 0.0500 | 5.00 | ND | 123 | 43-135 | 14.3 | 27 | |
| Total Xylenes | 9.22 | 0.0250 | 7.50 | ND | 123 | 43-135 | 14.4 | 27 | |
| G , D G 1 | 0.535 | | 0.500 | | 107 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | | | | | | | | | |
| Surrogate: Bromojtuorobenzene Surrogate: 1,2-Dichloroethane-d4 | 0.467 | | 0.500 | | 93.3 | 70-130 | | | |



QC Summary Data

| | | V C D | | ii y Data | | | | | |
|--|--------|--|----------------|--|----------|---------------|-------------|--------------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay)046-0001 atalie Gladden | | | | | Reported: 2/24/2022 4:46:41PM |
| | No | onhalogenated O | rganics | by EPA 801 | 5D - GR | RO | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209020-BLK1) | | | | | | | Prepared: 0 | 2/23/22 | Analyzed: 02/24/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.450 | | 0.500 | | 89.9 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.496 | | 0.500 | | 99.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.500 | | 0.500 | | 99.9 | 70-130 | | | |
| LCS (2209020-BS2) | | | | | | | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Gasoline Range Organics (C6-C10) | 52.8 | 20.0 | 50.0 | | 106 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.470 | | 0.500 | | 94.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.512 | | 0.500 | | 102 | 70-130 | | | |
| Matrix Spike (2209020-MS2) | | | | Source: E | 202122-0 | 4 | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Gasoline Range Organics (C6-C10) | 53.5 | 20.0 | 50.0 | ND | 107 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.468 | | 0.500 | | 93.6 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.482 | | 0.500 | | 96.3 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.516 | | 0.500 | | 103 | 70-130 | | | |
| Matrix Spike Dup (2209020-MSD2) | | | | Source: E | 202122-0 | 4 | Prepared: 0 | 2/23/22 A | Analyzed: 02/24/22 |
| Gasoline Range Organics (C6-C10) | 59.7 | 20.0 | 50.0 | ND | 119 | 70-130 | 11.1 | 20 | |
| Surrogate: Bromofluorobenzene | 0.482 | | 0.500 | | 96.4 | 70-130 | | | |
| | 0 (7) | | 0.500 | | 94.6 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.473 | | 0.500 | | 94.0 | /0-150 | | | |



QC Summary Data

| | | QC BI | | ary Data | | | | | |
|--|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 2/24/2022 4:46:41PM |
| | Nonh | alogenated Orga | anics by | v 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 |
| | 6 6 | 6 6 | 00 | 6 6 | ,,, | ,,, | | | |
| Blank (2209028-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 47.7 | | 50.0 | | 95.5 | 50-200 | | | |
| LCS (2209028-BS1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 473 | 25.0 | 500 | | 94.7 | 38-132 | | | |
| Surrogate: n-Nonane | 48.0 | | 50.0 | | 95.9 | 50-200 | | | |
| Matrix Spike (2209028-MS1) | | | | Source: E | 202122- | 06 | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 475 | 25.0 | 500 | ND | 95.1 | 38-132 | | | |
| Surrogate: n-Nonane | 48.0 | | 50.0 | | 95.9 | 50-200 | | | |
| Matrix Spike Dup (2209028-MSD1) | | | | Source: E | 202122- | 06 | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Diesel Range Organics (C10-C28) | 470 | 25.0 | 500 | ND | 94.1 | 38-132 | 1.09 | 20 | |
| Surrogate: n-Nonane | 44.8 | | 50.0 | | 89.6 | 50-200 | | | |



QC Summary Data

| | | | ••••••• | J – | • | | | | |
|--|-----------------|--|-------------------------|---|------------------|--------------------|-------------|-------------------|--------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | hunderbay 0046-0001 Jatalie Gladden | | | | | Reported: 2/24/2022 4:46:41PM |
| | | Anions | by EPA | 300.0/9056A | | | | | 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 (2209023-BLK1) | | | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Chloride LCS (2209023-BS1) | ND | 20.0 | | | | | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Chloride | 251 | 20.0 | 250 | Sources | 101 E202122-(| 90-110 | Proporad: 0 | ה הרוברות | nalyzed: 02/24/22 |
| Matrix Spike (2209023-MS1) Chloride | 1910 | 20.0 | 250 | 1920 | NR | 80-120 | riepareu: 0 | 2123122 F | Maryzed: 02/24/22 M2 |
| Matrix Spike Dup (2209023-MSD1) | | | | Source: | E202122-(| 01 | Prepared: 0 | 2/23/22 A | analyzed: 02/24/22 |
| Chloride | 1950 | 20.0 | 250 | 1920 | 14.2 | 80-120 | 2.11 | 20 | M2 |

QC Summary Report Comment:

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



| Mack Energy | Project Name: | Thunderbay | |
|--------------------|------------------|-----------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Natalie Gladden | 02/24/22 16:46 |

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Reproject Information

Chain of Custody

| Page | of |
|------|----|
| | |

| liant Maal Engeneral | | | | | | | | Lab Use (| | | | | | - | | | TAT | EPA Program | |
|--|-----------------|------------|----------------------|-------------------------------------|--------------------------|---|----------------------|--|-----------------|--------------|------------------|-------------|----------------|--------------|-----------------------|-----------|--|--------------|----------------|
| Project: Thunder Ray | | | | | | Bill To tention: ESS | | Lah | WO# | | | | ly Number | | 1D | | TAT Standard | CWA | SDWA |
| oject N | Aanager: | M. BUG | ckles | | Ad | Address: 2427 County Ra City, State, Zip Hobbs, NM 88240 Phone: | | | Lab WO# Jo | | | | 046-0 | 201 | | \times | | | |
| dress: | | | | | | | | | Cc | 2/23 | a | Analy | sis and N | ethod | 1 | | | | RCRA |
| | e, Zip La | ake F | irthui | C, NM | | | | | | | | | | | | | | State | 1 |
| none: nail: | | | | | En | nail: Natalie | | 8015 | 8015 | H | | | 0 | | - | | NM CO | UT AZ | TX |
| eport d | ue by: | | | | | | | RO by | RO by | y 802 | 8260 | 6010 | e 300 | | MN | TX | X | | |
| Time ampled | Date Sampled | Matrix | No. of Containers | Sample ID | | | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | BGDOC | BGDOC | | Remarks | 5 |
| | 2/18 | S | ſ | SP | 18 - | Surf | 1 | | | | | | | | X | | | | |
| | \langle | (| 1 | SP | 18 - | Surf | 2 | | | | | | | | (| | | | |
| | | | 5 | SP | 13 - | 8' | 3 | | | | | | | | | | | | |
| | | | (| SP | 11 - 6 | t | 4 | | | | | | | - | 5 | | | | |
| | | | | SP | 5-6 | 6. | 5 | | | | | | | | | | | | |
| | | 1 | | SP | 17 - 6 | | 6 | - | | | | | | | $\left \right\rangle$ | | | | |
| | |) | | - | 20-6 | | 7 | | | | | - | | | | | | | |
| | | (| | - | 19-4 | 1' | 8 | | | | | | | - | | | | | |
| | | | | SP | 12 - 4 |) | 9 | | | | | - | | _ | | | | | |
| | | (| L | SP | 16 - 5 | ourf | 10 | | | | | | | | 1 | | | | |
| ditior | al Instruc | tions: | | | | | | | | | | | | | | | | | |
| | | | | ticity of this san may be ground | | e that tampering with or intentional | inter all | e lotat | ion | | | 1.000 | | | | | e received on ice the day an 6 °C on subsequent d | | pled or receiv |
| Relinquished by: (Signature) Date 2/18 Time Received by: (Signature) | | | | | | L Date 2-22 | .22 | Time | 50 | 0 | Received on ice: | | | Lab Use Only | | | | | |
| | | | | | Received by: (Signature) | tu 2/23 | 1 | Time | | | T1 | | | <u>T2</u> | | <u>T3</u> | | | |
| edinquished by: (Signature) Date Time Received by: (Signature) | | | | | | Date | | Time | 2 | | AVC | G Temp ° | c_4 | 1 | | | | - | |
| | | | | Aqueous, O - Ot | | | Containe | Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA | | | | | | | | | | | |
| ote: Sam | ples are disc | arded 30 d | lays after r | esults are repo | orted unless of | ther arrangements are made. H vith this COC. The liability of the | lazardous samples wi | l be re | turne | d to cli | ient o | r disp | osed of at | the clie | ent exp | ense. Th | ne report for the an | alysis of th | e above |

| iont: | ent: Mack Energy Bill To | | | | | | | Lab Use Only | | | | | | TAT | | | | | EPA Pro | gram | |
|-----------------------------------|--------------------------|--------------|--------------|-----------------------|---|---|---------------------------|-----------------|------------|--------------|-------------|--|----------------|-----------|-----------|----------|------------|-----------------|------------|-------------|--------------|
| piect: Thunder Bau Attention: ESS | | | | | | | | Lab | WO# | | | Job Number | | | 1D 2D 3D | | | Standar | | | SDWA |
| oject N | Aanager: | M. BU | ckles | | Add | ress: 2427 County , State, Zip Hobbs , N | Ra | ES | 202 | 12 | 2 | act | 346- | 1000 | | \times | | | | | |
| Idress: | | | | | | | M 88240 | | _ | | 1 | Analy | sis and | Metho | d | - | | R | | | RCRA |
| | e, Zip L | ake F | Arthur | , NM | Pho | | | | | | 6 | | | | | | | | | State | |
| none: nail: | | | | | Ema | ail: Natalie | | 8015 | 8015 | | | | 0 | | 12 | | | NM | | T AZ | TX |
| eport d | ue by: | | | | | | | O by | Vd O | 8021 | 8260 | 010 | 300 | | MN | TX | | \times | | | |
| Time | Date | | No. of | Sample ID | | | Lab | DRO/ORO by 8015 | GRO/DRO by | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | BGDOC | BGDOC | | | Re | emarks | |
| ampled | Sampled | Matrix | Containers | Sample ID | | | Number | DR(| GR | BTE | 2 | Me | Ŀ | 1 | BG | BGI | | - | | marko | |
| | 2/18 | S | 1 | SP | 14-4 | 1 | 11 | | | | | | | | IX | | | | | | |
| | 2110 | 5 | | JP | | | | | | | - | | | - | | | | | | | |
| | 1 | 1 | (| SP | 16-8' | | 12 | | | | | | | | (| 1.00 | | hi haara | | | |
| | | | | The Real Procession | 1 . 10 | 1 | 13 | | | | | | | | | | | | | | |
| | | | | SP | 10-10 | | 15 | - | | | | | - | - | (| - | | | | | _ |
| | | | | SP | 12 - 5 | SUFF | | - | - | | - | - | | | 11 | | | | | | |
| - | FT- | - | -/ | 1 | | | 111 | - | 1 | | | | | | 11 | | | | | | |
| | SP 6-10' | | | | | 14 | | | | | | | - | | | | | | | | |
| | | | | 02 | 21 / | 1 | 15 | | 1.0 | | | | | | 1 | | | | | | |
| | | | | SP | 21-6 | | 10 | - | | - | | - | - | - | | - | - | | | | |
| | | | 1/ | SP | 18 - 4 | / | 10 | | | | | - | | | | | | | | | |
| | | 1 | (| cn | 0 5 | 206 | Contraction of the second | | | | | | | | \square | | | | | | |
| | | | | SP | 19-51 | | 17 | - | | | | | | _ | | | | | | | |
| | | | 11 | SP | 20-5 | Surf | 18 | | | | | | | | | 1 | | | | | |
| | 13 | | | | 20-0 | | | - | 1 | - | | | | - | ++ | | | | | | |
| | | | | XR; | 3P21- | Such | 19 | | | | | | 1 | | | | | | _ | | |
| dditio | nal Instruc | tions: | | | | 0 | | | | | | | | | | | | | | | |
| | | | | | | | | Trans | / | 1 | - | Sample | as requirir | g thermal | oreserva | tion mu | st he rece | ived on ice the | e day they | are sampler | or receive |
| | | | | | nple. I am aware s for legal action. | that tampering with or intentionally Sampled by: | WOOD MA | M | 2 | | | 1. | | | | | | °C on subseque | | are sumples | i or receive |
| | red by: (Sign | | Date | e | Time | Received by: (Signature) | a Date | | Time | | | | | | L | ab Us | se Onl | Y | | | |
| Jak | L an | ing | 1 | 2/18 | 4:16 PM | 4:16 P/M 2-4/ 2.22.22 15.90 Received on ice: | | | | | | | on ice: | C | D/ N | | | | | | |
| Relinquis | neetby: (Sign | ature) / | Date | | Time | Date 2/22 | 122 | Time | 05 | - | | | | - | | | | | | | |
| A | | for | - C | 22.22 | 1545 Time | Received by: (Signature) | Date | ad | Time | w | | <u>T1</u> | | | 12 | | | <u>T3</u> | | | |
| reunquisi | ned by: (Sign | ature) | Dat | c | Time | Received by: (Signature) | | | | | - 1 | AVG | Temp | °C 4 | 1 | | | | | | |
| anala Ma | triu C Cail C | d Colid Sa | Sludge A - | Aqueous, O - O | ther | | Containe | er Type | e: g - i | glass. | | | | | er gla | ss. v - | VOA | | | | |
| Note: Sar | nples are dis | carded 30 c | days after r | esults are rep | orted unless oth | ner arrangements are made. Ha | azardous samples wi | ll be re | turnec | l to cli | ient or | dispo | osed of a | | | | | port for the | a analysi | s of the a | bove |
| amples i | s applicable | only to thos | se samples | received by th | he laboratory wi | th this COC. The liability of the l | aboratory is limited | to the a | amour | nt paid | for o | n the | report. | | | | | | | | _ |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy I | Date Received: | 02/23/22 11 | :05 | Work Order ID: E202122 |
|----------------|---|------------------------|-------------|------------------|----------------------------------|
| Phone: | (575) 390-6397 | Date Logged In: | 02/23/22 09 | :12 | Logged In By: Caitlin Christian |
| Email: | Natalie@energystaffingllc.com | Due Date: | 02/24/22 17 | 2:00 (1 day TAT) | |
| <u>Chain o</u> | of Custody (COC) | | | | |
| 1. Does | the sample ID match the COC? | | Yes | | |
| 2. Does | the number of samples per sampling site location match | h the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: U | IPS |
| 4. Was t | he COC complete, i.e., signatures, dates/times, requested | ed analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in t | | Yes | | Comments/Resolution |
| a 1 | i.e, 15 minute hold time, are not included in this disucssion | • | | г | Comments/Resolution |
| | Turn Around Time (TAT) | | 3.7 | | No sample times provided on COC. |
| | he COC indicate standard TAT, or Expedited TAT? | | Yes | | No sample times provided on COC. |
| Sample | | | 3.7 | | |
| | a sample cooler received? | | Yes | | |
| • | 6 | | Yes | | |
| | he sample(s) received intact, i.e., not broken? | | Yes | | |
| | e custody/security seals present? | | No | | |
| 11. If ye | es, were custody/security seals intact? | | NA | | |
| 12. Was 1 | the sample received on ice? If yes, the recorded temp is 4°C, i. Note: Thermal preservation is not required, if samples are r minutes of sampling | | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sample to | emperature: <u>4</u> ° | <u>°C</u> | | |
| Sample | Container | | | | |
| 14. Are | aqueous VOC samples present? | | No | | |
| 15. Are | VOC samples collected in VOA Vials? | | NA | | |
| 16. Is th | e 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 | e appropriate volume/weight or number of sample containe | rs collected? | Yes | | |
| Field La | abel | | | | |
| | e field sample labels filled out with the minimum inform | nation: | | | |
| | Sample ID? | | Yes | | |
| | Date/Time Collected? Collectors name? | | No | - | |
| | Preservation_ | | No | | |
| | s the COC or field labels indicate the samples were pres | served? | No | | |
| | sample(s) correctly preserved? | | NA | | |
| | b filteration required and/or requested for dissolved me | tals? | No | | |
| | nase Sample Matrix | | | | |
| | s the sample have more than one phase, i.e., multiphase | ? | No | | |
| | es, does the COC specify which phase(s) is to be analyzed | | NA | | |
| • | tract Laboratory_ | | 1.12 ¥ | | |
| Subcon | | 0 | ът. | | |
| | samples required to get sent to a subcontract laboratory | ? | No | | |
| 28. Are | samples required to get sent to a subcontract laboratory a subcontract laboratory specified by the client and if s | | | Subcontract Lab | : na |

Date

envirotech Inc.

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





5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: T

Thunderbay

Work Order: E202128

Job Number: 20046-0001

Received: 2/25/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 2/25/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 2/25/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E202128 Date Received: 2/25/2022 10:10:00

Natalie Gladden,



Page 215 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/25/2022 10:10:00, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

Field Offices:

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com

Released to Imaging: 9/30/2022 10:09:16 AM

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

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

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Sample Summary

| | | Sample Sum | mary | | |
|--|--|------------|----------|----------|---------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Compress Road Project Number: 20046-0001 | | | | Reported: 02/25/22 18:12 |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| SW 10 | E202128-01A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 10 - 2' | E202128-02A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 11 | E202128-03A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| SW 11 - 2' | E202128-04A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 12 | E202128-05A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 12 - 2' | E202128-06A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 13 | E202128-07A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 13 - 6' | E202128-08A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 14 | E202128-09A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 14 - 2' | E202128-10A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| SW 15 | E202128-11A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| SW 15 - 2' | E202128-12A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| SW 16 | E202128-13A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 16 - 8' | E202128-14A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 17 | E202128-15A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| W 17 - 2' | E202128-16A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| P 1 - 10' | E202128-17A | Soil | 02/22/22 | 02/25/22 | Glass Jar, 4 oz. |
| | | | | | |



| | D. | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 10 | | | | |
| | | E202128-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 96.5 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | Batch: 2209047 | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.8 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 92.8 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2209046 |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |

Sample Data



Sample Data

| | 56 | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 10 - 2' | | | | |
| | | E202128-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.8 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Batch: 2209043 | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 99.9 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2209046 |
| Chloride | 31.4 | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |



| Sample Data | | | | | | | | |
|--|---|------------|------------------------------------|----------|----------------|-------------------------------------|--|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Nam Project Num Project Man | ber: 2004 | nderbay 46-0001 Ilie Gladden | | | Reported: 2/25/2022 18:12:34 | | |
| | | SW 11 | | | | | | |
| | | E202128-03 | | | | | | |
| | | Reporting | | | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes | | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2209047 | | |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | | |
| o-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | | | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.8 % | 70-130 | 02/25/22 | 02/25/22 | | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2209047 | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 02/25/22 | 02/25/22 | | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Anal | yst: JL | Batch: 2209043 | | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | | | |
| Surrogate: n-Nonane | | 101 % | 50-200 | 02/25/22 | 02/25/22 | | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | yst: RAS | | Batch: 2209046 | | |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | | | |



Sample Data

| | 6 | ample D | ala | | | | |
|--|--|------------|------------------------------------|----------------|----------|-------------------------------------|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/25/2022 18:12:34 | |
| | | SW 11 - 2' | | | | | |
| | | E202128-04 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2209047 | |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.1 % | 70-130 | 02/25/22 | 02/25/22 | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | Analyst: RKS | | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.5 % | 70-130 | 02/25/22 | 02/25/22 | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | Batch: 2209043 | | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | | |
| Surrogate: n-Nonane | | 99.6 % | 50-200 | 02/25/22 | 02/25/22 | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2209046 | |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | | |
| | | | | | | | |



| | 5 | ample D | ala | | | |
|--|----------------|------------|-------------|----------------|----------------|--------------------|
| Mack Energy | Project Name: | Thu | nderbay | | | |
| 7 W. Compress Road | Project Number | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladden | | | 2/25/2022 18:12:34 |
| | | SW 12 | | | | |
| | | E202128-05 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.2 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | Batch: 2209047 | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | | Batch: 2209043 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2209046 |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |



Sample Data

| | D. | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------|----------------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 12 - 2' | | | | |
| | | E202128-06 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 93.0 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.9 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | | Batch: 2209043 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 80.3 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209046 |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |



| | S | ample D | ata | | | | |
|--|--|------------|------------------------------------|------------|----------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 1lie Gladder | 1 | | | Reported: 2/25/2022 18:12:34 |
| | | SW 13 | | | | | |
| | | E202128-07 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilu | tion | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | | Analyst: I | RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | | 02/25/22 | 02/25/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.0 % | 70-130 | | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: I | RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.3 % | 70-130 | | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | | 02/25/22 | 02/25/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 85.1 % | 50-200 | | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: I | RAS | | Batch: 2209046 |
| Chloride | 1350 | 20.0 | 1 | | 02/25/22 | 02/25/22 | |



Sample Data

| | 5 | ampic D | aia | | | |
|--|---|------------|------------------------------------|----------|----------------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 13 - 6' | | | | |
| | | E202128-08 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.0 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | | Batch: 2209047 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | | Batch: 2209043 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 89.0 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2209046 |
| Chloride | 1300 | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |



| Sample Data | | | | | | | |
|--|--|------------|------------------------------------|--------------|----------------|-------------------------------------|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 2/25/2022 18:12:34 | |
| | | SW 14 | | | | | |
| | | E202128-09 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilut | ion Prepared | Analyzed | Notes | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | A | analyst: RKS | | Batch: 2209047 | |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| o-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.2 % | 70-130 | 02/25/22 | 02/25/22 | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | A | analyst: RKS | | Batch: 2209047 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.5 % | 70-130 | 02/25/22 | 02/25/22 | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | A | analyst: JL | Batch: 2209043 | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | | |
| Surrogate: n-Nonane | | 87.5 % | 50-200 | 02/25/22 | 02/25/22 | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | A | analyst: RAS | | Batch: 2209046 | |
| Chloride | 49.1 | 20.0 | 1 | 02/25/22 | 02/25/22 | | |



Sample Data

| | 56 | ampic D | uta | | | |
|--|---|------------|------------------------------------|----------|----------------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 14 - 2' | | | | |
| | | E202128-10 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.2 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | | Batch: 2209043 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 84.7 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2209046 |
| Chloride | 20.9 | 20.0 | 1 | 02/25/22 | 02/25/22 | |



| | S | Sample D | ata | | | |
|--|---|------------|------------------------------------|--------------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Num Project Mana | ber: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 15 | | | | |
| | | E202128-11 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilut | ion Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | A | Analyst: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.4 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | A | Analyst: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | A | Analyst: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 85.8 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | A | Analyst: RAS | | Batch: 2209046 |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |



Sample Data

| | 5 | ampie D | ala | | | |
|--|---|-----------------------|------------------------------------|-------------------------------------|----------------|----------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 ılie Gladden | Reported: 2/25/2022 18:12:34 | | |
| | | SW 15 - 2' | | | | |
| | | E202128-12 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | kg mg/kg Analyst: RKS | | | Batch: 2209047 | |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 92.0 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | /st: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.8 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | /st: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 86.5 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | /st: RAS | | Batch: 2209046 |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |



| | S | Sample D | ata | | | |
|--|--|------------|------------------------------------|-----------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Nam Project Num Project Mana | ber: 2004 | nderbay 46-0001 Ilie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 16 | | | | |
| | | E202128-13 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | lyst: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.8 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | lyst: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Anal | lyst: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 87.4 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | lyst: RAS | | Batch: 2209046 |
| Chloride | 515 | 20.0 | 1 | 02/25/22 | 02/25/22 | |



Sample Data

| | 50 | ampic D | ata | | | |
|--|---|------------|------------------------------------|----------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 16 - 8' | | | | |
| | | E202128-14 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.3 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.9 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 89.3 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2209046 |
| Chloride | 308 | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |



| | S | Sample D | ata | | | |
|--|--|------------|------------------------------------|-------------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Nam Project Num Project Mana | ber: 200 | nderbay 46-0001 alie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 17 | | | | |
| | | E202128-15 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Diluti | on Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | А | nalyst: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.1 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | А | nalyst: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | А | Analyst: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 88.8 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | A | nalyst: RAS | | Batch: 2209046 |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |

Sample Data

| | 56 | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|-------------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 2/25/2022 18:12:34 |
| | | SW 17 - 2' | | | | |
| | | E202128-16 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg mg/kg Analyst: RKS | | | | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.1 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.7 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 94.3 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2209046 |
| Chloride | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |



Sample Data

| | 3 | ample D | ลเล | | | |
|--|------------------------------|------------|--------------------|----------|----------|--------------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | | nderbay 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | | llie Gladden | | | 2/25/2022 18:12:34 |
| | | SP 1 - 10' | | | | |
| | | E202128-17 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | /st: RKS | | Batch: 2209047 |
| Benzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| Toluene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/25/22 | 02/25/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/25/22 | 02/25/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 93.2 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | /st: RKS | | Batch: 2209047 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | 70-130 | 02/25/22 | 02/25/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | vst: JL | | Batch: 2209043 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/25/22 | 02/25/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/25/22 | 02/25/22 | |
| Surrogate: n-Nonane | | 101 % | 50-200 | 02/25/22 | 02/25/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | vst: RAS | | Batch: 2209046 |
| Chloride | 270 | 20.0 | 1 | 02/25/22 | 02/25/22 | |
| | | | | | | |



QC Summary Data

| | | <u><u><u>v</u></u><u>v</u><u>v</u></u> | | i y Dau | • | | | | | | |
|--|-----------------|--|-------------------------|--|----------|--------------------|-------------|-------------------|-------------------------------------|--|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | underbay 046-0001 ttalie Gladden | | | | | Reported: 2/25/2022 18:12:34 | | |
| Volatile Organics by EPA 8021B | | | | | | | | | | | |
| Analyte | Result mg/kg | Reporting Limit mg/kg | Spike Level mg/kg | Source Result mg/kg | Rec % | Rec Limits % | RPD % | RPD Limit % | Notes | | |
| Blank (2209047-BLK1) | | | | | | | Prepared: 0 | 2/25/22 A | nalyzed: 02/25/22 | | |
| Benzene | ND | 0.0250 | | | | | 1 | - | , | | |
| 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 | 7.44 | | 8.00 | | 93.0 | 70-130 | | | | | |
| LCS (2209047-BS1) | | | | | |] | Prepared: 0 | 2/25/22 A | nalyzed: 02/25/22 | | |
| Benzene | 4.81 | 0.0250 | 5.00 | | 96.1 | 70-130 | | | | | |
| Ethylbenzene | 5.13 | 0.0250 | 5.00 | | 103 | 70-130 | | | | | |
| Toluene | 5.31 | 0.0250 | 5.00 | | 106 | 70-130 | | | | | |
| o-Xylene | 5.07 | 0.0250 | 5.00 | | 101 | 70-130 | | | | | |
| p,m-Xylene | 10.4 | 0.0500 | 10.0 | | 104 | 70-130 | | | | | |
| Total Xylenes | 15.5 | 0.0250 | 15.0 | | 103 | 70-130 | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.52 | | 8.00 | | 94.0 | 70-130 | | | | | |
| LCS Dup (2209047-BSD1) | | | | | | | Prepared: 0 | 2/25/22 A | nalyzed: 02/25/22 | | |
| Benzene | 4.94 | 0.0250 | 5.00 | | 98.9 | 70-130 | 2.77 | 20 | | | |
| Ethylbenzene | 5.28 | 0.0250 | 5.00 | | 106 | 70-130 | 2.79 | 20 | | | |
| Toluene | 5.45 | 0.0250 | 5.00 | | 109 | 70-130 | 2.50 | 20 | | | |
| o-Xylene | 5.23 | 0.0250 | 5.00 | | 105 | 70-130 | 3.04 | 20 | | | |
| p,m-Xylene | 10.7 | 0.0500 | 10.0 | | 107 | 70-130 | 2.65 | 20 | | | |
| Total Xylenes | 15.9 | 0.0250 | 15.0 | | 106 | 70-130 | 2.78 | 20 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.58 | | 8.00 | | 94.7 | 70-130 | | | | | |



QC Summary Data

| | | QU N | | ary Dut | | | | | |
|---|--------|----------------|----------|-----------------|---------|--------|-------------|------------|--------------------|
| Mack Energy | | Project Name: | | Thunderbay | | | | | Reported: |
| 7 W. Compress Road | | Project Number | | 0046-0001 | | | | | 2/25/2022 18 12 24 |
| Artesia NM, 88210 | | Project Manage | r: N | Vatalie Gladder | 1 | | | | 2/25/2022 18:12:34 |
| | No | onhalogenated | Organics | by EPA 80 | 15D - G | RO | | | Analyst: RKS |
| Analyte | | Reporting | Spike | Source | | Rec | | RPD | |
| - | Result | Limit | Level | Result | Rec | Limits | RPD | Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209047-BLK1) | | | | | | | Prepared: 0 | 02/25/22 A | nalyzed: 02/25/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.99 | | 8.00 | | 99.9 | 70-130 | | | |
| LCS (2209047-BS2) | | | | | | | Prepared: 0 | 2/25/22 A | analyzed: 02/25/22 |
| Gasoline Range Organics (C6-C10) | 59.7 | 20.0 | 50.0 | | 119 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.17 | | 8.00 | | 102 | 70-130 | | | |
| LCS Dup (2209047-BSD2) | | | | | | | Prepared: 0 | 2/25/22 A | analyzed: 02/25/22 |
| Gasoline Range Organics (C6-C10) | 49.9 | 20.0 | 50.0 | | 99.9 | 70-130 | 17.8 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.09 | | 8.00 | | 101 | 70-130 | | | |
| | | | | | | | | | |



QC Summary Data

| Mack Energy | | Project Name: | Th | underbay | | | | | Reported: |
|--|--------------------|--------------------|----------------|------------------|--------------------|---------------|--------------|------------------|--|
| 7 W. Compress Road | | Project Number: | 20 | 046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager | : Na | talie Gladden | | | | | 2/25/2022 18:12:34 |
| | Nonha | logenated Org | ganics by | EPA 8015D | - DRO | /ORO | | | Analyst: JL |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209043-BLK1) | | | | | | | Prepared: 02 | 2/24/22 <i>I</i> | Analyzed: 02/25/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| | | | | | | | | | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| e e () | ND 54.6 | | 50.0 | | 109 | 50-200 | | | |
| Surrogate: n-Nonane | | | 50.0 | | 109 | 50-200 | Prepared: 0 | 2/24/22 <i>F</i> | Analyzed: 02/25/22 |
| Surrogate: n-Nonane | | | 50.0 | | <i>109</i> 96.3 | 50-200 | Prepared: 0 | 2/24/22 <i>A</i> | Analyzed: 02/25/22 |
| Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2209043-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane | 54.6 | 50.0 | | | | | Prepared: 02 | 2/24/22 <i>F</i> | Analyzed: 02/25/22 |
| Surrogate: n-Nonane LCS (2209043-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane | <i>54.6</i> 481 | 50.0 | 500 | | 96.3 | 38-132 | | | Analyzed: 02/25/22 Analyzed: 02/25/22 |
| Surrogate: n-Nonane LCS (2209043-BS1) Diesel Range Organics (C10-C28) | <i>54.6</i> 481 | 50.0 | 500 | | 96.3 | 38-132 | | | |



QC Summary Data

| | | ~ | | v | | | | | |
|------------------------|--------|--------------------|----------------|------------------|------|---------------|-------------|--------------|--------------------|
| Mack Energy | | Project Name: | | hunderbay | | | | | Reported: |
| 7 W. Compress Road | | Project Number | : 20 | 0046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manage | r: N | atalie Gladder | n | | | | 2/25/2022 18:12:34 |
| | | Anions | by EPA 3 | 300.0/90564 | 4 | | | | Analyst: RAS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2209046-BLK1) | | | | | | | Prepared: 0 | 2/25/22 | Analyzed: 02/25/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2209046-BS1) | | | | | | | Prepared: 0 | 2/25/22 | Analyzed: 02/25/22 |
| Chloride | 250 | 20.0 | 250 | | 99.8 | 90-110 | | | |
| LCS Dup (2209046-BSD1) | | | | | | | Prepared: 0 | 2/25/22 | Analyzed: 02/25/22 |
| Chloride | 247 | 20.0 | 250 | | 98.9 | 90-110 | 0.959 | 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.



| Γ | Mack Energy | Project Name: | Thunderbay | |
|---|--------------------|------------------|-----------------|----------------|
| | 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| | Artesia NM, 88210 | Project Manager: | Natalie Gladden | 02/25/22 18:12 |

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

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



Released

| Mack Energy Bill To | 100 | 1 | 200 | La | b Us | e On | ly | 1 | | ТАТ | EPA Program |
|--|-------------------------|-----------------|-------------|--------------|-------------|-------------|--------------------|------------------|----------|---|-----------------------------------|
| Mack Energy Bill To t: ThunderBay Attention: ESS | | Lab | WO# | | | | | 1D | 2D 30 | Standard | CWA SDW/ |
| t Manager: M. Buckics Address: 2427 County | Rd | Eá | 202 | 12 | 8 | 200 | Number 146-0001 | | X | | |
| city, State, Zip Hobbs, NN | 1 88240 | - | - | - | | Analy | sis and Metho | d | <u> </u> | | RCRA |
| tate, Zip Roswell, NM Phone: Email: Natalie | | 10 | | | | | | | | | State |
| : <u>Email: Natalie</u> | | 801 | 8015 | | | | 0 | 1 | | NMI CO | |
| t due by: | | O by | 0 by | 8021 | 8260 | 010 | 300 | MN | X | | |
| Date Matrix No. of Sample ID | Lab | DRO/ORO by 8015 | GRO/DRO by | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC | BGDOC | | Remarks |
| ad Sampled Containers Sample ID | Number | DR | GR | BT | 2 | Me | ਤ | B | BGI | | nemana |
| 2/22 S I SW 10 | 1 | | | | | | | X | | | |
| (/ (SW 10-2' | 2 | | | | | | | (| 1.1 | | |
| $\langle \rangle$ SW 11 | 3 | | | | | | | | | | |
|)) (SW 11-2' | 4 | | | | | | | (| | | |
| SW 12 | 5 | | | | | | | | | | |
| \ (/ SW 12-2' | 6 | | | | | | | 1 | | | e |
| SW 13 | 7 | | | | | | | | | | |
| SW 13-26 | 8 | | | | | | | $\left \right $ | | | |
| SW 14 | 9 | | | - | | | | 1 | | | |
|) () SW 14-2' | 10 | | | 1.2 | | | | 1 | | 81. C | |
| sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionall time of collection is considered fraud and may be grounds for legal action. | y mislabelling the samp | letocati | on, | | | | | | | received on ice the day an 6 °C on subsequent da | they are sampled or receiv ys. |
| uished by: (Signature) Date Time Received by: (Signature) | Date | | Time | | | 100 | | L | ab Use (| Only | |
| alles ausen 2/22 4:19 minutes | 1- 2.23 | .22 | 1 | 44 | 40 | Rec | eived on ice: | |)/N | - | |
| uished by: (Signature) Date Time Received by: (Signature) | L Date | -1- | Time | | | | | - | | 246 | |
| min provident in the | Date | 122 | 10. Time | \$10 | | <u>T1</u> | | <u>T2</u> | - | <u></u> | |
| uished by: (Signature) Date Time Received by: (Signature) | Date | | line | | | AVE | G Temp °C_ | 1 | | | |
| | Cantala | an Turn | | - | | | lastic, ag - am | horal | cc v VO | 10 | |

Reference Project Information

Chain of Custody

Page _2 of _2

| Attention: ESS Lab WO# Project: Thunder Bay Attention: ESS Project Manager: M. Buckles Address: 2427 County RJ Address: City, State, Zip Roswell, NM S8240 Phone: Email: Natalie S | Analysis and Meth | 1D 2D 3D | Standard CWA SDWA |
|---|--|-----------------------------|---|
| Address: City, State, Zip Hobbs, NM \$8290 City, State, Zip Roswell, NM Phone: | Analysis and Meth | | RCRA |
| City, State, Zip Roswell, NM Phone: | | lod | RCRA |
| | 0.00 | | |
| Phone: Email: Natalie ST 08 Ag Email: Report due by: It is an addition of the second of | 0 0 | | Chata |
| Email: A A A A B <td< td=""><td></td><td></td><td>State NM CO UT AZ TX</td></td<> | | | State NM CO UT AZ TX |
| Report due by: 0 | | WW XI | NIM CO UT AZ IX |
| Time Date No. of Comple ID | oy 82 ide 3 | | |
| Sampled Sampled Matrix No. of Containers Sample ID Number 8 8 6 | VOC by 8260 Metals 6010 Chloride 300.0 | BGDOC | Remarks |
| 2/22 S 1 SW 14 | | XII | |
| (/ / SW 14-2' | | (| |
| | | | |
| | | | |
|)) (SW 15-2' 12 | | | |
| SW 16 13 | | | |
| SW 16-8' | | | 1+1 |
| SW 17 15 | | | |
| SW 17-2' 10 | | | |
| Sp 1-10' 17 | | | |
| | | | |
| | | | |
| Additional Instructions: | Samples sequiring them | nal presentation must be re | eceived on ice the day they are sampled or received |
| 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. | | temp above 0 but less than | 6 °C on subsequent days. |
| Relinquished by: (Signature) Date Time Received by: (Signature) Date Time 7.23.22 1444 | Received on ice | Lab Use Or e: 🕜/ N | าโy |
| Relinquished by: (Signature) Date Time Received by: (Signature) Date Date 10:1 | 0 T1 | T2 | Т3 |
| Refinguished by: (Signature) Date Time Received by: (Signature) Date Time | the state of the | | |
| | AVG Temp °C_ | | |
| Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other Container Type: g - glass, | p - poly/plastic, ag - a | client expense The | report for the analysis of the above |
| Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to clic 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. | chent expense. The | report for the undrysis of the above |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: Mack Energy | Date Received: | 02/25/22 | 10:10 | Work Order ID: | E202128 |
|--|--|-------------|-------------------|-----------------------|-------------------|
| Phone: (575) 390-6397 | Date Logged Ir | n: 02/24/22 | 09:42 | Logged In By: | Caitlin Christian |
| Email: Natalie@energystaffingllc.com | | | 17:00 (0 day TAT) | | |
| Chain of Custody (COC) | | | | | |
| 1. Does the sample ID match the COO | C? | Yes | | | |
| 2. Does the number of samples per sa | mpling site location match the COC | No | | | |
| 3. Were samples dropped off by client | t or carrier? | Yes | Carrier: F | edEx | |
| 4. Was the COC complete, i.e., signat | ures, dates/times, requested analyses? | No | | | |
| Were all samples received within h Note: Analysis, such as pH wh i.e, 15 minute hold time, are n | hich should be conducted in the field, | Yes | | Comme | nts/Resolution |
| <u>Sample Turn Around Time (TAT)</u> | | | | ът 1 <i>.</i> • | 1.1. 000 |
| 6. Did the COC indicate standard TAT | Γ, or Expedited TAT? | Yes | | No sample times provi | |
| Sample Cooler | | | | Duplicate Sample nam | es for sample |
| 7. Was a sample cooler received? | | Yes | | numbers 11 and 12. | |
| 8. If yes, was cooler received in good | condition? | Yes | | | |
| 9. Was the sample(s) received intact, | | Yes | | | |
| 10. Were custody/security seals prese | nt? | No | | | |
| 11. If yes, were custody/security seals | s intact? | NA | | | |
| 12. Was the sample received on ice? If yes Note: Thermal preservation is minutes of sampling | s, the recorded temp is 4° C, i.e., $6^{\circ}\pm 2^{\circ}$ C not required, if samples are received w/i 15 | Yes | | | |
| 13. If no visible ice, record the temper | rature. Actual sample temperature: | <u>4°C</u> | | | |
| Sample Container | | | | | |
| 14. Are aqueous VOC samples preser | nt? | No | | | |
| 15. Are VOC samples collected in VC | DA Vials? | NA | | | |
| 16. Is the head space less than 6-8 mm | a , | NA | | | |
| 17. Was a trip blank (TB) included for | | NA | | | |
| 18. Are non-VOC samples collected i | | No | | | |
| 19. Is the appropriate volume/weight or | number of sample containers collected? | Yes | | | |
| <u>Field Label</u> | | | | | |
| 20. Were field sample labels filled our | t with the minimum information: | V | | | |
| Sample ID? Date/Time Collected? | | Yes | | | |
| Collectors name? | | No No | | | |
| Sample Preservation | | 110 | | | |
| 21. Does the COC or field labels indi | cate the samples were preserved? | No | | | |
| 22. Are sample(s) correctly preserved | !? | NA | | | |
| 24. Is lab filteration required and/or re | equested for dissolved metals? | No | | | |
| Multiphase Sample Matrix | | | | | |
| 26. Does the sample have more than o | one phase, i.e., multiphase? | No | | | |
| 27. If yes, does the COC specify which | ch phase(s) is to be analyzed? | NA | | | |
| | | | | | |
| Subcontract Laboratory | | | | | |
| <u>Subcontract Laboratory</u> 28. Are samples required to get sent to | o a subcontract laboratory? | No | | | |
| Subcontract Laboratory 28. Are samples required to get sent t 29. Was a subcontract laboratory spec | - | No NA | Subcontract Lab | r na | |

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



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Project Information

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| ojectin | ormation | | | | | | Cha | n of Custod | y | | | | | | | | | | | | Page | |
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| roject: | Thunder | Bay | | | 194 | Attent | ion: ESS | | Lab | WO# | 12 | 5 | 1 dol | Yumbe | r | 1D | 2D | 3D | Sta | andard | CWA | SDWA |
| ddress: | anager: | M. Buck | ics | | | City S | ss: 2427 County Rd tate, Zip Hobbs, NM 9 | 18240 | Ea | 102 | Ia | 0 | Analy | sis and | Metho | d | | | - | a second to the | (| RCRA |
| | . Zip Ro | swelt, | NM | | | Phone | | 102.112 | - | | T | Í | | Sisting | Incene | | | | | | | I I Chira |
| none: | | | | | | Email: | Natalie | | 115 | 115 | | | | | | | | | | | State | |
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| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | | | | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | BGDOC | BGDOC | | | | Remarks | |
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| Relinquis | led by: (Sign | nature) | Dat | 2.23.2 | 4:1 Time | | Received by: (Signature) | - 2-23 | 1 | Time | 44 | -0 | Rec | eived (| on ice: | 0 | 01.1 | | | | | |
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Project Information

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Page 2 of 2 Page

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| Email: | | - and a state | | | | <u>En</u> | | | | 8015 | 8015 | - | - | | 0 | | 5 | | | NM C | O UT AZ | TX |
| Report d | up by: | | | | | - | | | | DRO/ORO by | GRO/DRO by | BTEX by 8021 | 3260 | Metals 6010 | 300.0 | | WN | ¥ | | X | | |
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| Time Sampled | Sampled | Matrix | No. of Containers | Sample ID | 2 | | | | Number | DRO | GRO | BTE | VOC by 8260 | Met | Chloride : | | BGDOC | BGDOC | | | Remarks | |
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| date or tir | ne of collectio | n is consider | ed fraud an | d may be grou | nds for | legal actio | n. <u>Sampled by:</u> | item l | wood | | - | - | - | - | | | | | | 1 | c deys. | |
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| | the a | | 1 | 2/22 | 14 | 1:19 | Anto | 1 | 2.23 | .22 | - / | 149 | 10 | Re | ceive | ed on ice: | 6 | DI | | | | |
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| | V | | | | | | | | | | | | | | | mp °C | | | | a starting | | and the second |
| Sample | Matrix: S - Soil | Sd - Solid, Sa | g - Sludge, A | - Aqueous, O | - Other | | - | | Contair | ner Typ | be:g- | glass | s, p - | poly/ | plast | ic, ag - am | ber gl | ass, v | - VO | 4 | | |
| Note: Sa | amples are d | iscarded 30 | davs after | results are r | eporte | ed unless | other arrangements are made. | Hazardous | samples w | /ill be r | eturne | d to d | client | or dis | posed | of at the c | lient ex | xpense | e. The | e report for the | analysis of th | ne above |
| samples | is applicable | e only to th | ose sample | s received b | y the l | aboratory | with this COC. The liability of the | e laborator | ry is limited | to the | amou | int pa | id for | on th | e rep | ort. | a press | - | | No. Contraction | and the second | |
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5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name: T

Thunderbay

Work Order: E202135

Job Number: 20046-0001

Received: 2/28/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/1/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/1/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E202135 Date Received: 2/28/2022 8:10:00AM

Natalie Gladden,



Page 247 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/28/2022 8:10:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@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

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

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Sample Summary

| | | Sampic Sum | mai y | | |
|--------------------|---------------|------------------|-----------------|----------|------------------|
| Mack Energy | | Project Name: | Thunderbay | | Reported: |
| 7 W. Compress Road | | Project Number: | 20046-0001 | | Keporteu. |
| Artesia NM, 88210 | | Project Manager: | Natalie Gladden | | 03/01/22 12:45 |
| lient Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| W 18 | E202135-01A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| V 18-2' | E202135-02A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| V 19 | E202135-03A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| / 19-2' | E202135-04A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| V 20 | E202135-05A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| / 20-2' | E202135-06A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| V 21 | E202135-07A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| V 21-2' | E202135-08A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| / 22 | E202135-09A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| / 22-2' | E202135-10A | Soil | 02/23/22 | 02/28/22 | Glass Jar, 4 oz. |
| | | | | | |



| | 5 | ampie D | ala | | | |
|--|---------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | B () |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | alie Gladden | | | 3/1/2022 12:45:52PN |
| | | SW 18 | | | | |
| | | E202135-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: IY | | Batch: 2210001 |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Toluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.6 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.2 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 78.5 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: KL | | Batch: 2210004 |
| Chloride | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| | | | | | | |

Sample Data



Sample Data

| | 0 | ample D | ala | | | |
|--|--------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name | | nderbay | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | alie Gladden | | | 3/1/2022 12:45:52PM |
| | | SW 18-2' | | | | |
| | | E202135-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Ana | lyst: IY | | Batch: 2210001 |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Foluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.0 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Ana | lyst: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.0 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Ana | lyst: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 80.8 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Ana | lyst: KL | | Batch: 2210004 |
| Chloride | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| | | | | | | |



| | 5 | ample D | ลเล | | | |
|--|---------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name | : Thu | nderbay | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | alie Gladden | | | 3/1/2022 12:45:52PM |
| | | SW 19 | | | | |
| | | E202135-03 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: IY | | Batch: 2210001 |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Toluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.0 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.3 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 82.2 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: KL | | Batch: 2210004 |
| Chloride | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| | | | | | | |
Sample Data

| | | ample D | utu | | | |
|--|------------------------------|------------|--------------------|----------|---------------------|----------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | er: 2004 | nderbay 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | ilie Gladden | | 3/1/2022 12:45:52PM | |
| | | SW 19-2' | | | | |
| | | E202135-04 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg mg/kg Analyst: IY | | | | | Batch: 2210001 |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Toluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.0 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | vst: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | vst: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 80.9 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | vst: KL | | Batch: 2210004 |
| Chloride | 22.3 | 20.0 | 1 | 02/28/22 | 02/28/22 | |



| | 5 | ample D | ลเล | | | |
|--|--------------|------------|--------------|----------------|----------|---------------------|
| Mack Energy | Project Name | | nderbay | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | iger: Nata | alie Gladden | | | 3/1/2022 12:45:52PM |
| | | SW 20 | | | | |
| | | E202135-05 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | Batch: 2210001 | | |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Toluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.1 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | vst: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.3 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | vst: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 82.7 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | rst: KL | | Batch: 2210004 |
| Chloride | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| | | | | | | |

Sample Data

| | D | ample D | uta | | | |
|--|--------------|------------|-------------|----------------|---------------------|----------------|
| Mack Energy | Project Name | : Thu | nderbay | | | |
| 7 W. Compress Road | Project Numb | ber: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | lie Gladden | | 3/1/2022 12:45:52PM | |
| | | SW 20-2' | | | | |
| | | E202135-06 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Batch: 2210001 | | |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Foluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.1 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.1 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 83.5 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2210004 |
| Chloride | 32.7 | 20.0 | 1 | 02/28/22 | 02/28/22 | |



| | 5 | ample D | ala | | | |
|--|--------------|------------|--------------|----------------|----------|---------------------|
| Mack Energy | Project Name | e: Thu | nderbay | | | |
| 7 W. Compress Road | Project Numb | ber: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | alie Gladden | | | 3/1/2022 12:45:52PM |
| | | SW 21 | | | | |
| | | E202135-07 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Batch: 2210001 | | |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Toluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 96.1 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.7 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 84.3 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2210004 |
| Chloride | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| | | | | | | |



Sample Data

| | | ampie D | utu | | | |
|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladden | | | Reported: 3/1/2022 12:45:52PM |
| | | SW 21-2' | | | | |
| | | E202135-08 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg mg/kg Analyst: IY | | | | | Batch: 2210001 |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Foluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| p-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.0 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.9 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: n-Nonane | | 81.9 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: KL | | Batch: 2210004 |
| Chloride | 52.4 | 20.0 | 1 | 02/28/22 | 02/28/22 | |



| | S | ample D | ลเล | | | |
|--|--|------------|------------------------------------|----------------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/1/2022 12:45:52PM |
| | 5 | SW 22 | | | | |
| | | E202135-09 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Batch: 2210001 | | |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| oluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| -Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 95.0 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 97.3 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | by EPA 8015D - DRO/ORO mg/kg mg/kg Analyst: AK | | st: AK | | Batch: 2210002 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| urrogate: n-Nonane | | 84.1 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2210004 |
| Chloride | 27.7 | 20.0 | 1 | 02/28/22 | 02/28/22 | |

Sample Data

| | 5 | ample D | ata | | | |
|--|---|------------|--------------------|----------|---------------------|----------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numbe | | nderbay 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladden | | 3/1/2022 12:45:52PM | |
| | | SW 22-2' | | | | |
| | | E202135-10 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | rs by EPA 8021B mg/kg mg/kg Analyst: IY | | | | | Batch: 2210001 |
| Benzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Toluene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o-Xylene | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 02/28/22 | 02/28/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.6 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2210001 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 02/28/22 | 02/28/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.6 % | 70-130 | 02/28/22 | 02/28/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: AK | | Batch: 2210002 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 02/28/22 | 02/28/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 02/28/22 | 02/28/22 | |
| Gurrogate: n-Nonane | | 82.7 % | 50-200 | 02/28/22 | 02/28/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: KL | | Batch: 2210004 |
| Chloride | 65.2 | 20.0 | 1 | 02/28/22 | 02/28/22 | |



QC Summary Data

| | | QC D | u111111 | iny Data | а | | | | | | |
|-------------------------------------|----------|--------------------|----------------|------------------|-----------|---------------|-------------|--------------|---------------------|--|--|
| Mack Energy | | Project Name: | | hunderbay | | | | | Reported: | | |
| 7 W. Compress Road | | Project Number: | | 0046-0001 | | | | | | | |
| Artesia NM, 88210 | | Project Manager: | N | atalie Gladder | 1 | | | | 3/1/2022 12:45:52PM | | |
| Volatile Organics by EPA 8021B | | | | | | | | | | | |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | | | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes | | |
| Blank (2210001-BLK1) | | | | | | | Prepared: 0 | 2/28/22 A | nalyzed: 02/28/22 | | |
| · · · · · | ND | 0.0250 | | | | | Trepurea. o | 2,20,22 11 | nary20a. 02/20/22 | | |
| Benzene | ND ND | 0.0250 | | | | | | | | | |
| Ethylbenzene | | 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 | 7.41 | | 8.00 | | 92.6 | 70-130 | | | | | |
| LCS (2210001-BS1) | | | | | | | Prepared: 0 | 2/28/22 A | nalyzed: 02/28/22 | | |
| Benzene | 4.65 | 0.0250 | 5.00 | | 92.9 | 70-130 | | | | | |
| Ethylbenzene | 4.98 | 0.0250 | 5.00 | | 99.7 | 70-130 | | | | | |
| Toluene | 5.14 | 0.0250 | 5.00 | | 103 | 70-130 | | | | | |
| o-Xylene | 4.92 | 0.0250 | 5.00 | | 98.4 | 70-130 | | | | | |
| p,m-Xylene | 10.1 | 0.0500 | 10.0 | | 101 | 70-130 | | | | | |
| Total Xylenes | 15.0 | 0.0250 | 15.0 | | 100 | 70-130 | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.55 | | 8.00 | | 94.4 | 70-130 | | | | | |
| Matrix Spike (2210001-MS1) | | | | Source: | E202135-0 |)1 | Prepared: 0 | 2/28/22 A | nalyzed: 02/28/22 | | |
| Benzene | 4.89 | 0.0250 | 5.00 | ND | 97.8 | 54-133 | 1 | | • | | |
| Ethylbenzene | 5.21 | 0.0250 | 5.00 | ND | 104 | 61-133 | | | | | |
| Toluene | 5.41 | 0.0250 | 5.00 | ND | 104 | 61-130 | | | | | |
| p-Xylene | 5.13 | 0.0250 | 5.00 | ND | 103 | 63-131 | | | | | |
| p,m-Xylene | 10.6 | 0.0230 | 10.0 | ND | 105 | 63-131 | | | | | |
| Total Xylenes | 15.7 | 0.0250 | 15.0 | ND | 105 | 63-131 | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.40 | 0.0250 | 8.00 | 112 | 92.5 | 70-130 | | | | | |
| Matrix Spike Dup (2210001-MSD1) | | | | Source | E202135-0 |)1 | Prenared: 0 | 2/28/22 A | nalyzed: 02/28/22 | | |
| | 4 7 1 | 0.0250 | 5.00 | | | | - | | nary 200. 02:20:22 | | |
| Benzene | 4.61 | 0.0250 | 5.00 | ND | 92.2 | 54-133 | 5.87 | 20 | | | |
| Ethylbenzene | 4.93 | 0.0250 | 5.00 | ND | 98.6 | 61-133 | 5.49 | 20 | | | |
| Toluene | 5.11 | 0.0250 | 5.00 | ND | 102 | 61-130 | 5.62 | 20 | | | |
| o-Xylene | 4.88 | 0.0250 | 5.00 | ND | 97.5 | 63-131 | 5.07 | 20 | | | |
| p,m-Xylene | 10.0 | 0.0500 | 10.0 | ND | 100 | 63-131 | 5.35 | 20 | | | |
| Total Xylenes | 14.9 | 0.0250 | 15.0 | ND | 99.3 | 63-131 | 5.26 | 20 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.38 | | 8.00 | | 92.2 | 70-130 | | | | | |
| | | | | | | | | | | | |



QC Summary Data

| | | QC D | umm | ii y Data | L | | | | |
|--|--------|--|----------------|--|--------------------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 3/1/2022 12:45:52PM |
| | Noi | nhalogenated (| Organics | by EPA 801 | 5D - Gl | RO | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2210001-BLK1) | | | | | | | Prepared: 0 | 2/28/22 A | nalyzed: 02/28/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.82 | | 8.00 | | 97.8 | 70-130 | | | |
| LCS (2210001-BS2) | | | | | | | Prepared: 0 | 2/28/22 A | nalyzed: 02/28/22 |
| Gasoline Range Organics (C6-C10) | 45.0 | 20.0 | 50.0 | | 90.1 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.09 | | 8.00 | | 101 | 70-130 | | | |
| Matrix Spike (2210001-MS2) | | | | Source: I | E202135-0 | 01 | Prepared: 0 | 2/28/22 A | nalyzed: 02/28/22 |
| Gasoline Range Organics (C6-C10) | 47.7 | 20.0 | 50.0 | ND | 95.3 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.00 | | 8.00 | | 100 | 70-130 | | | |
| Matrix Spike Dup (2210001-MSD2) | | | | Source: I | E 202135- (| 01 | Prepared: 0 | 2/28/22 A | nalyzed: 02/28/22 |
| Gasoline Range Organics (C6-C10) | 49.6 | 20.0 | 50.0 | ND | 99.1 | 70-130 | 3.90 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.08 | | 8.00 | | 101 | 70-130 | | | |



QC Summary Data

| | | QC DI | | ary Data | | | | | |
|---|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | : | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 3/1/2022 12:45:52PM |
| | Nonh | alogenated Orga | anics by | y EPA 8015D | - DRO | /ORO | | | Analyst: AK |
| Analyte | Result mg/kg | Reporting Limit mg/kg | Spike Level mg/kg | Source Result mg/kg | Rec % | Rec Limits % | RPD % | RPD Limit % | Notes |
| Blank (2210002-BLK1) | | | | | | | Prepared: 0 | 2/28/22 A | analyzed: 02/28/22 |
| Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36) | ND ND | 25.0 50.0 | | | | | | | |
| Surrogate: n-Nonane | 39.8 | | 50.0 | | 79.5 | 50-200 | | | |
| LCS (2210002-BS1) | | | | | | | Prepared: 0 | 2/28/22 A | analyzed: 02/28/22 |
| Diesel Range Organics (C10-C28) | 458 | 25.0 | 500 | | 91.6 | 38-132 | | | |
| Surrogate: n-Nonane | 38.1 | | 50.0 | | 76.2 | 50-200 | | | |
| Matrix Spike (2210002-MS1) | | | | Source: E | 202135- | 03 | Prepared: 0 | 2/28/22 A | analyzed: 02/28/22 |
| Diesel Range Organics (C10-C28) | 463 | 25.0 | 500 | ND | 92.7 | 38-132 | | | |
| Surrogate: n-Nonane | 39.2 | | 50.0 | | 78.4 | 50-200 | | | |
| Matrix Spike Dup (2210002-MSD1) | | | | Source: E | 202135- | 03 | Prepared: 0 | 2/28/22 A | analyzed: 02/28/22 |
| Diesel Range Organics (C10-C28) | 526 | 25.0 | 500 | ND | 105 | 38-132 | 12.6 | 20 | |
| Surrogate: n-Nonane | 45.8 | | 50.0 | | 91.6 | 50-200 | | | |



QC Summary Data

| | | $\mathbf{x} \in \mathbf{v}$ | •••••• | | - | | | | |
|--|--------|--|----------------|---|----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | hunderbay 0046-0001 Jatalie Gladden | | | | | Reported: 3/1/2022 12:45:52PM |
| | | , , | | 300.0/9056A | • | | | | Analyst: KL |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2210004-BLK1) | | | | | | | Prepared: 0 | 2/28/22 A | Analyzed: 02/28/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2210004-BS1) | | | | | | | Prepared: 0 | 2/28/22 A | Analyzed: 02/28/22 |
| Chloride | 244 | 20.0 | 250 | | 97.5 | 90-110 | | | |
| Matrix Spike (2210004-MS1) | | | | Source: | E202135- | 01 | Prepared: 0 | 2/28/22 A | Analyzed: 02/28/22 |
| Chloride | 267 | 20.0 | 250 | ND | 107 | 80-120 | | | |
| Matrix Spike Dup (2210004-MSD1) | | | | Source: | E202135- | 01 | Prepared: 0 | 2/28/22 A | Analyzed: 02/28/22 |
| Chloride | 269 | 20.0 | 250 | ND | 108 | 80-120 | 0.749 | 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.



| Γ | Mack Energy | Project Name: | Thunderbay | |
|---|--------------------|------------------|-----------------|----------------|
| | 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| | Artesia NM, 88210 | Project Manager: | Natalie Gladden | 03/01/22 12:45 |

| ND | Analyte NOT DETECTED at or above the reporting limit |
|----|--|
| | · · · · · · · · · · · · · · · · · · · |

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

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



Released

| roject In | formation | b. | | | | | | Chain of | Custody | × | | | | | | | | | | | Pa | age | of |
|-----------------|-----------------|---------------|----------------------|----------------|---------------------------------------|--------------|---------------------------------------|----------------------|-------------|------------|-----------------|--------------|----------------|-------------|------------|--------------------|---------|--------|-------------|-----------------------------------|---------|------------|----------------|
| lient: | Mack 1 | Energi | 4 | | | | Bill To | D | - | - | | | | e On | | | | | TAT | | | | ogram |
| roject: | Thunde | rBay | ~ | | Att | tention: A | 127 Coun | Lo pl | | Lab | WO# | 12 | = | I dol | Num | -900l | 1D | 2D | 3D | Standar | ď | CWA | SDWA |
| ddress: | lanager: | M. BL | lues | | | v. State, Z | Lip Hobbs, | NM 882 | 40 | Ea | rud | 13 | 2 | Analy | sis an | d Metho | d | | | 1.12 | | | RCRA |
| itv. Stat | e, Zip R | Swell | , NM | | Ph | one: | op needs j | and our | | | | | | | | | | | | 1000 | - | | |
| hone: | | | / | | En | nail: Nat | ralie | | | 8015 | 015 | | | | | • | 10.1 | | | - | | State | - |
| mail: | | | | | 1.1 | | | | | by 8 | GRO/DRO by 8015 | 021 | 260 | 10 | 300.0 | 100 | MN | × | | NM | | JT AZ | IX |
| Report d | | | 1 | | | | | | Lab | DRO/ORO by | /DRO | BTEX by 8021 | VOC by 8260 | als 60 | Chloride : | | | | | 24 | _ | | |
| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | | | | | Number | DRO, | GRO, | втех | voc | Metals 6010 | Chlo | | BGDOC | BGDOC | 1 | | F | lemarks | |
| | 2/23 | | }- | SW | 18 | | | | 1 | | | | | | | | X | | | | | | |
| | (| | 1 | | 18-2' | | | | 2 | | | | | | | | (| | | | | | |
| |) | Q | | | 19 | | | 1 | 3 | | | | | | | | 17 | | | | | - | |
| | | | | | 19 -2' | | | 1 | 4 | | | | | | | | | | | | | | |
| | | | | | 20 | | | | 5 | | | | | | | | 5 | | | | | | |
| | | | | | 20-2' | | | | 9 | | - | | | | | | (| | | | | | |
| | | | | | | | | | 7 | | | | | | | 5 | 1 | | | | | | |
| | | | 1/ | SW | 21 | 1 | | | 1. State 1. | | - | - | - | - | | | | | | | | | |
| | | | | | 21-2 | | | | 8 | - | - | | | | | | 5 | - | | | | | |
| b) ——— | | | | SW | | | | - | 9 | - | | | - | - | - | | 15 | - | | | | | |
| | / | | | SW | 22 - | 2' | | | 10 | | | | | | | | 1 | | | | | | |
| Additio | nal Instru | ctions: | | ÷. | | | | | | | | | | | | | | | | | | | |
| | | | | | ample. I am awa ds for legal actio | | ring with or intent | tionally mislabellin | a the samp | e locati | ion, | | | 1.00 | | COLOR PROPERTY AND | | | | eived on ice the °C on subsequ | | | ed or received |
| | hed by: (Sig | | Dat | | Time 1:221 | Receive | d by: (Signature) | | Date | 2) | Time | 52 | 5 | Rec | eiveo | d on ice: | | ab U | se Onl I | У | 1 | | |
| Relinquis | hed by: (Sig | nature) | Dat | | Time 1632 | Receive | d by: (Signature) | 1/sten | Date | 122 | Time 8 | :10 | | | | | T2 | | | Т3 | | | |
| Relinquis | hed by: (Sig | nature) | Da | | Time | | ed by: (Signature) |) | Date | | Time | | | | 5 Ten | np °C_ | 4 | | | 1 | | | |
| Sample M | atrix: S - Soil | Sd - Solid Se | - Sludge, A | Aqueous, O - 0 | Other | | | | Containe | er Typ | e: g - | glass | , p - p | oly/p | lastic | , ag - aml | ber gla | ass, v | - VOA | | | | |
| Note: Sa | mples are di | scarded 30 | days after | results are re | ported unless of | other arrang | ements are mad DC. The liability o | le. Hazardous | amples wi | ll be re | turne | d to c | lient o | r disp | osed o | of at the cli | ient ex | pense | . The re | eport for th | e analy | sis of the | above |
| samples | is applicable | only to the | use sample | s received by | the laboratory | with this CC | o. The hability o | in the laboratory | Junica | a the | annou | | | - | > | | 3.5 | | • | | | | |
| | | | | | | | | Page 2 | 20 of 21 | | | | (| E | 3 | e | n | V | Ĭ | ro | t | e | C |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy Da | te Received: | 02/28/22 08 | 3:10 | Work Order ID: E202135 |
|-----------------|--|----------------------|---------------|------------------|------------------------------------|
| Phone: | (575) 390-6397 Da | te Logged In: | 02/25/22 16 | 5:08 | Logged In By: Alexa Michaels |
| Email: | Natalie@energystaffingllc.com Du | ie Date: | 03/01/22 17 | 7:00 (1 day TAT) | |
| Chain of | f Custody (COC) | | | | |
| 1. Does t | the sample ID match the COC? | | Yes | | |
| 2. Does t | the number of samples per sampling site location match | the COC | Yes | | |
| 3. Were s | samples dropped off by client or carrier? | | Yes | Carrier: U | JPS |
| 4. Was th | ne COC complete, i.e., signatures, dates/times, requested | analyses? | No | _ | |
| 5. Were a | all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion. | e field, | Yes | | Comments/Resolution |
| <u>Sample '</u> | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | e COC indicate standard TAT, or Expedited TAT? | | Yes | | Time Sampled and Smaple matrix not |
| Sample (| <u>Cooler</u> | | | | provided on COC. |
| 7. Was a | sample cooler received? | | Yes | | |
| 8. If yes, | was cooler received in good condition? | | Yes | | |
| 9. Was th | ne sample(s) received intact, i.e., not broken? | | Yes | | |
| 10. Were | custody/security seals present? | | No | | |
| 11. If yes | s, were custody/security seals intact? | | NA | | |
| 12. Was ti | he sample received on ice? If yes, the recorded temp is 4°C, i.e., Note: Thermal preservation is not required, if samples are rec minutes of sampling | | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sample tem | nperature: <u>4°</u> | <u>C</u> | | |
| Sample | <u>Container</u> | | | | |
| 14. Are a | aqueous VOC samples present? | | No | | |
| 15. Are V | VOC samples collected in VOA Vials? | | NA | | |
| 16. Is the | e 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 r | non-VOC samples collected in the correct containers? | | Yes | | |
| 19. Is the | appropriate volume/weight or number of sample containers | collected? | Yes | | |
| Field La | bel | | | | |
| | field sample labels filled out with the minimum information | ation: | | | |
| | Sample ID? | | Yes | | |
| | Date/Time Collected? Collectors name? | | No No | | |
| | Preservation_ | | INO | | |
| | the COC or field labels indicate the samples were prese | rved? | No | | |
| | sample(s) correctly preserved? | | NA | | |
| | o filteration required and/or requested for dissolved meta | ls? | No | | |
| | ase Sample Matrix | | | | |
| | the sample have more than one phase, i.e., multiphase? | | No | | |
| | s, does the COC specify which phase(s) is to be analyzed | 1? | NA | | |
| - | ract Laboratory | | 11/3 | | |
| | samples required to get sent to a subcontract laboratory? | | No | | |
| | a subcontract laboratory specified by the client and if so | who? | | Subcontract Lab | n' NA |
| | a care care incortance, specified by the energy and the first | | - · · · · · · | Subcontract Lau | , |

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



•





5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay

Work Order: E203043

Job Number: 20046-0001

Received: 3/9/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/10/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/10/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E203043 Date Received: 3/9/2022 8:10:00AM

Natalie Gladden,



Page 268 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/9/2022 8:10:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

Field Offices:

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

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| | | Sample Sum | illai y | | |
|--------------------|---------------|------------------|-----------------|----------|------------------|
| Mack Energy | | Project Name: | Thunderbay | | Reported: |
| 7 W. Compress Road | | Project Number: | 20046-0001 | | Reported. |
| Artesia NM, 88210 | | Project Manager: | Natalie Gladden | | 03/10/22 17:16 |
| | | | | | |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| SP8 - 6' | E203043-01A | Soil | 03/03/22 | 03/09/22 | Glass Jar, 4 oz. |
| SP9 - 6' | E203043-02A | Soil | 03/03/22 | 03/09/22 | Glass Jar, 4 oz. |
| SW13 - 6' | E203043-03A | Soil | 03/03/22 | 03/09/22 | Glass Jar, 4 oz. |
| SP3 - 6' | E203043-04A | Soil | 03/03/22 | 03/09/22 | Glass Jar, 4 oz. |



| | 0 | ampie D | ala | | | |
|--|------------------------------|------------|--------------------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | | nderbay 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | | ilie Gladden | | | 3/10/2022 5:16:55PM |
| | | SP8 - 6' | | | | |
| | | E203043-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2211034 |
| Benzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Toluene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/09/22 | 03/09/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 96.7 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2211034 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.2 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: KL | | Batch: 2211020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/09/22 | 03/09/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: n-Nonane | | 83.8 % | 50-200 | 03/09/22 | 03/09/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2211035 |
| Chloride | 104 | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| | | | | | | |

Sample Data

Sample Data

| | 2 | bample D | ala | | | |
|--|--------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name | e: Thu | nderbay | | | |
| 7 W. Compress Road | Project Num | ber: 200 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ager: Nata | alie Gladden | | | 3/10/2022 5:16:55PM |
| | | SP9 - 6' | | | | |
| | | E203043-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: RKS | | Batch: 2211034 |
| Benzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Toluene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/09/22 | 03/09/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.9 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: RKS | | Batch: 2211034 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: KL | | Batch: 2211020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/09/22 | 03/09/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: n-Nonane | | 94.3 % | 50-200 | 03/09/22 | 03/09/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2211035 |
| Chloride | ND | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/10/2022 5:16:55PM |
| | | SW13 - 6' | | | | |
| | | E203043-03 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211034 |
| Benzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Toluene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/09/22 | 03/09/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 98.8 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211034 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.4 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: KL | | Batch: 2211020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/09/22 | 03/09/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: n-Nonane | | 109 % | 50-200 | 03/09/22 | 03/09/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211035 |
| Chloride | ND | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| | | | | | | |



Sample Data

| | 2 | bample D | ลเล | | | |
|--|-------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Nam | | nderbay | | | |
| 7 W. Compress Road | Project Num | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Man | ager: Nata | alie Gladden | | | 3/10/2022 5:16:55PM |
| | | SP3 - 6' | | | | |
| | | E203043-04 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2211034 |
| Benzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Toluene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/09/22 | 03/09/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.3 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2211034 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 03/09/22 | 03/09/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Anal | yst: KL | | Batch: 2211020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/09/22 | 03/09/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/09/22 | 03/09/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | 03/09/22 | 03/09/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | yst: RAS | | Batch: 2211035 |
| Chloride | ND | 20.0 | 1 | 03/09/22 | 03/09/22 | |
| | | | | | | |



QC Summary Data

| | | QC D | u | ing Date | • | | | | |
|-------------------------------------|--------------|----------------------------------|----------------|------------------------|--------------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | hunderbay 0046-0001 | | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | Ν | atalie Gladden | | | | | 3/10/2022 5:16:55PM |
| | | Volatile O | rganics l | by EPA 802 | 1B | | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211034-BLK1) | | | | | | | Prepared: 0 | 3/09/22 | Analyzed: 03/09/22 |
| 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 | 7.83 | | 8.00 | | 97.8 | 70-130 | | | |
| LCS (2211034-BS1) | | | | | | | Prepared: 0 | 3/09/22 | Analyzed: 03/09/22 |
| Benzene | 4.22 | 0.0250 | 5.00 | | 84.3 | 70-130 | | | |
| Ethylbenzene | 4.48 | 0.0250 | 5.00 | | 89.6 | 70-130 | | | |
| Toluene | 4.54 | 0.0250 | 5.00 | | 90.7 | 70-130 | | | |
| o-Xylene | 4.58 | 0.0250 | 5.00 | | 91.5 | 70-130 | | | |
| p,m-Xylene | 9.12 | 0.0500 | 10.0 | | 91.2 | 70-130 | | | |
| Total Xylenes | 13.7 | 0.0250 | 15.0 | | 91.3 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.76 | | 8.00 | | 97.0 | 70-130 | | | |
| Matrix Spike (2211034-MS1) | | | | Source: l | E203042-(| 01 | Prepared: 0 | 3/09/22 | Analyzed: 03/09/22 |
| Benzene | 4.27 | 0.0250 | 5.00 | ND | 85.4 | 54-133 | | | |
| Ethylbenzene | 4.72 | 0.0250 | 5.00 | 0.137 | 91.7 | 61-133 | | | |
| Toluene | 4.62 | 0.0250 | 5.00 | 0.0387 | 91.6 | 61-130 | | | |
| o-Xylene | 5.14 | 0.0250 | 5.00 | 0.373 | 95.3 | 63-131 | | | |
| p,m-Xylene | 9.97 | 0.0500 | 10.0 | 0.809 | 91.7 | 63-131 | | | |
| Total Xylenes | 15.1 | 0.0250 | 15.0 | 1.18 | 92.9 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 9.77 | | 8.00 | | 122 | 70-130 | | | |
| Matrix Spike Dup (2211034-MSD1) | | | | Source: 1 | E203042-(| 01 | Prepared: 0 | 3/09/22 | Analyzed: 03/09/22 |
| Benzene | 4.27 | 0.0250 | 5.00 | ND | 85.4 | 54-133 | 0.0234 | 20 | |
| | 4.72 | 0.0250 | 5.00 | 0.137 | 91.7 | 61-133 | 0.0847 | 20 | |
| Ethylbenzene | | | | | | 61-130 | 0.216 | 20 | |
| • | 4.63 | 0.0250 | 5.00 | 0.0387 | 91.8 | 01-130 | | 20 | |
| Ethylbenzene Toluene o-Xylene | | 0.0250 0.0250 | 5.00 5.00 | 0.0387 0.373 | 91.8 95.3 | 63-131 | 0.0399 | 20 | |
| Toluene | 4.63 | | | | | | | | |
| Toluene o-Xylene | 4.63 5.14 | 0.0250 | 5.00 | 0.373 | 95.3 | 63-131 | 0.0399 | 20 | |



OC Summary Data

| | | QC D | u1111110 | ii y Data | • | | | | |
|--|--------|--|-------------------------|--|----------|--------------------|--------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay)046-0001 atalie Gladden | | | | | Reported: 3/10/2022 5:16:55PM |
| | No | nhalogenated C | Organics | by EPA 801 | 5D - Gl | RO | | | Analyst: RKS |
| Analyte | Result | Reporting Limit mg/kg | Spike Level mg/kg | Source Result mg/kg | Rec % | Rec Limits % | RPD % | RPD Limit % | Notes |
| DLL (2211024 DI 1/1) | | | | | | | Dressent O | 2/00/22 | 1 |
| Blank (2211034-BLK1) | | | | | | | Prepared: 0. | 5/09/22 Ai | nalyzed: 03/09/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.86 | | 8.00 | | 98.2 | 70-130 | | | |
| LCS (2211034-BS2) | | | | | | | Prepared: 0 | 3/09/22 Ai | nalyzed: 03/09/22 |
| Gasoline Range Organics (C6-C10) | 50.5 | 20.0 | 50.0 | | 101 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.07 | | 8.00 | | 101 | 70-130 | | | |
| Matrix Spike (2211034-MS2) | | | | Source: F | 203042- | 01 | Prepared: 02 | 3/09/22 Ai | nalyzed: 03/09/22 |
| Gasoline Range Organics (C6-C10) | 93.4 | 20.0 | 50.0 | 40.0 | 107 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.68 | | 8.00 | | 96.0 | 70-130 | | | |
| Matrix Spike Dup (2211034-MSD2) | | | | Source: H | 203042- | 01 | Prepared: 0 | 3/09/22 Ai | nalyzed: 03/09/22 |
| Gasoline Range Organics (C6-C10) | 90.9 | 20.0 | 50.0 | 40.0 | 102 | 70-130 | 2.68 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.73 | | 8.00 | | 96.7 | 70-130 | | | |



QC Summary Data

| | | QC D | | ary Data | | | | | |
|--|-----------------|--|-------------------------|---|----------|--------------------|--------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 3/10/2022 5:16:55PM |
| | Nonh | alogenated Org | anics by | y EPA 8015D | - DRO | /ORO | | | Analyst: KL |
| Analyte | Result mg/kg | Reporting Limit mg/kg | Spike Level mg/kg | Source Result mg/kg | Rec % | Rec Limits % | RPD % | RPD Limit % | Notes |
| Blank (2211020-BLK1) | | | | | | | Prepared: 0 | 3/08/22 A | Analyzed: 03/08/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 52.0 | | 50.0 | | 104 | 50-200 | | | |
| LCS (2211020-BS1) | | | | | | | Prepared: 02 | 3/08/22 A | Analyzed: 03/08/22 |
| Diesel Range Organics (C10-C28) | 460 | 25.0 | 500 | | 92.0 | 38-132 | | | |
| Surrogate: n-Nonane | 51.7 | | 50.0 | | 103 | 50-200 | | | |
| Matrix Spike (2211020-MS1) | | | | Source: E | 203028- | 21 | Prepared: 0 | 3/08/22 A | Analyzed: 03/08/22 |
| Diesel Range Organics (C10-C28) | 492 | 25.0 | 500 | ND | 98.4 | 38-132 | | | |
| Surrogate: n-Nonane | 57.4 | | 50.0 | | 115 | 50-200 | | | |
| Matrix Spike Dup (2211020-MSD1) | | | | Source: E | 203028- | 21 | Prepared: 0. | 3/08/22 A | Analyzed: 03/08/22 |
| Diesel Range Organics (C10-C28) | 497 | 25.0 | 500 | ND | 99.5 | 38-132 | 1.08 | 20 | |
| Surrogate: n-Nonane | 59.3 | | 50.0 | | 119 | 50-200 | | | |



QC Summary Data

| | | | •••••• | <i>J</i> – | • | | | | |
|--|-----------------|--|-------------------------|---|-----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | hunderbay 0046-0001 fatalie Gladden | L | | | | Reported: 3/10/2022 5:16:55PM |
| | | Anions | by EPA | 300.0/9056A | 1 | | | | 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 |
| | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Blank (2211035-BLK1) | | | | | | | Prepared: 0 | 3/09/22 A | analyzed: 03/09/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2211035-BS1) | | | | | | | Prepared: 0 | 3/09/22 A | analyzed: 03/09/22 |
| Chloride | 248 | 20.0 | 250 | | 99.2 | 90-110 | | | |
| Matrix Spike (2211035-MS1) | | | | Source: | E203042-0 | 01 | Prepared: 0 | 3/09/22 A | analyzed: 03/09/22 |
| Chloride | 15600 | 400 | 250 | 10500 | NR | 80-120 | | | M2 |
| Matrix Spike Dup (2211035-MSD1) | | | | Source: | E203042-0 | 01 | Prepared: 0 | 3/09/22 A | analyzed: 03/09/22 |
| Chloride | 14200 | 400 | 250 | 10500 | NR | 80-120 | 9.18 | 20 | M2 |

QC Summary Report Comment:

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



| Mack Energy | Project Name: | Thunderbay | |
|--------------------|------------------|-----------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Natalie Gladden | 03/10/22 17:16 |

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



| R | | | |
|-----|----------|-----------|---|
| ele | | | |
| Fre | ject Inf | formation | 1 |
| be | | 1.1.1 | |

Glient:

Received by OCD: 6/15/2022 4:07:07 PM

Page 280 of 508

| ent: | VV | YOCH | - (=1 | nerx- | 11 | | | Bill To | | | 200 | La | ab Us | se Or | ly . | | | | T | AT | EPA F | rogram |
|---|------------------|------------------|---------------|----------------|------------|--------------|----------------|-----------------------|------------------------|-----------------|-----------------|--------------|-------------|-------------|----------------|----------------|-----------|----------|------------|--|------------------|-----------------|
| roject: | Th | und | | Xu / | 1 | Atter | ntion: F | 85 | | Lab | WO | ‡ | 2 | Job | | | 1D | 2D | 3D | Standard | CWA | SDWA |
| 10 | Manager: | | | 9 | | Addr | ess: | 0 | | E | 203 | 04 | 3 | áb | HG | 10001 | | 12 | | | | |
| Address | | | | | | City, | State, Zip | | | | | | | Analy | sis a | nd Metho | d | 1 | , | 1 | | RCRA |
| ty, Sta | te, Zip | _ | | | | Phor | e: | | | - | | | | | 100 | | | | | 1 | | |
| enone: | | | | | - 1 | Emai | l: | | | 1 | 015 | | | | 1.1 | - | | | | 1. | State | |
| anail: | Nata | ie + | Dakot | * | _ | - | | | | oy 8(| oy 8(| 21 | 0 | 0 | 0.00 | | WN | | | NM CO | UT AZ | TX |
| Report | due by: | | | | 0.011 | | | | | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | | TX | | X | | |
| . Time | Date | Matrix | No. of | Sample | ID | | | | Lab | 0/0 | d/o | EX b | C b) | etals | loric | | BGDOC | BGDOC | | | Remark | 5 |
| Sampled | Sampled | inacia | Containers | Jumpie | | | | | Numbe | er ä | GB | 81 | > | ž | 5 | - | B | BG | - | | - and the second | |
| .16 | 33 | 501 | 81 | 54 | 28 - | -(01 | | | 1 | | | | | | | | 1/ | - | - | | | |
| R | 210 | 0 | - | 60 | 0 | | . ,1 | | 2 | 2 | 1 | | | | | | 1 | | | | | |
| | 313 | -(| | De | 497 | SPA | -6 | | U.S. | | - | - | | - | - | | | - | 4 | | | |
| | 32 | 5 | 1 | Sc | 2213 | 3-1 | 01 | | 3 | | | | | | | | | | | | | |
| | hi | 1/ | 1 | 5 | 02 | , |) | | 4 | | | | | | | | | 1 | | | | |
| | PD | | | OF | 2 | - 0 | | | | - | - | | - | - | - | | +(| - | - | | | |
| - | 33 | 11 | +7 | 50 | Bok | a | UT= | 4 0 | A 2.7.22 per Dakota | | | | - | - | - | | + | + | | | | |
| | | | | | | | | | per Dakota | 3 | | | | | | | | | | | | |
| | - | | | 4 | | | | | - 1 - 14 | - | + | - | - | - | - | | + | - | | | | |
| 1 | | | | | | | | | | 1 | | | | 1 | | | | | | | | |
| | | | | - | | | | | | 1 | 1 | | | | | | | | | | | |
| - | - | | - | - | | | | | | 14 | 1 | + | - | - | - | | - | - | - | | | |
| | | | | | | | | | | 10 | | | | | | | | _ | - | | | |
| | | | | | | | | | 4 | | | | | | | | | | | | | |
| Additio | onal Instru | actions: | <u> </u> | - | | | | | | | | | - | | - | 1 | - | | | | | |
| L (field o | malar) attor | to the validit | by and auth | enticity of th | is sample | l am aware t | hat tampering | with or intentionally | mislabelling the sa | fole loca | tion. | | | Samp | les req | uiring thermal | l preser | vation n | nust be re | eceived on ice the day | they are sam | oled or receive |
| 100 C 100 | me of collecti | | | | | | | ampled by: | buc l | in | uro | C | | packe | ed in ice | at an avg ten | np abov | e 0 but | less than | i 6 °C on subsequent d | ays. | |
| Relinqui | shed by: (Sig | matore) | 1 A. D. | 349 1 | Time | | Received by | (Signature) / | Date | | Time | 1 | | 101 | 3 | | | 0 | Jse Oi | nly | | |
| 1 0 | pheles | 1-10 | 2014 | 7721 | 2 | 16 | X | AN | - 3.7 | .22 | 1 | 141 | 6 | Red | ceive | d on ice: | 6 | Y/ | N | | | |
| Relinqui | shed by: (Sig | gnature) | | ate | Time | | Received by | (Signature) | Date | 100 | Time | | - | | | | | | | | | |
| 1 | for | 11- | ~ . | 3.8.22 | 2 0 | 110 | Cut | in Chi | | 122 | | 5:10 | | <u>T1</u> | 1.00 | | <u>T2</u> | | | <u> </u> | | |
| Retingut | shed by: (Sf | nature) | D | ate | Time | | Received by | : (Signature) | Date | | Time | e | | | GTO | mp °C | 4 | | | | | |
| Sample | Aatrix: S - Soil | , Sd - Solid, Sr | g - Sludge, A | A - Aqueous, I | 0 - Other | | I | | Conta | ner Ty | pe:g- | glass | , p - j | _ | | c, ag - am | ber gl | ass, v | - VOA | | | 7 |
| Note: S | mples are o | liscarded 30 | days after | r results are | e reported | unless oth | er arrangeme | nts are made. H | azardous samples | will be i | returne | ed to c | lient o | or disp | osed | of at the cl | ient e | kpense | e. The | report for the an | alysis of th | e above |
| sample | is applicabl | e only to the | ose sample | es received | by the lab | oratory wi | th this COC. T | he liability of the | laboratory is limite | d to the | e amou | unt pai | id for | on the | e repo | rt. | | | | | | |
| | | | | | | | | | | | | | | C | 3 | - | | - | | - | - | |
| | | | | | | | | | Page 14 of | 15 | | | | E | 2 | e | | V | | rot | 16 | CI |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy D | ate Received: | 03/09/22 | 08:10 | Work Order ID: E203043 |
|--|--|---------------------------------------|--|-------------------|-----------------------------------|
| Phone: | (575) 390-6397 D | ate Logged In: | 03/07/22 | 16:25 | Logged In By: Caitlin Christian |
| Email: | | ue Date: | 03/09/22 | 17:00 (0 day TAT) | <i>a i</i> |
| Chain o | f Custody (COC) | | | | |
| 1. Does | the sample ID match the COC? | | Yes | | |
| 2. Does | the number of samples per sampling site location match | the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: C | ourrier |
| 4. Was the | he COC complete, i.e., signatures, dates/times, requester | d analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion. | e field, | Yes | | Comments/Resolution |
| <u>Sample</u> | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | ne COC indicate standard TAT, or Expedited TAT? | | Yes | | Sample times not provided on COC. |
| Sample | <u>Cooler</u> | | | | |
| 7. Was a | a sample cooler received? | | Yes | | |
| 8. If yes | , was cooler received in good condition? | | Yes | | |
| 9. Was th | he sample(s) received intact, i.e., not broken? | | Yes | | |
| 10. Were | e custody/security seals present? | | No | | |
| | s, were custody/security seals intact? | | NA | | |
| 12. Was t | the sample received on ice? If yes, the recorded temp is 4°C, i.e Note: Thermal preservation is not required, if samples are re- | , | Yes | | |
| 13 If no | minutes of sampling visible ice, record the temperature. Actual sample te | mperature: 4° | С | | |
| | Container | <u> </u> | <u> </u> | | |
| | aqueous VOC samples present? | | No | | |
| | VOC samples collected in VOA Vials? | | NA | | |
| | e head space less than 6-8 mm (pea sized or less)? | | NA | | |
| | | | | | |
| | a trip blank (TB) included for VOC analyses? | | NA | | |
| 17. Was | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? | | | | |
| 17. Was 18. Are 1 | non-VOC samples collected in the correct containers? | s collected? | NA Yes Yes | | |
| 17. Was 18. Are 1 19. Is the | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container | s collected? | Yes | | |
| 17. Was 18. Are 1 19. Is the Field La | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container | | Yes | | |
| Was Are 1 Are 1 Is the Field La Were | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel_ | | Yes | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? | | Yes Yes Yes No | | |
| 17. Was 18. Are 19. Is the Field La 20. Were | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? | | Yes Yes Yes | | |
| 17. Was 18. Are a 19. Is the Field La 20. Were Sample | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> | nation: | Yes Yes No No | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 3 5 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres | nation: | Yes Yes No No No | | |
| 17. Was 18. Are 19. Is the Field Lz 20. Were 20. Were 21. Does 22. Are | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres sample(s) correctly preserved? | nation: erved? | Yes Yes No No No NA | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lal | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres sample(s) correctly preserved? b filteration required and/or requested for dissolved met | nation: erved? | Yes Yes No No No | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lai Multiph | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres sample(s) correctly preserved? b filteration required and/or requested for dissolved met mase Sample Matrix | nation: erved? als? | Yes Yes No No No No | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lai Multiph 26. Does | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres sample(s) correctly preserved? b filteration required and/or requested for dissolved met <u>mase Sample Matrix</u> s the sample have more than one phase, i.e., multiphase. | nation: erved? als? ? | Yes Yes No No No No No | | |
| 17. Was 18. Are 1 19. Is the Field Ls 20. Werd 21. Does 22. Are 1 24. Is lal Multiph 26. Does 27. If ye | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres sample(s) correctly preserved? b filteration required and/or requested for dissolved met <u>hase Sample Matrix</u> s the sample have more than one phase, i.e., multiphase? es, does the COC specify which phase(s) is to be analyze | nation: erved? als? ? | Yes Yes No No No No | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lal Multiph 26. Does 27. If ye Subcont | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres sample(s) correctly preserved? b filteration required and/or requested for dissolved met <u>hase Sample Matrix</u> s the sample have more than one phase, i.e., multiphase the COC specify which phase(s) is to be analyze tract Laboratory | nation: erved? als? 2 2d? | Yes Yes No No NA No No | | |
| 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 2 24. Is lai <u>Multiph</u> 26. Does 27. If ye <u>Subcont</u> 28. Are 2 | non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample container abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were pres sample(s) correctly preserved? b filteration required and/or requested for dissolved met <u>hase Sample Matrix</u> s the sample have more than one phase, i.e., multiphase? es, does the COC specify which phase(s) is to be analyze | nation: erved? als? ed? | Yes Yes No No No No No | Subcontract Lab | |



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5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay Fed Com #1

Work Order: E203053

Job Number: 20046-0001

Received: 3/11/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/11/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/11/22

Matt Buckles 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Fed Com #1 Workorder: E203053 Date Received: 3/11/2022 7:30:00AM

Matt Buckles,



Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/11/2022 7:30:00AM, under the Project Name: Thunderbay Fed Com #1.

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

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

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

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

Respectfully,

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Sample Summarv

| | | Sample Sum | | | | | |
|--|---------------|--|---|----------|---------------------------------|--|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | Thunderbay Fed Co 20046-0001 Matt Buckles | om #1 | Reported: 03/11/22 17:47 | | |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container | | |
| Comp 1 | E203053-01A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 2 | E203053-02A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 3 | E203053-03A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 4 | E203053-04A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 5 | E203053-05A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 6 | E203053-06A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 7 | E203053-07A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 8 | E203053-08A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 9 | E203053-09A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 10 | E203053-10A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 11 | E203053-11A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 12 | E203053-12A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 13 | E203053-13A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 14 | E203053-14A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 15 | E203053-15A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 16 | E203053-16A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 17 | E203053-17A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 18 | E203053-18A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 19 | E203053-19A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |
| Comp 20 | E203053-20A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | |



| | D | ampic D | ala | | | |
|--|--|------------|---------------------------------------|-----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numl Project Mana | ber: 2004 | nderbay Fed C 46-0001 t Buckles | om #1 | | Reported: 3/11/2022 5:47:40PM |
| | | Comp 1 | | | | |
| | | E203053-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Ana | lyst: RKS | Batch: 2211064 | |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.9 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Ana | lyst: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Ana | lyst: JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 108 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Ana | lyst: RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |

Sample Data



Sample Data

| | 5 | | ata | | | | |
|--|--------------|------------|-----------------|----------|----------|---------------------|--|
| Mack Energy | Project Name | e: Thu | nderbay Fed Com | #1 | | | |
| 7 W. Compress Road | Project Numb | ber: 2004 | 46-0001 | | | Reported: | |
| Artesia NM, 88210 | Project Mana | ger: Mat | t Buckles | | | 3/11/2022 5:47:40PM | |
| | | Comp 2 | | | | | |
| | | E203053-02 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 | |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/11/22 | | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.9 % | 70-130 | 03/10/22 | 03/11/22 | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/11/22 | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 03/10/22 | 03/11/22 | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211074 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | | |
| Surrogate: n-Nonane | | 101 % | 50-200 | 03/11/22 | 03/11/22 | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211070 | |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | | |
| | | | | | | | |


Sample Data

| | D | ampic D | ata | | | |
|--|--------------|------------|-----------------|---------------------|-----------|----------------|
| Mack Energy | Project Name | : Thu | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numb | ber: 2004 | 46-0001 | | Reported: | |
| Artesia NM, 88210 | Project Mana | ger: Mat | t Buckles | 3/11/2022 5:47:40PM | | |
| | | Comp 3 | | | | |
| | | E203053-03 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Foluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.9 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 86.4 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | | ampic D | ata | | | |
|--|---------------|------------|-----------------|---------------------|----------|----------------|
| Mack Energy | Project Name: | : Thu | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numb | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | 3/11/2022 5:47:40PM | | |
| | | Comp 4 | | | | |
| | | E203053-04 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Foluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.3 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.8 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 95.6 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | : RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | | ampic D | | | | |
|--|---------------|------------|-----------------|---------------------|----------|----------------|
| Mack Energy | Project Name: | Thu | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numbe | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | | 3/11/2022 5:47:40PN | | |
| | | Comp 5 | | | | |
| | | E203053-05 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 92.1 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.2 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 103 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211065 |
| Chloride | ND | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | aia | | | |
|--|---------------|------------|------------------------|--------------|---|---------------------|
| Mack Energy | Project Name | | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numb | | 46-0001 • Decel-las | | Reported: 3/11/2022 5:47:40PM | |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | | | 3/11/2022 5:4/:40PM |
| | | Comp 6 | | | | |
| | | E203053-06 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.7 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.3 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 112 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | : RAS | | Batch: 2211065 |
| Chloride | 245 | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ata | | | |
|--|-----------------------------|------------|----------------------------|---------------------|----------|----------------|
| Mack Energy 7 W. Compress Road | Project Name Project Num | | nderbay Fed Com 46-0001 | n #1 | | Reported: |
| Artesia NM, 88210 | Project Mana | | | 3/11/2022 5:47:40PM | | |
| | | Comp 7 | | | | |
| | | E203053-07 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.2 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 113 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2211065 |
| Chloride | 133 | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| Ť | | | 1 | 03/10/22 | 03/11/22 | |



Sample Data

| | 5 | ampic D | ala | | | |
|--|--|------------|----------|--------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name:Thunderbay Fed ComProject Number:20046-0001Project Manager:Matt Buckles | | | #1 | | Reported: 3/11/2022 5:47:40PM |
| | | Comp 8 | | | | |
| | | E203053-08 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.2 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 113 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | : RAS | | Batch: 2211065 |
| Chloride | 419 | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D. | ampic D | aia | | | |
|--|-------------------------------|------------|----------------------------|---|----------|----------------------|
| Mack Energy | Project Name: | | nderbay Fed Com 46-0001 | #1 | | Dementede |
| 7 W. Compress Road Artesia NM, 88210 | Project Numb Project Manag | | | Reported: 3/11/2022 5:47:40PM | | |
| Alusia IVM, 00210 | 1 Toject Wianag | | t Duckies | | | 5,11,2022 5.17.10114 |
| | | Comp 9 | | | | |
| | | E203053-09 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.8 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 101 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | : RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | | ampic D | ata | | | |
|--|---------------|------------|-----------------|---------------------|-----------|----------------|
| Mack Energy | Project Name: | | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numb | er: 2004 | 46-0001 | | Reported: | |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | 3/11/2022 5:47:40PM | | |
| | | Comp 10 | | | | |
| | | E203053-10 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 96.2 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.3 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | 5 | ampic D | ala | | | |
|--|--------------|---|----------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Numb | Project Name:Thunderbay Fed Com #1Project Number:20046-0001Project Manager:Matt Buckles | | | | Reported: 3/11/2022 5:47:40PM |
| | | Comp 11 | | | | |
| | | E203053-11 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: RKS | Batch: 2211077 | |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.8 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.7 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | | mpic D | | | | | |
|--|---|--------------------|-------------------------------------|-------------|----------------------|----------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | r: 2004 | nderbay Feo 46-0001 t Buckles | d Com # | 1 | | Reported: 3/11/2022 5:47:40PM |
| | | Comp 12 | | | | | |
| | - | E203053-12 | | | | | |
| Analyte | Result | Reporting Limit | Dilu | tion | Prepared | Analyzed | Notes |
| - | | | | | * | Analyzed | |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: 1 | | | Batch: 2211080 |
| Benzene | ND | 0.0250 | 1 | | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | | 03/11/22 03/11/22 | 03/11/22 03/11/22 | |
| p-Xylene | ND ND | 0.0250 0.0500 | 1 | | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND ND | 0.0300 | 1 | | 03/11/22 | 03/11/22 | |
| Total Xylenes | | | | L . | | | |
| Surrogate: Bromofluorobenzene | | 92.2 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.2 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst:] | RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | | 03/11/22 | 03/11/22 | |



Sample Data

| | | imple D | | | | | |
|--|---|--------------------|------------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay Fe 46-0001 t Buckles | ed Com ‡ | #1 | | Reported: 3/11/2022 5:47:40PM |
| | | Comp 13 | | | | | |
| | | E203053-13 | | | | | |
| Analyte | Result | Reporting Limit | Dil | ution | Prepared | Analyzed | Notes |
| Anaryte | Kesuit | Limit | DI | ution | Prepared | Anaryzeu | |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | | | Batch: 2211080 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | imple D | | | | | |
|--|---|--------------------|------------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay Fe 46-0001 t Buckles | ed Com 7 | #1 | | Reported: 3/11/2022 5:47:40PM |
| | | Comp 14 | | | | | |
| | - | E203053-14 | | | | | |
| Analyte | Result | Reporting Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 93.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 93.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | impic D | | | | | |
|--|---|--------------------|--------|----------|----------|---|----------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name:Thunderbay Fed Com #1Project Number:20046-0001Project Manager:Matt Buckles | | | | | Reported: 3/11/2022 5:47:40PM | |
| | | Comp 15 | | | | | |
| | | E203053-15 | | | | | |
| Analyte | Result | Reporting Limit | | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | D 0.0250 1 | | 03/11/22 | 03/11/22 | | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.0 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.0 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | Л | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | mpic D | | | | | |
|--|---|--------------------|------------------------------------|----------------|------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | r: 2004 | nderbay Fe 46-0001 t Buckles | ed Com ‡ | <i>‡</i> 1 | | Reported: 3/11/2022 5:47:40PM |
| | | Comp 16 | | | | | |
| |] | E203053-16 | | | | | |
| Analyte | Result | Reporting Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg mg/kg Analyst: IY | | 5 | Batch: 2211080 | | | |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | Dutch. 2211000 |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | ЛL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 97.5 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | D | ampic D | ata | | | |
|--|---------------|------------|-----------------|---------------------|-----------|----------------|
| Mack Energy | Project Name | | nderbay Fed Com | #1 | | _ |
| 7 W. Compress Road | Project Numb | | 46-0001 | | Reported: | |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | 3/11/2022 5:47:40PM | | |
| | | Comp 17 | | | | |
| | | E203053-17 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| p-Xylene | ND | 0.0250 | 1 | 1 03/10/22 | | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.5 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 113 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211065 |
| Chloride | 262 | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | | imple D | | | | |
|--|---------------|------------|-----------------|---------------------|----------|----------------|
| Mack Energy | Project Name: | Thu | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numbe | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | 3/11/2022 5:47:40PM | | |
| | | Comp 18 | | | | |
| | | E203053-18 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 1 03/10/22 | | |
| o-Xylene | ND | 0.0250 | 1 | 1 03/10/22 | | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 97.1 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | :: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 64.5 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | 116 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | : RAS | | Batch: 2211065 |
| Chloride | 348 | 20.0 | 1 | 03/10/22 | 03/11/22 | |



Sample Data

| | imple D | ucu | | | |
|----------------|--|--|---|--|---|
| Project Name: | | | | | |
| Project Numbe | er: 2004 | 46-0001 | | | Reported: |
| Project Manage | er: Mat | t Buckles | | 3/11/2022 5:47:40PM | |
| | Comp 19 | | | | |
| 1 | E203053-19 | | | | |
| | Reporting | | | | |
| Result | Limit | Dilution Prepared | | Analyzed | Notes |
| mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211064 |
| ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| ND | 0.0250 | 1 | 1 03/10/22 | | |
| ND | 0.0250 | 1 | 1 03/10/22 | | |
| ND | 0.0500 | 1 | 1 03/10/22 | | |
| ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| | 91.7 % | 70-130 | 03/10/22 | 03/10/22 | |
| mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| | 98.4 % | 70-130 | 03/10/22 | 03/10/22 | |
| mg/kg | mg/kg | Analys | t: JL | | Batch: 2211066 |
| 329 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| 549 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| | 101 % | 50-200 | 03/10/22 | 03/11/22 | |
| mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211065 |
| | | | | | |
| | Project Name: Project Numbe Project Manag Result mg/kg ND ND ND ND ND ND ND ND ND ND ND ND ND | Project Name: Thun Project Number: 2004 Project Manager: Math E203053-19 E203053-19 E203053-19 Reporting Result Limit mg/kg mg/kg MD 0.0250 ND 20.0 98.4 % mg/kg mg/kg mg/kg Mg/kg 50.0 549 50.0 | Project Number: $20046-0001$ Matt Buckles Project Manager: $Matt Buckles$ E203053-19 E203053-19 E203053-19 E203053-19 E203053-19 E203053-19 E203053-19 E203053-19 Matt Dilution $Dilution$ mg/kg mg/kg Analys ND 0.0250 1 ND 20.0 1 mg/kg mg/kg Mat/s mg/kg mg/kg Analys 329 25.0 1 full $50-200$ 1 | It in the set of the s | I Thunderbay Fed Com #1 Project Namber: $20046-0001$ Project Manager: Matt Buckles E203053-19 E203053-19 Result Limit Dilution Prepared Analyzed Mg/kg mg/kg Analyst: RKS VI ND 0.0250 1 $03/10/22$ $03/10/22$ ND 20.0 1 $03/10/22$ $03/10/22$ $03/10/22$ MD 20.0 1 $03/10/22$ </td |



Sample Data

| | ~• | imple D | | | | |
|--|---------------|------------|-------------------|--------------|---------------------|----------------|
| Mack Energy | Project Name: | Thu | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numbe | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Mat | t Buckles | | 3/11/2022 5:47:40PM | |
| | | Comp 20 | | | | |
| | | E203053-20 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution Prepared | | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 1 03/10/22 | | |
| -Xylene | ND | 0.0250 | 1 | 1 03/10/22 | | |
| o,m-Xylene | ND | 0.0500 | 1 | 1 03/10/22 | | |
| Total Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 96.4 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 726 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | 1380 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 108 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211065 |
| Chloride | 28.0 | 20.0 | 1 | 03/10/22 | 03/11/22 | |



QC Summary Data

| | | QC D | | J | - | | | | |
|---|--------|----------------------------------|----------------|--------------------------|---------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | 20 | underbay Fed 046-0001 | Com #1 | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | М | att Buckles | | | | | 3/11/2022 5:47:40PM |
| | V | olatile Organio | c Compo | unds by EP | A 8260E | 3 | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211080-BLK1) | | | | | |] | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| 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 | 0.446 | | 0.500 | | 89.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.507 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| LCS (2211080-BS1) | | | | | |] | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Benzene | 2.85 | 0.0250 | 2.50 | | 114 | 70-130 | | | |
| Ethylbenzene | 3.05 | 0.0250 | 2.50 | | 122 | 70-130 | | | |
| Foluene | 3.01 | 0.0250 | 2.50 | | 121 | 70-130 | | | |
| p-Xylene | 2.93 | 0.0250 | 2.50 | | 117 | 70-130 | | | |
| p,m-Xylene | 5.82 | 0.0500 | 5.00 | | 116 | 70-130 | | | |
| Total Xylenes | 8.76 | 0.0250 | 7.50 | | 117 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.480 | | 0.500 | | 96.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.515 | | 0.500 | | 103 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.524 | | 0.500 | | 105 | 70-130 | | | |
| LCS Dup (2211080-BSD1) | | | | | |] | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Benzene | 2.77 | 0.0250 | 2.50 | | 111 | 70-130 | 2.60 | 23 | |
| Ethylbenzene | 2.93 | 0.0250 | 2.50 | | 117 | 70-130 | 3.83 | 27 | |
| Toluene | 2.92 | 0.0250 | 2.50 | | 117 | 70-130 | 3.32 | 24 | |
| p-Xylene | 2.80 | 0.0250 | 2.50 | | 112 | 70-130 | 4.66 | 27 | |
| p,m-Xylene | 5.64 | 0.0500 | 5.00 | | 113 | 70-130 | 3.29 | 27 | |
| Total Xylenes | 8.43 | 0.0250 | 7.50 | | 112 | 70-130 | 3.75 | 27 | |
| | 0.107 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.486 | | 0.500 | | 27.1 | | | | |
| Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 101 | 70-130 | | | |



QC Summary Data

| | | QC D | u1111116 | ii y Dat | a | | | | |
|--|--------|--|----------------|---|-----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay Fe 0046-0001 latt Buckles | d Com #1 | | | | Reported: 3/11/2022 5:47:40PM |
| | | Volatile O | rganics l | by EPA 802 | 21B | | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211064-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/10/22 |
| Benzene | ND | 0.0250 | | | | | | | • |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| p-Xylene | ND | 0.0250 | | | | | | | |
| o,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.51 | | 8.00 | | 93.8 | 70-130 | | | |
| LCS (2211064-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/10/22 |
| Benzene | 4.83 | 0.0250 | 5.00 | | 96.5 | 70-130 | | | |
| Ethylbenzene | 5.10 | 0.0250 | 5.00 | | 102 | 70-130 | | | |
| oluene | 5.32 | 0.0250 | 5.00 | | 106 | 70-130 | | | |
| -Xylene | 5.05 | 0.0250 | 5.00 | | 101 | 70-130 | | | |
| o,m-Xylene | 10.3 | 0.0500 | 10.0 | | 103 | 70-130 | | | |
| Fotal Xylenes | 15.4 | 0.0250 | 15.0 | | 103 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.58 | | 8.00 | | 94.8 | 70-130 | | | |
| Matrix Spike (2211064-MS1) | | | | Source: | E203053-1 | 9 | Prepared: 0 | 3/10/22 A | nalyzed: 03/10/22 |
| Benzene | 4.82 | 0.0250 | 5.00 | ND | 96.3 | 54-133 | | | |
| Ethylbenzene | 5.10 | 0.0250 | 5.00 | ND | 102 | 61-133 | | | |
| Foluene | 5.33 | 0.0250 | 5.00 | ND | 107 | 61-130 | | | |
| -Xylene | 5.03 | 0.0250 | 5.00 | ND | 101 | 63-131 | | | |
| o,m-Xylene | 10.3 | 0.0500 | 10.0 | ND | 103 | 63-131 | | | |
| Total Xylenes | 15.4 | 0.0250 | 15.0 | ND | 102 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.48 | | 8.00 | | 93.5 | 70-130 | | | |
| Matrix Spike Dup (2211064-MSD1) | | | | Source: | E203053-1 | 9 | Prepared: 0 | 3/10/22 A | nalyzed: 03/10/22 |
| Benzene | 4.81 | 0.0250 | 5.00 | ND | 96.3 | 54-133 | 0.0561 | 20 | |
| Ethylbenzene | 5.07 | 0.0250 | 5.00 | ND | 101 | 61-133 | 0.550 | 20 | |
| Toluene | 5.30 | 0.0250 | 5.00 | ND | 106 | 61-130 | 0.389 | 20 | |
| p-Xylene | 5.01 | 0.0250 | 5.00 | ND | 100 | 63-131 | 0.486 | 20 | |
| o,m-Xylene | 10.3 | 0.0500 | 10.0 | ND | 103 | 63-131 | 0.599 | 20 | |
| Total Xylenes | 15.3 | 0.0250 | 15.0 | ND | 102 | 63-131 | 0.562 | 20 | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.40 | | 8.00 | | 92.5 | 70-130 | | | |
| | | | | | | | | | |



OC Summary Data

| | | <u><u><u>v</u></u><u>v</u><u>v</u></u> | | ii y Data | | | | | |
|--|--------|--|----------------|--|----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: | 20 | hunderbay Fec 0046-0001 latt Buckles | l Com #1 | | | | Reported: 3/11/2022 5:47:40PM |
| Artesia NM, 88210 | | Project Manager: | IV | latt Buckles | | | | | 3/11/2022 3:47:40PM |
| | | Analyst: RKS | | | | | | | |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211077-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| p-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.44 | | 8.00 | | 93.0 | 70-130 | | | |
| LCS (2211077-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Benzene | 4.74 | 0.0250 | 5.00 | | 94.8 | 70-130 | | | |
| Ethylbenzene | 5.01 | 0.0250 | 5.00 | | 100 | 70-130 | | | |
| Toluene | 5.24 | 0.0250 | 5.00 | | 105 | 70-130 | | | |
| o-Xylene | 4.96 | 0.0250 | 5.00 | | 99.2 | 70-130 | | | |
| p,m-Xylene | 10.1 | 0.0500 | 10.0 | | 101 | 70-130 | | | |
| Total Xylenes | 15.1 | 0.0250 | 15.0 | | 101 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.51 | | 8.00 | | 93.9 | 70-130 | | | |
| LCS Dup (2211077-BSD1) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Benzene | 4.94 | 0.0250 | 5.00 | | 98.8 | 70-130 | 4.14 | 20 | |
| Ethylbenzene | 5.20 | 0.0250 | 5.00 | | 104 | 70-130 | 3.74 | 20 | |
| Toluene | 5.44 | 0.0250 | 5.00 | | 109 | 70-130 | 3.78 | 20 | |
| o-Xylene | 5.14 | 0.0250 | 5.00 | | 103 | 70-130 | 3.55 | 20 | |
| p,m-Xylene | 10.5 | 0.0500 | 10.0 | | 105 | 70-130 | 3.60 | 20 | |
| Total Xylenes | 15.7 | 0.0250 | 15.0 | | 104 | 70-130 | 3.58 | 20 | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.51 | | 8.00 | | 93.9 | 70-130 | | | |



QC Summary Data

| | | QU N | | ary Date | • | | | | |
|---|--------|----------------------------------|----------------|----------------------------|----------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | hunderbay Fed 0046-0001 | Com #1 | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | Ν | Aatt Buckles | | | | | 3/11/2022 5:47:40PM |
| | No | nhalogenated O | rganics | by EPA 801 | 5D - G | RO | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211064-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.96 | | 8.00 | | 99.6 | 70-130 | | | |
| LCS (2211064-BS2) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | 47.0 | 20.0 | 50.0 | | 94.0 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.16 | | 8.00 | | 102 | 70-130 | | | |
| Matrix Spike (2211064-MS2) | | | | Source:] | E203053- | 19 | Prepared: 0 | 3/10/22 A | analyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | 48.1 | 20.0 | 50.0 | ND | 96.3 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.09 | | 8.00 | | 101 | 70-130 | | | |
| Matrix Spike Dup (2211064-MSD2) | | | | Source: 1 | E203053- | 19 | Prepared: 0 | 3/10/22 A | analyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | 47.5 | 20.0 | 50.0 | ND | 95.0 | 70-130 | 1.28 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.97 | | 8.00 | | 99.6 | 70-130 | | | |



QC Summary Data

| | | QU L | /ummi | ary Data | и | | | | |
|--|--------|--|----------------|--|----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number Project Manager | : 2 | hunderbay Feo 0046-0001 1att Buckles | l Com #1 | | | | Reported: 3/11/2022 5:47:40PM |
| | No | nhalogenated | Organics | by EPA 80 | 15D - G | RO | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211077-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.91 | | 8.00 | | 98.9 | 70-130 | | | |
| LCS (2211077-BS2) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 46.9 | 20.0 | 50.0 | | 93.8 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.87 | | 8.00 | | 98.3 | 70-130 | | | |
| LCS Dup (2211077-BSD2) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 46.4 | 20.0 | 50.0 | | 92.8 | 70-130 | 1.08 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.89 | | 8.00 | | 98.6 | 70-130 | | | |



QC Summary Data

| | | QC D | umm | ary Date | а | | | | |
|--|--------|--|----------------|--|----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | | Thunderbay Fec 20046-0001 Matt Buckles | l Com #1 | | | | Reported: 3/11/2022 5:47:40PM |
| Alusia IVM, 86210 | No | onhalogenated C | | | 15D - G | RO | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211080-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.446 | | 0.500 | | 89.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.507 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| LCS (2211080-BS2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 60.8 | 20.0 | 50.0 | | 122 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.475 | | 0.500 | | 95.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.527 | | 0.500 | | 105 | 70-130 | | | |
| LCS Dup (2211080-BSD2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 63.5 | 20.0 | 50.0 | | 127 | 70-130 | 4.31 | 20 | |
| Surrogate: Bromofluorobenzene | 0.476 | | 0.500 | | 95.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.511 | | 0.500 | | 102 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.515 | | 0.500 | | 103 | 70-130 | | | |
| | | | | | | | | | |



QC Summary Data

| | | QU N | | ary Data | | | | | |
|-----------------------------------|--------|----------------------------------|----------------|----------------------------|----------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | hunderbay Fec 0046-0001 | l Com #1 | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | Ν | latt Buckles | | | | | 3/11/2022 5:47:40PM |
| | Nonh | alogenated Org | anics by | EPA 8015I |) - DRO | /ORO | | | Analyst: JL |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211066-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 55.5 | | 50.0 | | 111 | 50-200 | | | |
| LCS (2211066-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) | 458 | 25.0 | 500 | | 91.5 | 38-132 | | | |
| Surrogate: n-Nonane | 54.1 | | 50.0 | | 108 | 50-200 | | | |
| Matrix Spike (2211066-MS1) | | | | Source: | E203053- | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) | 488 | 25.0 | 500 | ND | 97.6 | 38-132 | | | |
| Surrogate: n-Nonane | 53.6 | | 50.0 | | 107 | 50-200 | | | |
| Matrix Spike Dup (2211066-MSD1) | | | | Source: | E203053- | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) | 485 | 25.0 | 500 | ND | 97.0 | 38-132 | 0.628 | 20 | |
| Surrogate: n-Nonane | 53.5 | | 50.0 | | 107 | 50-200 | | | |



QC Summary Data

| Mack Energy | | Project Name: | Th | underbay Feo | l Com #1 | | | | Reported: |
|--|-------------------|--------------------|----------------|------------------|---------------------|-------------------------|--------------|--------------|---------------------|
| 7 W. Compress Road | | Project Number: | 20 | 046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager: | M | att Buckles | | | | | 3/11/2022 5:47:40PM |
| | Nonha | logenated Org | anics by | EPA 8015I |) - DRO | /ORO | | | Analyst: JL |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211074-BLK1) | | | | | | | Prepared: 02 | 3/10/22 A | Analyzed: 03/11/22 |
| | | | | | | | | | mary20a. 05/11/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | indiy200. 03/11/22 |
| | ND ND | 25.0 50.0 | | | | | | | inaly200.03/11/22 |
| Dil Range Organics (C28-C36) | | | 50.0 | | 97.9 | 50-200 | | | |
| Diesel Range Organics (C10-C28) Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2211074-BS1) | ND | | 50.0 | | 97.9 | 50-200 | | | Analyzed: 03/11/22 |
| Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2211074-BS1) | ND | | 50.0 | | <i>97.9</i> 95.3 | <i>50-200</i> 38-132 | | | |
| Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2211074-BS1) Diesel Range Organics (C10-C28) | ND 48.9 | 50.0 | | | | | | | |
| Dil Range Organics (C28-C36) Surrogate: n-Nonane | ND 48.9 476 | 50.0 | 500 | | 95.3 | 38-132 | Prepared: 0. | 3/10/22 A | |
| Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2211074-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane | ND 48.9 476 | 50.0 | 500 | | 95.3 | 38-132 | Prepared: 0. | 3/10/22 A | Analyzed: 03/11/22 |



QC Summary Data

| | | | | ····· · · · · · · · · · · · · · · · · | | | | | |
|--|--------|--|----------------|--|----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay Feo 20046-0001 Matt Buckles | d Com #1 | | | | Reported: 3/11/2022 5:47:40PM |
| | | Anions l | by EPA | 300.0/9056 | 4 | | | | Analyst: RAS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211065-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2211065-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Chloride | 248 | 20.0 | 250 | | 99.3 | 90-110 | | | |
| Matrix Spike (2211065-MS1) | | | | Source: | E203053- | 17 | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Chloride | 500 | 20.0 | 250 | 262 | 95.4 | 80-120 | | | |
| Matrix Spike Dup (2211065-MSD1) | | | | Source: | E203053- | 17 | Prepared: 0 | 3/10/22 A | analyzed: 03/11/22 |
| Chloride | 499 | 20.0 | 250 | 262 | 94.8 | 80-120 | 0.307 | 20 | |



QC Summary Data

| | | <u> </u> | | v | | | | | |
|------------------------|--------|--------------------|----------------|------------------|----------|---------------|--------------|--------------|---------------------|
| Mack Energy | | Project Name: | Т | hunderbay Fee | d Com #1 | | | | Reported: |
| 7 W. Compress Road | | Project Number: | 2 | 0046-0001 | | | | | - |
| Artesia NM, 88210 | | Project Manager | :: N | latt Buckles | | | | | 3/11/2022 5:47:40PM |
| | | Anions | by EPA | 300.0/90564 | ۸ | | | | Analyst: RAS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211070-BLK1) | | | | | | | Prepared: 0. | 3/10/22 | Analyzed: 03/10/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2211070-BS1) | | | | | | | Prepared: 03 | 3/10/22 | Analyzed: 03/11/22 |
| Chloride | 247 | 20.0 | 250 | | 98.7 | 90-110 | | | |
| LCS Dup (2211070-BSD1) | | | | | | | Prepared: 0. | 3/10/22 | Analyzed: 03/11/22 |
| Chloride | 249 | 20.0 | 250 | | 99.5 | 90-110 | 0.827 | 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.



| Mack Energy | Project Name: | Thunderbay Fed Com #1 | |
|--------------------|------------------|-----------------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Matt Buckles | 03/11/22 17:47 |

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Released to Imaging: 9/30/2022 10:09:16 AM

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|-----------------|-----------------|----------------|----------------------|--------------------|-------------------------|---------------------|--------------------------|------------------|-----------------|-----------------|--------------|-------------|-------------|--------------------|--|--------|--------|------------------------|------------------------|----------------|
| ent: | 10 | CCC. | Er | RAV | | | Bill To | | | | | b Use | | | | | TA | Т | EPA P | rogram |
| ject: | Then | dert | supp | -alla | Atte | ention: ES | 5 | | Lab | WO# | - | | Job N | lumber | . 1D | 2D | 3D | Standard | CWA | SDWA |
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| Iress: | | | | | City | , State, Zip | tobs, NM & | 12-10 | | | - | | Analy | sis and Me | thod ' | 1 | | | | RCRA |
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| ail: port du | ie hv: | | | | 0 | Kepping | Vic-com | r | yd C | λq C | 8021 | 260 | 010 | 300. | MN | X | | | | |
| ime mpled | Date Sampled | Matrix | No. of Containers | Sample ID | | 0 | | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | BGDOC | BGDOC | | N | Remarks | |
| | 2 | | | 0 | | (| | Indiniber | - | | | - | - | <u> </u> | 1 | | | | | |
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| eld sam | oler), attest t | o the validity | and authen | ticity of this san | nple. I am aware | that tampering with | or intentionally mislabe | lling the sample | locati | ion, | | | 10-10 F-10 | and the second | a frank a ser the way | | | eived on ice the day t | and a second second of | led or receive |
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| nt: ect: ect Manager: ress: , State, Zip ne: ail: oort due by: me Date Sampled Matrix No. of Containers Sample ID 313 501 1 Comp 12 Comp 12 | Bill To | DRO/ORO by 8015 | GRO/DRO by 8015 | ,05 | 3 | Jop | ly Number SY (6-0 vsis and N | 100 | 1D | 2D | TA 3D | T Standard | CWA | rogram SDWA |
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| ect Manager: Address: ress: City, State, Zip y, State, Zip Phone: ne: Email: ail: Date me Date sampled Matrix No. of Sample ID | | Ea | 03 | ,05 | 3 | 206 | 460 | 100 | X | 2D | 3D | Standard | CWA | SDWA |
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| npled Sampled Matrix Containers Sample ID | | DRO/O | | γ8 | / 82(| 601 | de 3(| | | TX. | | X | | |
| 3/3 Soil / Comp 11 (Comp 12 | 11 | | GRO/ | ВТЕХ by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | BGDOC | BGDOC | | | Remarks | |
| Compiz Compiz | | | | | | | | | 5 | | | 1 | | |
| Compiz Compiz | 12 | | | | | | | | | | | | | - |
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| -) Comp 12 | | + | | - | | | \vdash | - | (| | | | | |
| 1 1 Complie | 10 | - | | - | | | | - | \rightarrow | | | | | |
| Come 17 | 11 | - | | - | | - | | - | +(- | - | | | | |
| Comp 18 | 18 | - | | | | - | | - | \rightarrow | | \vdash | | | |
| Comp 19 | 19 | | | | _ | | | _ | 1 | | | | | |
|)) Comp 20 | ZO | | | | | | | | 2 | | | | | |
| ditional Instructions: | | | | | | | | | | | | | | |
| eld sampler), attest to the validity and authenticity of this sample. I am aware that tampering with e or time of collection is considered fraud and may be grounds for legal action. Sam | th or intentionally mislabelling the sampled by: | le locat | on, | | | 10000000 | | | | | | eived on ice the da °C on subsequent | | led or receive |
| inquished by: (Signature) Date Time Received by: (S | Signature) Date 3.10. | 22 | Time | | 10 | Rec | eived or | ice: | | ab Us D/ N | se Onl | ly | | |
| inquished by: (Signature) Date Time Received by: (S 3 · /0 · 22 /90 Oterta | | 1 | Time | | 0 | T1 | | | T2 | | | T3 | | |
| inquished by: (Signature) Date Time Received by: (S | | | Time | | | | G Temp ' | or c | + | - | | | | |
| | Containe | er Typ | p. g | place | | | lastic, ag | | | SS. V - | VOA | | | |
| nple Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other te: Samples are discarded 30 days after results are reported unless other arrangements nples is applicable only to those samples received by the laboratory with this COC. The | s are made. Hazardous samples wi | ll be re | turned | d to cl | ient o | r disp | osed of at | the clie | ent exp | oense. | . The re | eport for the a | | |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy | Date Received: | 03/11/22 07 | :30 | Work Order ID: E203053 |
|--|---|-----------------|-------------|-----------------|---|
| Phone: | (575) 746-9547 | Date Logged In: | 03/08/22 16 | :32 | Logged In By: Caitlin Christian |
| Email: | natalie@energystaffingllc.com | Due Date: | 03/11/22 17 | :00 (0 day TAT) | |
| <u>Chain o</u> | f Custody (COC) | | | | |
| 1. Does | the sample ID match the COC? | | Yes | | |
| 2. Does | the number of samples per sampling site location mat | ch the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: C | Courrier |
| 4. Was t | he COC complete, i.e., signatures, dates/times, reques | sted analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi | | Yes | | Comments/Resolution |
| <u>Sample</u> | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | ne COC indicate standard TAT, or Expedited TAT? | | Yes | | Project has been seperated into 2 reports |
| Sample | Cooler | | | | due to amount of samples. Workorders are |
| | sample cooler received? | | Yes | | as follows: |
| 8. If yes | , was cooler received in good condition? | | Yes | | E203053 COC page 1&2 of 5, E203054 |
| 9. Was t | he sample(s) received intact, i.e., not broken? | | Yes | | COC page 3,4 &5 of 5. Sample times not |
| 10. Were | e custody/security seals present? | | No | | |
| 11. If ye | s, were custody/security seals intact? | | NA | | provided on coc. |
| 12. Was t | the sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling | | Yes | | |
| 13. If no | | temperature: 4° | °C | | |
| | Container | <u>-</u> | | | |
| | aqueous VOC samples present? | | No | | |
| | VOC samples collected in VOA Vials? | | NA | | |
| | e head space less than 6-8 mm (pea sized or less)? | | NA | | |
| 17. Was | a trip blank (TB) included for VOC analyses? | | NA | | |
| | non-VOC samples collected in the correct containers' | ? | Yes | | |
| 19. Is the | e appropriate volume/weight or number of sample contain | ners collected? | Yes | | |
| Field La | abel | | | | |
| | e field sample labels filled out with the minimum info | ormation: | | | |
| | Sample ID? | | Yes | | |
| | Date/Time Collected? Collectors name? | | No | ľ | |
| | Preservation | | No | | |
| | s the COC or field labels indicate the samples were pr | eserved? | No | | |
| | sample(s) correctly preserved? | | NA | | |
| | b filteration required and/or requested for dissolved n | netals? | No | | |
| | ase Sample Matrix | | - | | |
| | s the sample have more than one phase, i.e., multipha | se? | No | | |
| | s, does the COC specify which phase(s) is to be analy | | NA | | |
| | | | 1.12 1 | | |
| 27. If ye | tract Laboratory | | | | |
| 27. If ye <u>Subcon</u> t | tract Laboratory samples required to get sent to a subcontract laborato | rv? | No | | |
| 27. If ye <u>Subcont</u> 28. Are | tract Laboratory samples required to get sent to a subcontract laborato a subcontract laboratory specified by the client and it | | No NA S | Subcontract Lab | r: na |

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



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5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay Fed Com #1

Work Order: E203054

Job Number: 20046-0001

Received: 3/11/2022

Revision: 2

Report Reviewed By:

Walter Hinchman Laboratory Director 3/11/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/11/22

Matt Buckles 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Fed Com #1 Workorder: E203054 Date Received: 3/11/2022 7:30:00AM

Matt Buckles,



Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/11/2022 7:30:00AM, under the Project Name: Thunderbay Fed Com #1.

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

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

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

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

Respectfully,

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

Field Offices:

Cell: 505-320-4759

ljarboe@envirotech-inc.com

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services Office: 505-421-LABS(5227)

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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | | Sample Sum | vject Name: Thunderbay Fed Com #1 | | | | | | |
|--------------------|---------------|------------------|-----------------------------------|----------|------------------|--|--|--|--|
| Mack Energy | Project Name: | Reported: | | | | | | | |
| 7 W. Compress Road | | Project Number: | 20046-0001 | | - | | | | |
| Artesia NM, 88210 | | Project Manager: | Matt Buckles | | 03/11/22 19:08 | | | | |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container | | | | |
| Comp 21 | E203054-01A | Solid | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 22 | E203054-02A | Solid | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 23 | E203054-03A | Solid | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 24 | E203054-04A | Solid | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 25 | E203054-05A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 26 | E203054-06A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 27 | E203054-07A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 28 | E203054-08A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 29 | E203054-09A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 30 | E203054-10A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 31 | E203054-11A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 32 | E203054-12A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 33 | E203054-13A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 34 | E203054-14A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 35 | E203054-15A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 36 | E203054-16A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 37 | E203054-17A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 38 | E203054-18A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 39 | E203054-19A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 40 | E203054-20A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 41 | E203054-21A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 42 | E203054-22A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 43 | E203054-23A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 44 | E203054-24A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 45 | E203054-25A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 46 | E203054-26A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 47 | E203054-27A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |
| Comp 48 | E203054-28A | Soil | 03/03/22 | 03/11/22 | Glass Jar, 4 oz. | | | | |



| | D | ampic D | ala | | | |
|--|-------------------------------|------------|----------------------------|----------|----------------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numb | | nderbay Fed Coi 46-0001 | m #1 | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | | | 3/11/2022 7:08:22PM |
| | | Comp 21 | | | | |
| | | E203054-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | yst: RKS | Batch: 2211064 | |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 97.4 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | yst: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | mg/kg Analyst: RKS | | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 38.8 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | 73.5 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | yst: RAS | | Batch: 2211065 |
| Chloride | ND | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |

Sample Data



Sample Data

| | D | | ata | | | |
|--|--------------|------------|-----------------|----------|----------|---------------------|
| Mack Energy | Project Name | | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Mat | t Buckles | | | 3/11/2022 7:08:22PM |
| | | Comp 22 | | | | |
| | | E203054-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 97.3 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 97.0 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | 169 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2211065 |
| Chloride | ND | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | | ampic D | | | | |
|--|----------------|------------|-----------------|--------------|-----------|---------------------|
| Mack Energy | Project Name: | | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Number | | 46-0001 | | Reported: | |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | | | 3/11/2022 7:08:22PM |
| | | Comp 23 | | | | |
| | | E203054-03 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 97.3 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | Analyst: RKS | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 391 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | 646 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211065 |
| | 33.8 | | | | | |



Sample Data

| | D | | ata | | | |
|--|--------------|------------|-----------------|----------|----------|---------------------|
| Mack Energy | Project Name | | nderbay Fed Com | #1 | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | iger: Mat | t Buckles | | | 3/11/2022 7:08:22PM |
| | | Comp 24 | | | | |
| | | E203054-04 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/10/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.7 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/10/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/10/22 | 03/10/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 65.3 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | 110 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211065 |
| Chloride | ND | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

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|--|---------------|------------|------------|----------|----------|----------|---------------------|
| Mack Energy | Project Name: | | nderbay Fe | ed Com # | ¢1 | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | Buckles | | | | 3/11/2022 7:08:22PM |
| | | Comp 25 | | | | | |
| | | E203054-05 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: Toluene-d8 | | 99.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 103 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | imple D | | | | |
|--|----------------|------------|-------------|---------------------|-------------|----------------|
| Mack Energy | Project Name: | | nderbay Fed | Com #1 | | |
| 7 W. Compress Road | Project Number | | 6-0001 | Reported: | | |
| Artesia NM, 88210 | Project Manag | ger: Mat | Buckles | 3/11/2022 7:08:22PM | | |
| | | Comp 26 | | | | |
| | | E203054-06 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilut | ion Prepar | ed Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | I | Analyst: IY | | Batch: 2211080 |
| Benzene | ND | 0.0250 | 1 | 03/11/2 | 22 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/2 | 22 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/2 | 22 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/2 | 22 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/11/2 | 22 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/2 | 22 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.7 % | 70-130 | 03/11/. | 22 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | 03/11/. | 22 03/11/22 | |
| Surrogate: Toluene-d8 | | 98.9 % | 70-130 | 03/11/. | 22 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | I | Analyst: IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/2 | 22 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.7 % | 70-130 | 03/11/. | 22 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | 03/11/. | 22 03/11/22 | |
| Surrogate: Toluene-d8 | | 98.9 % | 70-130 | 03/11/. | 22 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | I | Analyst: JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/2 | 22 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/2 | 22 03/11/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | 03/11/. | 22 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | l | Analyst: RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | 03/11/2 | 22 03/11/22 | |



Sample Data

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|--|----------------|------------|------------|---------------------|----------|----------|----------------|
| Mack Energy | Project Name: | | nderbay Fe | d Com # | 1 | | |
| 7 W. Compress Road | Project Number | | 46-0001 | Reported: | | | |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | 3/11/2022 7:08:22PM | | | |
| | | Comp 27 | | | | | |
| | | E203054-07 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilı | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.5 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.5 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2211074 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 99.0 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211070 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

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|--|---------------|------------|-------------|-------------|----------|----------|---------------------|
| Mack Energy | Project Name: | Thu | nderbay Feo | d Com #1 | | | |
| 7 W. Compress Road | Project Numbe | er: 2004 | 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | Buckles | | | | 3/11/2022 7:08:22PM |
| | | Comp 28 | | | | | |
| | | E203054-08 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilu | tion | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | · | Analyst: IY | - | | Batch: 2211080 |
| Benzene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | l | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 90.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: Toluene-d8 | | 98.4 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | l | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 90.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: Toluene-d8 | | 98.4 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | , | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | l | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | l | 03/11/22 | 03/11/22 | |
| urrogate: n-Nonane | | 103 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: R | AS | | Batch: 2211070 |
| Chloride | ND | 20.0 | 1 | l | 03/11/22 | 03/11/22 | |



Sample Data

| | | imple D | | | | | |
|--|---------------|------------|-------------|-------------|----------|----------|---------------------|
| Mack Energy | Project Name: | Thu | nderbay Fec | d Com #1 | | | |
| 7 W. Compress Road | Project Numbe | er: 2004 | 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | t Buckles | | | | 3/11/2022 7:08:22PM |
| | | Comp 29 | | | | | |
| | | E203054-09 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilu | tion | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Benzene | ND | 0.0250 | 1 | | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | 1 | | 03/11/22 | 03/11/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 90.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Jurrogate: Toluene-d8 | | 99.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | | 03/11/22 | 03/11/22 | |
| 'urrogate: Bromofluorobenzene | | 90.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: Toluene-d8 | | 99.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORC | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | l | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | | 03/11/22 | 03/11/22 | |
| urrogate: n-Nonane | | 100 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: RA | .S | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | | 03/11/22 | 03/11/22 | |



Sample Data

| | 24 | mpic D | | | | | |
|--|---|--------------------|------------------------------------|------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Number Project Manage | r: 2004 | nderbay Fe 46-0001 t Buckles | d Com # | 1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 30 | | | | | |
| | I | E203054-10 | | | | | |
| Analyte | Result | Reporting Limit | Dilt | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: . | ЛL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 111 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | 5 | ample D | ata | | | | |
|--|---|------------|------------------------------------|----------|------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | er: 2004 | nderbay Fe 46-0001 t Buckles | ed Com ‡ | <i>‡</i> 1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 31 | | | | | |
| | | E203054-11 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.0 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.0 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 103 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | ample D | | | | | |
|--|---------------|------------|------------|------------|----------|----------|---------------------|
| Mack Energy | Project Name: | | nderbay Fe | d Com #1 | l | | |
| 7 W. Compress Road | Project Numb | | 20046-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | Buckles | | | | 3/11/2022 7:08:22PM |
| | | Comp 32 | | | | | |
| | | E203054-12 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilu | ition | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: I | Y | | Batch: 2211079 |
| Benzene | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.9 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: I | Y | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.9 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: Toluene-d8 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: J | L | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 98.3 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: F | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | imple D | | | | | |
|--|---|--------------------|------------------------------------|------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | r: 2004 | nderbay Fe 46-0001 t Buckles | d Com # | 1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 33 | | | | | |
| |] | E203054-13 | | | | | |
| Analyte | Result | Reporting Limit | Dilu | ition | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | : | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 99.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 99.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: . | JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | : | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | ~ | ampic D | | | | | |
|--|--|------------|------------------------------------|------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay Fe 46-0001 t Buckles | d Com # | 1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 34 | | | | | |
| | | E203054-14 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilu | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: I | Y | | Batch: 2211079 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 93.8 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 92.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: I | Y | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | : | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 93.8 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 92.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: J | L | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: I | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | ample D | ata | | | | |
|--|---|--------------------|------------------------------------|----------|------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | er: 2004 | nderbay Fe 46-0001 t Buckles | ed Com ♯ | <i>‡</i> 1 | | Reported: 3/11/2022 7:08:22PM |
| | 110,00011100.000 | - | | | | | |
| | | Comp 35 | | | | | |
| | | E203054-15 | | | | | |
| Analyte | Result | Reporting Limit | | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 95.5 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 95.5 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 108 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | ample D | uu | | | | |
|--|---|------------|------------------------------------|----------|------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | er: 2004 | nderbay Fo 46-0001 t Buckles | ed Com ‡ | <i>‡</i> 1 | | Reported: 3/11/2022 7:08:22PM |
| Artesia NM, 86210 | Project Manag | ger: Mat | Duckles | | | | 5/11/2022 /.08.22FW |
| | | Comp 36 | | | | | |
| | | E203054-16 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 97.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.2 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 97.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.2 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 111 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | mpic D | | | | | |
|--|---|--------------------|-------------------------------------|------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | r: 2004 | nderbay Fee 46-0001 t Buckles | d Com #1 | l | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 37 | | | | | |
| | - | E203054-17 | | | | | |
| Analyte | Result | Reporting Limit | Dilu | ition | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: I | Y | | Batch: 2211079 |
| Benzene | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 98.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: I | Y | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 98.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: J | L | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 105 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: I | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | ~ | ampic D | | | | | |
|--|--|------------|------------------------------------|------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay Fe 46-0001 t Buckles | ed Com # | 1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 38 | | | | | |
| | | E203054-18 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilı | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: l | IY | | Batch: 2211079 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | - | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 95.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 89.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: l | IY | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 95.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 89.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: J | IL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 108 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: l | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | ample D | uu | | | | |
|--|---------------|------------|------------|----------|----------|----------|---------------------|
| Mack Energy | Project Name: | Thu | nderbay Fe | d Com # | 1 | | |
| 7 W. Compress Road | Project Numbe | | 20046-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | Buckles | | | | 3/11/2022 7:08:22PM |
| | | Comp 39 | | | | | |
| | | E203054-19 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| thylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| l'oluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| -Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| ,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| urrogate: Bromofluorobenzene | | 99.9 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 91.5 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211079 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 99.9 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: 1,2-Dichloroethane-d4 | | 91.5 % | 70-130 | | 03/11/22 | 03/11/22 | |
| urrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | ЛL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/11/22 | 03/11/22 | |
| urrogate: n-Nonane | | 110 % | 50-200 | | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | D. | ampic D | ala | | | |
|--|-------------------------------|------------|----------------------------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numb | | nderbay Fed Com 46-0001 | #1 | | Reported: |
| Artesia NM, 88210 | Project Manag | | t Buckles | | | 3/11/2022 7:08:22PM |
| | | Comp 40 | | | | |
| | | E203054-20 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211077 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 91.9 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.6 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 106 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ala | | | |
|--|---|------------|---|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | ber: 2004 | nderbay Fed Com 46-0001 t Buckles | #1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 41 | | | | |
| | | E203054-21 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211077 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.1 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 109 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D. | ampic D | ata | | | |
|--|--|------------|---|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay Fed Con 46-0001 t Buckles | n #1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 42 | | | | |
| | | E203054-22 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| Foluene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.8 % | 70-130 | 03/10/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.8 % | 70-130 | 03/10/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 89.6 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | 171 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 92.7 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2211065 |
| Chloride | 110 | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D. | ampic D | ala | | | |
|--|--|------------|---|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay Fed Com 46-0001 t Buckles | n #1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 43 | | | | |
| | | E203054-23 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: RKS | | Batch: 2211077 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Foluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.6 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.2 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 109 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | aia | | | |
|--|------------------------------|------------|----------------------------|--------------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | | nderbay Fed Com 46-0001 | #1 | | Reported: |
| Artesia NM, 88210 | Project Manag | | t Buckles | | | 3/11/2022 7:08:22PM |
| | | Comp 44 | | | | |
| | | E203054-24 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211077 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 92.2 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.6 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | 0 | ampie D | ala | | | |
|--|--|------------|---|--------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay Fed Com 46-0001 t Buckles | n #1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 45 | | | | |
| | | E203054-25 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211077 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.9 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.9 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ata | | | |
|--|---------------|------------|-----------------|---------------------|----------|----------------|
| Mack Energy | Project Name | | nderbay Fed Com | ı #1 | | _ |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Mat | | 3/11/2022 7:08:22PM | | |
| | | Comp 46 | | | | |
| | | E203054-26 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Analyst: RKS | | Batch: 2211064 |
| Benzene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/10/22 | 03/11/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.4 % | 70-130 | 03/10/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211064 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/10/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | ıt: JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | 88.3 | 25.0 | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | 166 | 50.0 | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 105 % | 50-200 | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2211065 |
| Chloride | 110 | 20.0 | 1 | 03/10/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | 0 | ampic D | ala | | | |
|--|---|------------|---|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay Fed Cor 46-0001 t Buckles | n #1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 47 | | | | |
| | | E203054-27 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2211077 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.0 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | st: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | st: JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | st: RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



Sample Data

| | 5 | ampic D | ala | | | |
|--|---|------------|---|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay Fed Com 46-0001 t Buckles | #1 | | Reported: 3/11/2022 7:08:22PM |
| | | Comp 48 | | | | |
| | | E203054-28 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211077 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.1 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.0 % | 70-130 | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2211069 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/11/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 106 % | 50-200 | 03/11/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2211071 |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | |
| | | | | | | |



QC Summary Data

| MIF | | D 1 | | 1 1 1 1 | | | | | |
|----------------------------------|--------|--------------------|----------------|------------------|----------|---------------|--------------|--------------|---------------------|
| Mack Energy | | Project Name: | | underbay Fed | Com #1 | | | | Reported: |
| 7 W. Compress Road | | Project Number: | | 046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager: | Ma | att Buckles | | | | | 3/11/2022 7:08:22PM |
| | V | olatile Organic | Compou | unds by EF | PA 8260B | 6 | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211079-BLK1) | | | | | | I | Prepared: 0. | 3/10/22 At | nalyzed: 03/11/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| o-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.477 | | 0.500 | | 95.4 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.510 | | 0.500 | | 102 | 70-130 | | | |
| LCS (2211079-BS1) | | | | | | I | Prepared: 0. | 3/10/22 A | nalyzed: 03/11/22 |
| Benzene | 2.46 | 0.0250 | 2.50 | | 98.3 | 70-130 | | | |
| Ethylbenzene | 2.73 | 0.0250 | 2.50 | | 109 | 70-130 | | | |
| Toluene | 2.67 | 0.0250 | 2.50 | | 107 | 70-130 | | | |
| o-Xylene | 2.65 | 0.0250 | 2.50 | | 106 | 70-130 | | | |
| p,m-Xylene | 5.39 | 0.0500 | 5.00 | | 108 | 70-130 | | | |
| Total Xylenes | 8.05 | 0.0250 | 7.50 | | 107 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.503 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.498 | | 0.500 | | 99.6 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.529 | | 0.500 | | 106 | 70-130 | | | |
| LCS Dup (2211079-BSD1) | | | | | | I | Prepared: 0. | 3/10/22 At | nalyzed: 03/11/22 |
| Benzene | 2.43 | 0.0250 | 2.50 | | 97.3 | 70-130 | 0.981 | 23 | |
| Ethylbenzene | 2.85 | 0.0250 | 2.50 | | 114 | 70-130 | 4.35 | 27 | |
| Toluene | 2.79 | 0.0250 | 2.50 | | 112 | 70-130 | 4.41 | 24 | |
| p-Xylene | 2.78 | 0.0250 | 2.50 | | 111 | 70-130 | 4.55 | 27 | |
| p,m-Xylene | 5.60 | 0.0500 | 5.00 | | 112 | 70-130 | 3.72 | 27 | |
| Total Xylenes | 8.37 | 0.0250 | 7.50 | | 112 | 70-130 | 3.99 | 27 | |
| Surrogate: Bromofluorobenzene | 0.506 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.455 | | 0.500 | | 91.0 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.520 | | 0.500 | | 104 | 70-130 | | | |



QC Summary Data

| | | | | 1 1 22 | | | | | |
|----------------------------------|--------|--------------------|----------------|------------------|---------|---------------|--------------|--------------|---------------------|
| Mack Energy | | Project Name: | | underbay Fed | Com #1 | | | | Reported: |
| 7 W. Compress Road | | Project Number: | | 046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager: | M | att Buckles | | | | | 3/11/2022 7:08:22PM |
| | V | olatile Organic | Compo | unds by EP | A 8260B | 6 | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211080-BLK1) | | | | | | F | Prepared: 0. | 3/10/22 At | nalyzed: 03/11/22 |
| 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 | 0.446 | | 0.500 | | 89.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.507 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| LCS (2211080-BS1) | | | | | | F | Prepared: 0. | 3/10/22 A | nalyzed: 03/11/22 |
| Benzene | 2.85 | 0.0250 | 2.50 | | 114 | 70-130 | | | |
| Ethylbenzene | 3.05 | 0.0250 | 2.50 | | 122 | 70-130 | | | |
| Toluene | 3.01 | 0.0250 | 2.50 | | 121 | 70-130 | | | |
| p-Xylene | 2.93 | 0.0250 | 2.50 | | 117 | 70-130 | | | |
| o,m-Xylene | 5.82 | 0.0500 | 5.00 | | 116 | 70-130 | | | |
| Fotal Xylenes | 8.76 | 0.0250 | 7.50 | | 117 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.480 | | 0.500 | | 96.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.515 | | 0.500 | | 103 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.524 | | 0.500 | | 105 | 70-130 | | | |
| LCS Dup (2211080-BSD1) | | | | | | F | Prepared: 0. | 3/10/22 At | nalyzed: 03/11/22 |
| Benzene | 2.77 | 0.0250 | 2.50 | | 111 | 70-130 | 2.60 | 23 | |
| Ethylbenzene | 2.93 | 0.0250 | 2.50 | | 117 | 70-130 | 3.83 | 27 | |
| Toluene | 2.92 | 0.0250 | 2.50 | | 117 | 70-130 | 3.32 | 24 | |
| o-Xylene | 2.80 | 0.0250 | 2.50 | | 112 | 70-130 | 4.66 | 27 | |
| p,m-Xylene | 5.64 | 0.0500 | 5.00 | | 113 | 70-130 | 3.29 | 27 | |
| Total Xylenes | 8.43 | 0.0250 | 7.50 | | 112 | 70-130 | 3.75 | 27 | |
| Surrogate: Bromofluorobenzene | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.505 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.519 | | 0.500 | | 104 | 70-130 | | | |



QC Summary Data

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|--|--------------|--|----------------|--|-------------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay Feo 0046-0001 latt Buckles | d Com #1 | | | | Reported: 3/11/2022 7:08:22PM |
| | | Volatile O | rganics l | by EPA 802 | 21B | | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211064-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/10/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| p-Xylene | ND | 0.0250 | | | | | | | |
| o,m-Xylene | ND | 0.0500 | | | | | | | |
| Fotal Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.51 | 0.0250 | 8.00 | | 93.8 | 70-130 | | | |
| LCS (2211064-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | analyzed: 03/10/22 |
| Benzene | 4.83 | 0.0250 | 5.00 | | 96.5 | 70-130 | | | |
| Ethylbenzene | 5.10 | 0.0250 | 5.00 | | 102 | 70-130 | | | |
| Toluene | 5.32 | 0.0250 | 5.00 | | 106 | 70-130 | | | |
| p-Xylene | 5.05 | 0.0250 | 5.00 | | 101 | 70-130 | | | |
| o,m-Xylene | 10.3 | 0.0500 | 10.0 | | 103 | 70-130 | | | |
| Fotal Xylenes | 15.4 | 0.0250 | 15.0 | | 103 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.58 | 0.0250 | 8.00 | | 94.8 | 70-130 | | | |
| Matrix Spike (2211064-MS1) | | | | Source: | E203053-1 | 9 | Prepared: 0 | 3/10/22 A | nalyzed: 03/10/22 |
| Benzene | 4.82 | 0.0250 | 5.00 | ND | 96.3 | 54-133 | 1 . | | J |
| Ethylbenzene | 5.10 | 0.0250 | 5.00 | ND | 102 | 61-133 | | | |
| Toluene | 5.33 | 0.0250 | 5.00 | ND | 102 | 61-133 | | | |
| | 5.03 | 0.0250 | 5.00 | ND | 107 | 63-131 | | | |
| o-Xylene | 10.3 | 0.0250 | 10.0 | ND | 101 | 63-131 | | | |
| p,m-Xylene Fotal Xylenes | 15.4 | 0.0500 | 15.0 | ND | 103 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.48 | 0.0230 | 8.00 | nD | 93.5 | 70-130 | | | |
| Matrix Spike Dup (2211064-MSD1) | | | | Source: | E203053-1 | 9 | Prepared: 0 | 3/10/22 A | nalyzed: 03/10/22 |
| | 4.81 | 0.0250 | 5.00 | ND | 96.3 | 54-133 | 0.0561 | 20 | |
| Benzene | 4.81 5.07 | 0.0250 | 5.00 | ND | 96.5 101 | 61-133 | 0.0561 | 20 | |
| Ethylbenzene | 5.30 | 0.0250 | | | | 61-133 | 0.330 | 20 | |
| Foluene | 5.01 | 0.0250 | 5.00 5.00 | ND ND | 106 100 | 63-131 | 0.389 | 20 | |
| -Xylene | | 0.0250 | | | | | 0.486 | | |
| o,m-Xylene | 10.3 | 0.0500 | 10.0 | ND | 103 | 63-131 | | 20 20 | |
| Fotal Xylenes | 15.3 | 0.0250 | 15.0 | ND | 102 | 63-131 | 0.562 | 20 | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.40 | | 8.00 | | 92.5 | 70-130 | | | |



QC Summary Data

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|-------------------------------------|--------|----------------------------------|----------------|----------------------------|------------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | 2 | hunderbay Fed 0046-0001 | l Com #1 | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | IV | fatt Buckles | | | | | 3/11/2022 7:08:22PM |
| | | Volatile Or | rganics | by EPA 802 | 1 B | | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211077-BLK1) | | | | | |] | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| p-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.44 | | 8.00 | | 93.0 | 70-130 | | | |
| LCS (2211077-BS1) | | | | | |] | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Benzene | 4.74 | 0.0250 | 5.00 | | 94.8 | 70-130 | | | |
| Ethylbenzene | 5.01 | 0.0250 | 5.00 | | 100 | 70-130 | | | |
| Toluene | 5.24 | 0.0250 | 5.00 | | 105 | 70-130 | | | |
| p-Xylene | 4.96 | 0.0250 | 5.00 | | 99.2 | 70-130 | | | |
| p,m-Xylene | 10.1 | 0.0500 | 10.0 | | 101 | 70-130 | | | |
| Total Xylenes | 15.1 | 0.0250 | 15.0 | | 101 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.51 | | 8.00 | | 93.9 | 70-130 | | | |
| LCS Dup (2211077-BSD1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Benzene | 4.94 | 0.0250 | 5.00 | | 98.8 | 70-130 | 4.14 | 20 | |
| Ethylbenzene | 5.20 | 0.0250 | 5.00 | | 104 | 70-130 | 3.74 | 20 | |
| Toluene | 5.44 | 0.0250 | 5.00 | | 109 | 70-130 | 3.78 | 20 | |
| p-Xylene | 5.14 | 0.0250 | 5.00 | | 103 | 70-130 | 3.55 | 20 | |
| p,m-Xylene | 10.5 | 0.0500 | 10.0 | | 105 | 70-130 | 3.60 | 20 | |
| Total Xylenes | 15.7 | 0.0250 | 15.0 | | 104 | 70-130 | 3.58 | 20 | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.51 | | 8.00 | | 93.9 | 70-130 | | | |



QC Summary Data

| | | QU D | u 111111 | ing Data | | | | | |
|---|--------|----------------------------------|----------------|----------------------------|----------|---------------|-------------|--------------|--|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | 20 | hunderbay Fed 0046-0001 | d Com #1 | | | | Reported: /11/2022 7:08:22PM |
| Artesia NM, 88210 | | Project Manager: | N | latt Buckles | | | | 3 | /11/2022 /:08:22PM |
| | Noi | nhalogenated C | Organics | by EPA 80 | 15D - Gl | RO | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211064-BLK1) | | | | | | | Prepared: 0 | 3/10/22 An | alyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.96 | | 8.00 | | 99.6 | 70-130 | | | |
| LCS (2211064-BS2) | | | | | | | Prepared: 0 | 3/10/22 An | alyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | 47.0 | 20.0 | 50.0 | | 94.0 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.16 | | 8.00 | | 102 | 70-130 | | | |
| Matrix Spike (2211064-MS2) | | | | Source: | E203053- | 19 | Prepared: 0 | 3/10/22 An | alyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | 48.1 | 20.0 | 50.0 | ND | 96.3 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.09 | | 8.00 | | 101 | 70-130 | | | |
| Matrix Spike Dup (2211064-MSD2) | | | | Source: | E203053- | 19 | Prepared: 0 | 3/10/22 An | alyzed: 03/10/22 |
| Gasoline Range Organics (C6-C10) | 47.5 | 20.0 | 50.0 | ND | 95.0 | 70-130 | 1.28 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.97 | | 8.00 | | 99.6 | 70-130 | | | |



QC Summary Data

| | | QU L | /ummin | ary Dat | и | | | | |
|--|--------|--|----------------|--|----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number Project Manager | : 2 | Thunderbay Feo 20046-0001 Matt Buckles | 1 Com #1 | | | | Reported: 3/11/2022 7:08:22PM |
| | No | nhalogenated | Organics | by EPA 80 | 15D - G | RO | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211077-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.91 | | 8.00 | | 98.9 | 70-130 | | | |
| LCS (2211077-BS2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 46.9 | 20.0 | 50.0 | | 93.8 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.87 | | 8.00 | | 98.3 | 70-130 | | | |
| LCS Dup (2211077-BSD2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 46.4 | 20.0 | 50.0 | | 92.8 | 70-130 | 1.08 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.89 | | 8.00 | | 98.6 | 70-130 | | | |



OC Summary Data

| | | QC D | uIIIIII | | a | | | | |
|--|--------|--|----------------|--|----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay Fec 20046-0001 Matt Buckles | l Com #1 | | | | Reported: 3/11/2022 7:08:22PM |
| 111051a 1414, 00210 | No | nhalogenated C | | | 15D - G | RO | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211079-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.477 | | 0.500 | | 95.4 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.510 | | 0.500 | | 102 | 70-130 | | | |
| LCS (2211079-BS2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 58.8 | 20.0 | 50.0 | | 118 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.494 | | 0.500 | | 98.7 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.508 | | 0.500 | | 102 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.514 | | 0.500 | | 103 | 70-130 | | | |
| LCS Dup (2211079-BSD2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 54.4 | 20.0 | 50.0 | | 109 | 70-130 | 7.81 | 20 | |
| Surrogate: Bromofluorobenzene | 0.472 | | 0.500 | | 94.3 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.471 | | 0.500 | | 94.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.512 | | 0.500 | | 102 | 70-130 | | | |
| | | | | | | | | | |


QC Summary Data

| | | QC D | umm | ary Date | а | | | | |
|-----------------------------------|--------|----------------------------------|----------------|------------------------------|----------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | Thunderbay Fec 20046-0001 | 1 Com #1 | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | | Matt Buckles | | | | | 3/11/2022 7:08:22PM |
| | No | nhalogenated C | Organic | s by EPA 80 | 15D - G | RO | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211080-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.446 | | 0.500 | | 89.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.507 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| LCS (2211080-BS2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 60.8 | 20.0 | 50.0 | | 122 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.475 | | 0.500 | | 95.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.527 | | 0.500 | | 105 | 70-130 | | | |
| LCS Dup (2211080-BSD2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 63.5 | 20.0 | 50.0 | | 127 | 70-130 | 4.31 | 20 | |
| Surrogate: Bromofluorobenzene | 0.476 | | 0.500 | | 95.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.511 | | 0.500 | | 102 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.515 | | 0.500 | | 103 | 70-130 | | | |
| | | | | | | | | | |



QC Summary Data

| | | QC D | | ary Data | u | | | | |
|--|-----------------|--|-------------------------|--|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | hunderbay Fec 0046-0001 1att Buckles | l Com #1 | | | | Reported: 3/11/2022 7:08:22PM |
| | Nonh | alogenated Org | anics by | EPA 8015I |) - 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 (2211066-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 55.5 | | 50.0 | | 111 | 50-200 | | | |
| LCS (2211066-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) | 458 | 25.0 | 500 | | 91.5 | 38-132 | | | |
| Surrogate: n-Nonane | 54.1 | | 50.0 | | 108 | 50-200 | | | |
| Matrix Spike (2211066-MS1) | | | | Source: | E203053- | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) | 488 | 25.0 | 500 | ND | 97.6 | 38-132 | | | |
| Surrogate: n-Nonane | 53.6 | | 50.0 | | 107 | 50-200 | | | |
| Matrix Spike Dup (2211066-MSD1) | | | | Source: | E203053- | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) | 485 | 25.0 | 500 | ND | 97.0 | 38-132 | 0.628 | 20 | |
| Surrogate: n-Nonane | 53.5 | | 50.0 | | 107 | 50-200 | | | |



QC Summary Data

| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | underbay Feo 046-0001 | d Com #1 | | | | Reported: |
|---|-------------------|----------------------------------|----------------|--------------------------|----------|---------------|---------------|--------------|--|
| Artesia NM, 88210 | | Project Manager | : M | att Buckles | | | | | 3/11/2022 7:08:22PM |
| | Nonha | alogenated Org | ganics by | EPA 8015I | D - DRO | /ORO | | | Analyst: JL |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211069-BLK1) | | | | | | | D 1.07 | 2/10/22 | 1 1 00/10/00 |
| Dialik (221100)-DEIX1) | | | | | | | Prepared: 0. | 3/10/22 A | nalyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | Prepared: 0. | 3/10/22 A | nalyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) | ND ND | 25.0 50.0 | | | | | Prepared: 0. | 3/10/22 A | nalyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) Dil Range Organics (C28-C36) | | | 50.0 | | 111 | 50-200 | Prepared: 0. | 3/10/22 A | nalyzed: 03/10/22 |
| · / | ND | | 50.0 | | 111 | 50-200 | | | nalyzed: 03/10/22 nalyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2211069-BS1) | ND | | 50.0 | | 96.3 | 50-200 | | | |
| Diesel Range Organics (C10-C28) Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2211069-BS1) Diesel Range Organics (C10-C28) | ND 55.5 | 50.0 | | | | | | | |
| Diesel Range Organics (C10-C28) Dil Range Organics (C28-C36) Surrogate: n-Nonane | ND 55.5 481 | 50.0 | 500 | | 96.3 | 38-132 | Prepared: 0. | 3/10/22 A | |
| Diesel Range Organics (C10-C28) Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2211069-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane | ND 55.5 481 | 50.0 | 500 | | 96.3 | 38-132 | Prepared: 0. | 3/10/22 A | nalyzed: 03/11/22 |



QC Summary Data

| | | QC D | 4111114 | - 5 | • | | | | |
|--|-------------|----------------------------------|----------------|---|----------|---------------|--------------|--------------|---|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | 20 | underbay Fed 046-0001 att Duaklas | Com #1 | | | | Reported: 3/11/2022 7:08:22PM |
| Artesia NM, 88210 | | Project Manager: | | att Buckles | | | | | 5/11/2022 /:08:22PM |
| | Nonh | alogenated Org | anics by | EPA 8015E |) - DRO/ | ORO | | | Analyst: JL |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211074-BLK1) | | | | | | | Prepared: 0. | 3/10/22 A | nalyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 48.9 | | 50.0 | | 97.9 | | | | |
| | | | | | 97.9 | 50-200 | | | |
| LCS (2211074-BS1) | | | | | 97.9 | 50-200 | Prepared: 0. | 3/10/22 A | nalyzed: 03/11/22 |
| | 476 | 25.0 | 500 | | 97.9 | 38-132 | Prepared: 0. | 3/10/22 A | nalyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) | 476 49.3 | 25.0 | | | | | Prepared: 0. | 3/10/22 A | nalyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) Surrogate: n-Nonane | | 25.0 | 500 | | 95.3 | 38-132 | | | nalyzed: 03/11/22 nalyzed: 03/11/22 |
| LCS (2211074-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane LCS Dup (2211074-BSD1) Diesel Range Organics (C10-C28) | | 25.0 | 500 | | 95.3 | 38-132 | | | |



QC Summary Data

| | | | | ····· J – ····· | | | | | |
|--|--------|--|----------------|--|-----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay Fec 20046-0001 Matt Buckles | 1 Com #1 | | | | Reported: 3/11/2022 7:08:22PM |
| | | Anions | by EPA | 300.0/9056A | 4 | | | | Analyst: RAS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211065-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2211065-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Chloride | 248 | 20.0 | 250 | | 99.3 | 90-110 | | | |
| Matrix Spike (2211065-MS1) | | | | Source: | E203053-1 | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Chloride | 500 | 20.0 | 250 | 262 | 95.4 | 80-120 | | | |
| Matrix Spike Dup (2211065-MSD1) | | | | Source: | E203053-1 | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Chloride | 499 | 20.0 | 250 | 262 | 94.8 | 80-120 | 0.307 | 20 | |



QC Summary Data

| | | <u> </u> | | v | | | | | |
|------------------------|--------|--------------------|----------------|------------------|----------|---------------|--------------|--------------|---------------------|
| Mack Energy | | Project Name: | Т | hunderbay Fee | d Com #1 | | | | Reported: |
| 7 W. Compress Road | | Project Number: | 2 | 0046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager | :: N | latt Buckles | | | | | 3/11/2022 7:08:22PM |
| | | Anions | by EPA | 300.0/90564 | 4 | | | | Analyst: RAS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211070-BLK1) | | | | | | | Prepared: 0. | 3/10/22 | Analyzed: 03/10/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2211070-BS1) | | | | | | | Prepared: 03 | 3/10/22 | Analyzed: 03/11/22 |
| Chloride | 247 | 20.0 | 250 | | 98.7 | 90-110 | | | |
| LCS Dup (2211070-BSD1) | | | | | | | Prepared: 0. | 3/10/22 | Analyzed: 03/11/22 |
| Chloride | 249 | 20.0 | 250 | | 99.5 | 90-110 | 0.827 | 20 | |
| | | | | | | | | | |



QC Summary Data

| | | <u> </u> | | v | | | | | |
|------------------------|--------|--------------------|----------------|------------------|----------|---------------|--------------|--------------|---------------------|
| Mack Energy | | Project Name: | Т | hunderbay Fee | d Com #1 | | | | Reported: |
| 7 W. Compress Road | | Project Number: | 2 | 0046-0001 | | | | | - |
| Artesia NM, 88210 | | Project Manager | :: N | latt Buckles | | | | | 3/11/2022 7:08:22PM |
| | | Anions | by EPA | 300.0/90564 | ۸ | | | | Analyst: RAS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211071-BLK1) | | | | | | | Prepared: 0. | 3/10/22 | Analyzed: 03/11/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2211071-BS1) | | | | | | | Prepared: 03 | 3/10/22 | Analyzed: 03/11/22 |
| Chloride | 250 | 20.0 | 250 | | 100 | 90-110 | | | |
| LCS Dup (2211071-BSD1) | | | | | | | Prepared: 03 | 3/10/22 | Analyzed: 03/11/22 |
| Chloride | 250 | 20.0 | 250 | | 100 | 90-110 | 0.168 | 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.



| Mack Energy | Project Name: | Thunderbay Fed Com #1 | |
|--------------------|------------------|-----------------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Matt Buckles | 03/11/22 19:08 |

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Referoject Information

Page <u>3</u> of <u>6</u>

| oject In | formation | 6 | | | | | | C | Chain of Custo | dy | | | | | | | | | | | | Page 🤶 | 5_of |
|-----------------------------------|-------------------------|------------------------|----------------------|--------------------------------|----------------|--------------------------------|-------------------|--------------------|----------------------|-----------------|--------------------|---------|-------------|-------------|----------|-----------------------------|-----------|-------|------------|-------------|----------|----------------|----------------|
| roject: | ack Ene Thur der | Buy | | _ | | ttention | | Bill To | | Lab | WO# | | | | Numb | | 1D | 2D | TA 3D | AT Stand | lard | EPA P CWA | rogram SDWA |
| roject M ddress: ity, State | |) | | | | ddress: ity, State hone: | 2724 e, Zip Ho | N CR US, NM 88 | 240 | Eó | 203 | 05 | | | | d Metho | d d | | | | | | RCRA |
| none: nail: eport du | | | | | Ē | mail: M | statie | | | DRO/ORO by 8015 | GRO/DRO by 8015 | 8021 | 3260 | 010 | 300.0 | a. | WN | TX | | NM | | State UT AZ | TX |
| Time ampled | Date Sampled | Matrix | No. of Containers | Sample ID | | | | | Lab Numb | DRO/OR | GRO/DR | BTEX by | VOC by 8260 | Metals 6010 | Chloride | | BGDOC | BGDOC | | (| | Remarks | |
| | 3-3-22 | 5 | 1 | Comp | 21 | | | | 1 | | | | 21 | | | | X | | | | _ | | |
| | 7 | 5 | (| Comp | 22 | | | | 20 | | | 1 | | | | | (| _ | | | <u>.</u> | | |
| | | | | Conp | 23 | | | | 3 | | - | | | | | | / | - | | | | _ | |
| - | | | | Comp | 29 | | | | 100 | | | - | | - | | | | | | | | | |
| | | - | | Conp | 25 | | | | 5 | -9 | | í. | | | | | 1 | | | | | | ĩ |
| | | | | Com | 27 | | | | 7 | | | | | | | | | | | | | | |
| 8 | | | | Conp | 28 | | | | 8 | - | | | | | | | | | | | | | |
| | | | | Comp | 29 | | | | 9 | | | | | | | | | | | | | | |
| 1.1 | al Instruc | | / | Comp | 30 | | | | 10 | | | | | | | | | - | | | | | |
| ield sam | COC pler), attest to | Page o the validity | and auther | iticity of this s | ample. I am aw | are that tan | npering with | or intentionally r | nislabelling the sar |) E | ac ion, | SC | DE | Samp | corequi | ing thermal t an avg ten | | | | | | | ed or received |
| linquish | ed by: (Sign | ature) | Dat | -3-22 | Time | | ived by: (Sig | gnature) | | 0.22 | - | 540 | 0 | Rec | eived | on ice: | | ab U | se On I | ly | | | |
| A | ed by: (Sign | sh | | .10.22 | Time 1902 | | ived by: (Sig | in Chi | ta 3/11 Date | 122 | Time 7. Time | 30 | 2 | <u>T1</u> | | | <u>T2</u> | | 2 | <u></u> | | | |
| V | ed by Sign | | Dat | | Time | ĸece | ived by: (Sig | gnaturej | | nor Tree | | | | | G Tem | | 1 | | VOA | | | 12- | 2 |
| | | carded 30 | days after i | Aqueous, O - results are re | | other arra | angements a | are made. Haz | ardous samples | | | | | | | ag - aml | | | | report for | the ana | lysis of the | above |

Reference information

Page $\underline{4}$ of $\underline{5}$

| Bill To Tat EPA Program Order: Final: Attention: Bx, Bill To Job Number Remarks More: mail: Cliv, State. Zip / Mr. CR. Cliv, State. Zip / Mr. CR. Remarks RCR More: mail: Remarks RCR RCR RCR RCR Sampled Mark Concert RCR RCR RCR RCR RCR Sampled Sampled Sample ID Number Lab RCR RCR RCR Graver Graver Sampled ID Number RCR RCR RCR Graver Graver Sampled ID Number RCR RCR RCR Graver Graver Sampled ID Number RCR | | | | | | | | | | | | | | | | | | | | | | | | | of |
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| dress: Analysis and Method RCR Visite, Zip Analysis and Method RCR Nate, Zip Image: Simple ID Image: Simple ID Image: Simple ID Image: Simple ID Number Image: Simple ID Image: Simple ID Image: Simple ID Image: Simple ID Number Image: Simple ID | ject: | Thunder P | | | | | Atten | tion: E | 55 | | | Lab | WO# | - | | | | | 1D | 2D | 3D | Stand | lard | CWA | SDWA |
| A: State: Phone: The state State: Normal: State: all: | | lanager: | 2 | | | | Addre | ess: 27 | 24 N | CIR OD | 240 | Ec | 20.3 | 05 | 4 | | | | X | | | | | | DCDA |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | -7. | | | | | | | ip #1064 | 55, mm 88. | 010 | - | - | | 1 | Analy | sis and | Metho | d | 1 | - | _ | 1 | 1 | RCRA |
| all: mont due by: mont d | | e, Zip | | | | | | | i. | | | 5 | S | | | 1.1 | | | | | | - | | State | L |
| 33722 5 1 Gap 31 11 1 <td< td=""><td></td><td>100</td><td></td><td></td><td></td><td></td><td>Email</td><td>. Vergal</td><td>ne -</td><td></td><td></td><td>/ 801</td><td>/ 801</td><td></td><td>~</td><td></td><td>0.0</td><td></td><td>5</td><td></td><td></td><td>NN</td><td></td><td></td><td>TX</td></td<> | | 100 | | | | | Email | . Vergal | ne - | | | / 801 | / 801 | | ~ | | 0.0 | | 5 | | | NN | | | TX |
| 33722 5 1 Gap 31 11 1 <td< td=""><td></td><td>ue by:</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>30 by</td><td>4 O E</td><td>/ 802</td><td>8260</td><td>6010</td><td>e 300</td><td></td><td>1.5</td><td>TX</td><td></td><td>X</td><td>0</td><td></td><td></td></td<> | | ue by: | | | | | | | | | | 30 by | 4 O E | / 802 | 8260 | 6010 | e 300 | | 1.5 | TX | | X | 0 | | |
| Image: Second | | | Matrix | | Sample I | D | | | | | | DRO/OI | GRO/DI | BTEX by | voc by | Metals | Chlorid | | BGDOC | BGDOC | Ċ. | | | Remarks | |
| Image: Second | | 3-3-22 | 5 | 1 | Comp | 31 | | | | | 11 | | | | | | | | X | Ym | | | | | |
| Image: Second | | 1 | ſ | (| Conp | 32 | | | | | 12 | | | | | | | | (| | | | | | |
| ditional Instructions: Cong 37 17 Image: State to the validity and authenticity of this sample. I am aware that tampering will or interitionally infidebelling the sample location, sampled by: (Signature) Sampled by: (Signature) Date Time Received by: (Signature) Date Time AVG Temp °c 4//////////////////////////////////// | | | | | Conf | 33 | | | | | 13 | - | | | | | | | | | | | | | |
| Impulsive by: (Signature) Date Time Received by: (Signature) Date Time Time Received by: (Signature) Date Time Time Received by: (Signature) Date Time | | | | | Conf | 34 | | | | | 14 | | | | | | | | | | | | | | |
| Image: Signature Image: Signature <td< td=""><td></td><td></td><td></td><td></td><td>Comp</td><td>35</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></td<> | | | | | Comp | 35 | | | | | | - | | | _ | | | | | | | | | | 1 |
| Image: Second State Image: Second State< | | | | | Comp | 36 | | | | | | | | <u>.</u> | | | | | | | | | | | • |
| Image: Signature Date Time Received by: (Signature) Date Time Time Time Received by: (Signature) Date Time Tim | | | | | Comp | 37 | | | | | - 152 | - | | | | _ | | | | | | | | | |
| ditional Instructions: Comp 1/2 ditional Instructions: Comp 200 105 5 500 Project Vout - 000 500 500 500 500 1000 1000 1000 10 | _ | | | | Comp | 38 | | _ | | | - | | | | | | | - | | - | | | - | | |
| ditional Instructions: Description Samples requiring thermal preservation must be received on ice the day they are sampled or received in ice at an avg temp above 0 but less than 6°C on subsequent days. e or time of collection is considered fraud and may be grounds for legal action. Sampled by: Signature) Date Time Received by: (Signature) Date Time Lab Use Only inquished by: (Signature) Date Time Received by: (Signature) Date Time Received by: (Signature) Date Time | _ | | | | Comp | 39 | | | | | | | - | | | - | | | | - | | | | | |
| Dec Coccept of the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, e or time of collection is considered fraud and may be grounds for legal action. Sampled by: Samples requiring thermal preservation must be received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice an area temp above 0 but less than 6°C on subsequent days. Date Time Received by: (Signature) Date Time Lab Use Only inquished by: (Signature) Date Time Received by: (Signature) Date Time 3 · 10 · 2 2 19 · 00 Control of the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice an area temp above 0 but less than 6°C on subsequent days. Industries day: Date Time Received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice the day they are sampled or received on ice they are sampled or received on ice | | / | 1 | 1 | COND | % | | _ | | | do | | | | | | | | 1) | | | - 1- | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | eld sam | pler), attest to | o the validity | | ticity of this | | | Pr at tamperi | ng with or i | intentionally misla | abelling the sam | | UC ion, | DE | 52 | Sampl | es requiri | ng thermal | • · · · · · · · · · · · · · · · · · · · | | | | | a state of the second | led or receiv |
| John 3·10·22 1900 Cartle Olath 3/1/22 7:30 T1 T2 T3 Inneurished by: (Signature) Date Time Received by: (Signature) Date Time AVG Temp °C_4 | inquish | ed by: (Sign | ature) | | - | Time | | Received | by: (Signa | ature) John | | .22 | | | 0 | Rec | eived | on ice: | | - | | ly | | | |
| AVG Temp °C | × | -0 | ah | | | | 00 | Ca | Alta | . Clat | - 3/11 | 122 | 7. | 30 | > | T1 | 31 | | <u>T2</u> | | | <u>T3</u> | | | |
| nole Matrix: S - Soil Sd - Soil de - Anuegus O - Other Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA | linguish | ed by: (Sign | ature) | Date | e | Time | | Received | by: (Signa | ature) | 1 | | | | | | | | | | 1 | | | | |
| te: 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 | nple Ma | trix: S - Soil, S | id - Solid, Sg | - Sludge, A - | Aqueous, O | - Other | | | | | | | | | | | | | | | | | | | |

| liont: M | lack Ene | 1 | | | 1 1 | | | Bill To | | | 1 | - | la | b Use | - On | V | | | | TAT | | EPA P | rogram |
|------------|------------------|--------------|-----------------------|---------------------------|--------------|------------|-------------|----------------|---------------|------------|-----------------|-----------------|--------------|-------------|-------------|----------------|----------|-----------|------------------|--------|--|---------|----------------|
| | Thunder Be | | | | Att | ention: | F55 | Din To | | | Lab | NO# | | | | lumber | | 10 | 2D | | Standard | CWA | SDWA |
| | Aanager: | | | | Ad | dress: | 27.24 | NCR | | | Eá | 102 | 05 | 4 | 200 | 46-0 | box | X | | | | | |
| dress: | | | | | Cit | y, State | , Zip H. | obbs NM | 88240 | | | | | | | sis and N | | d | 1 | | | | RCRA |
| ty, Stat | e, Zip | | | | | one: | 1 | ' | | | | | | | | | | | | | 1 | | |
| one: | | | | | En | nail: Na | talie | _ | | | 3015 | 015 | | | | - | | | | | NINAL CO | State | TTVI |
| nail: | un huu | | | | 10.0 | | | | | | by 8 | by 8 | 021 | 260 | 010 | 300.0 | | MN | × | | | Page 5 | |
| eport d | Date | 1.1.1 | No. of | | 1-1 | | | | | Lab | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | | | | 1.51 | | 1 1 |
| ampled | Sampled | Matrix | Containers | Sample ID | | | | | | Number | DRO | GRO | BTE | voc | Met | Chlo | - | BGDOC | BGDOC | | | Remarks | 5 |
| | 3-3-22 | 5 | | Conp 41 | | | | | | 21 | | | | | | 1.5 | | | | | | | |
| | (|) | (| 60m 42 | | | | | | 22 | | | | | | | | | | | | | |
| | | | $\left \right\rangle$ | Comp 43 |) | | | | | 23 | | | | | | | | | | | | | |
| | | | (| Carp 44 | | | | | | 24 | | | | | | | | | | | | | |
| | | 1 | | 0 110 | | | | | | 25 | - | | | | | | | 1 | | | | | |
| | | (| / | A M |) | | | | | 24 | | | | | | | | | | | | - | |
| | | / | (| Comp 16 | | | | | | 27 | | | | | | | |) | | | | | |
| | |) | | 1 Itt | , | | | | | 28 | | | | | - | | + | X | | | | | |
| | | | L | Conp 48 | | | | | _ | a o | | | | | | | + | I.V. | | - | | | |
| | | 1 | - | | | | | | | 4 | CC | _ | _ | | - | | - | - | _ | - | - | | |
| | | | | | | | _ | | | | - | | _ | | | | - | | | | | | |
| XE | al Instruc | 1. | TIN | | F F | F | or | Proj | ect | Ma | in | 2 | | U | X | DE | 20 | 350 | SE | 53 | | | |
| (field sam | pler), attest to | the validity | y and authen | city of this sample | e. I am awar | e that tam | pering with | or intentional | y mislabellin | g the samp | le locati | on, | | | Sample | es requiring | thermal | preserva | tion mus | | ved on ice the day Con subsequent d | | oled or receiv |
| | / | <i>(11</i>) | | may be grounds fo | | | | pled by: | | Data | _ | Time | | | puenes | in ice or or | ang term | | | | | | |
| elinquist | ned by: (Signa | ature) | Date | : Tin 3-77 | le | Receiv | ived by: (S | ignature) | 1 | Date 3./0 | . 7.7 | Time | 154 | 10 | Rec | eived or | ice. | | $\frac{1}{2}$ /N | e Only | | | |
| elinguist | ned by: (Signa | ature). | Date | | ne | Receiv | ived by: (S | ignature) | | Date | 1 | Time | - | 0 | nec | civeu oi | rice. | C | 1 14 | | | | |
| 1 | | 2h- | | .10.22 | 1900 | Ca | rett | w Ch | te | 3/11/ | 22 | 7. | :30 | 2 | T1 | 11 | | <u>T2</u> | | 1 | <u>T3</u> | | |
| Elinquis | ned by: (Sign | ature) | Date | | | Recei | ived by: (S | ignature) | | Date | | Time | | | AVO | i Temp | °c C | 4 | | | | | |
| | | | | Aqueous, O - Other | | | | | | Containe | ar Tun | | alacc | | | | | er ala | cc v. | VOA | | | |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy D | ate Received: | 03/11/22 0 | 7:30 | Work Order ID: E203054 |
|--|---|----------------------------------|--|------------------|---|
| Phone: | (575) 746-9547 D | ate Logged In: | 03/08/22 1 | 6:37 | Logged In By: Caitlin Christian |
| Email: | natalie@energystaffingllc.com D | ue Date: | 03/11/22 1 | 7:00 (0 day TAT) | |
| Chain o | f Custody (COC) | | | | |
| 1. Does 1 | he sample ID match the COC? | | Yes | | |
| 2. Does t | he number of samples per sampling site location match | the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: C | Courrier |
| 4. Was th | ne COC complete, i.e., signatures, dates/times, requester | d analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion. | e field, | Yes | | Comments/Resolution |
| Sample ' | <u> Turn Around Time (TAT)</u> | | | | |
| 6. Did th | e COC indicate standard TAT, or Expedited TAT? | | Yes | | Project has been seperated into 2 reports |
| Sample | Cooler | | | | due to amount of samples. Workorders are |
| 7. Was a | sample cooler received? | | Yes | | as follows: |
| 8. If yes, | was cooler received in good condition? | | Yes | | E203053 COC page 1&2 of 5, E203054 |
| 9. Was tl | ne sample(s) received intact, i.e., not broken? | | Yes | | COC page 3,4 & 5 of 5. Sampled times not |
| 10. Were | custody/security seals present? | | No | | |
| 11. If yes | s, were custody/security seals intact? | | NA | | provided on coc. |
| 12. Was t | he sample received on ice? If yes, the recorded temp is 4°C, i.e Note: Thermal preservation is not required, if samples are re- minutes of sampling | | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sample te | mperature: <u>4°</u> | <u>C</u> | | |
| Sample | Container | | | | |
| 14. Are a | aqueous VOC samples present? | | No | | |
| 15. Are ' | VOC samples collected in VOA Vials? | | NA | | |
| | | | D.L.A | | |
| | e head space less than 6-8 mm (pea sized or less)? | | NA | | |
| 16. Is the | e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? | | NA | | |
| 16. Is the 17. Was | | | | | |
| 16. Is the 17. Was 18. Are 1 | a trip blank (TB) included for VOC analyses? | s collected? | NA | | |
| 16. Is the 17. Was 18. Are 1 | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container | s collected? | NA Yes | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container <u>bel</u> field sample labels filled out with the minimum inform | | NA Yes Yes | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container <u>bel</u> field sample labels filled out with the minimum inform Sample ID? | | NA Yes Yes Yes | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container <u>bel</u> field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? | | NA Yes Yes No | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform sample ID? Date/Time Collected? Collectors name? | | NA Yes Yes Yes | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I C Sample | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform sample ID? Date/Time Collected? Collectors name? Preservation | nation: | NA Yes Yes No No | | |
| 16. Is the 17. Was 18. Are n 19. Is the Field La 20. Were Sample 21. Does | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were pres | nation: | NA Yes Yes No | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were Sample 21. Does 22. Are s | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform sample ID? Date/Time Collected? Collectors name? Preservation | nation: erved? | NA Yes Yes No No | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I C Sample 21. Does 22. Are s 24. Is lat | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were pres sample(s) correctly preserved? o filteration required and/or requested for dissolved met | nation: erved? | NA Yes Yes No No No | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are s 24. Is lat Multiph | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were pres sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix | nation: erved? als? | NA Yes Yes No No No NA No | | |
| 16. Is the 17. Was 18. Are n 19. Is the Field La 20. Were 20. Were 21. Does 22. Are s 24. Is lat Multiph 26. Does | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were pres sample(s) correctly preserved? o filteration required and/or requested for dissolved met | nation: erved? als? ? | NA Yes Yes No No No NA No | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were 21. Does 22. Are s 24. Is lat Multiph 26. Does 27. If ye: | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were pres sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix the sample have more than one phase, i.e., multiphasef s, does the COC specify which phase(s) is to be analyze | nation: erved? als? ? | NA Yes Yes No No No NA No | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were 21. Does 22. Are 5 24. Is lat Multiph 26. Does 27. If ye: | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were pres sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyze ract Laboratory. | nation: erved? als? ? | NA Yes Yes No No NA No No | | |
| 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 5 24. Is lat Multiph 26. Does 27. If ye Subcont 28. Are 5 | a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were pres sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix the sample have more than one phase, i.e., multiphasef s, does the COC specify which phase(s) is to be analyze | nation: erved? als? ed? | NA Yes Yes No No NA No NA No NA | Subcontract Lab | rna |

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



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5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay

Work Order: E203057

Job Number: 20046-0001

Received: 3/10/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/15/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/15/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E203057 Date Received: 3/10/2022 10:30:00AM

Natalie Gladden,



Page 374 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/10/2022 10:30:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

Field Offices:

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | | Sample Sum | mary | | |
|--|---------------|------------|------------|----------|---------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | - | | 20046-0001 | | Reported: 03/15/22 18:19 |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| Comp 49 - 2' | E203057-01A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 50 - 2' | E203057-02A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| 'omp 51 - 2' | E203057-03A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| comp 52 - 2' | E203057-04A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 53 - 2' | E203057-05A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 54 - 2' | E203057-06A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| comp 55 - 2' | E203057-07A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 56 - 2' | E203057-08A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 57 - 2' | E203057-09A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 58 - 2' | E203057-10A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 59 - 2' | E203057-11A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 60 - 2' | E203057-12A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 61 - 2' | E203057-13A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 62 - 2' | E203057-14A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 63 - 2' | E203057-15A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 64 - 2' | E203057-16A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 65 - 2' | E203057-17A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| 'omp 66 - 2' | E203057-18A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| 'omp 67 - 2' | E203057-19A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| comp 68 - 2' | E203057-20A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |



| | | mpic D | | | | |
|--|---|--------------|------------------------------------|------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladden | | | Reported: 3/15/2022 6:19:13PM |
| | (| Comp 49 - 2' | | | | |
| | | E203057-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilutio | n Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | Ar | alyst: IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 95.0 % | 70-130 | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 96.9 % | 70-130 | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Ar | alyst: IY | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 95.0 % | 70-130 | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 96.9 % | 70-130 | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Ar | alyst: JL | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 106 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Ar | alyst: RAS | | Batch: 2212005 |
| Chloride | 116 | 20.0 | 1 | 03/14/22 | 03/15/22 | |

Sample Data



| | 5 | ample D | ara | | | | |
|--|---|--------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay 46-0001 ılie Gladdo | en | | | Reported: 3/15/2022 6:19:13PM |
| | (| Comp 50 - 2' | | | | | |
| | | E203057-02 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 99.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 99.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 108 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2212005 |
| Chloride | 168 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | | imple D | uu | | | | |
|--|--|--------------|---------|-------------|----------|----------|---|
| Mack Energy | Project Name: | | nderbay | | | | Den sute de |
| 7 W. Compress Road Artesia NM, 88210 | Project Number: 20046-0001 Project Manager: Natalie Gladden | | | | | | Reported: 3/15/2022 6:19:13PM |
| Antosia IVIVI, 66210 | Tiojeet Mailago | | | -11 | | | 5/15/2022 0.17.151 W |
| | C | 'omp 51 - 2' | | | | | |
| |] | E203057-03 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 106 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 90.8 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 106 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | : JL | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | 95.2 | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | 79.7 | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | 20.2 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | 5 | ample D | ala | | | | | |
|--|--|--------------|---------|-------------|----------|----------|---|--|
| Mack Energy 7 W. Compress Road | Project Name | | nderbay | | | | | |
| Artesia NM, 88210 | Project Number: 20046-0001 Project Manager: Natalie Gladd | | | 'n | | | Reported: 3/15/2022 6:19:13PM | |
| Alusia IVII, 00210 | | - | | | | | 5/15/2022 0.19.15114 | |
| | (| Comp 52 - 2' | | | | | | |
| | | E203057-04 | | | | | | |
| | | Reporting | | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes | |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211088 | |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | | |
| Surrogate: Bromofluorobenzene | | 92.9 % | 70-130 | | 03/11/22 | 03/14/22 | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 99.1 % | 70-130 | | 03/11/22 | 03/14/22 | | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/14/22 | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | | |
| Surrogate: Bromofluorobenzene | | 92.9 % | 70-130 | | 03/11/22 | 03/14/22 | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 99.1 % | 70-130 | | 03/11/22 | 03/14/22 | | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/14/22 | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2212015 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | | |
| Surrogate: n-Nonane | | 110 % | 50-200 | | 03/14/22 | 03/15/22 | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 | |
| Chloride | 122 | 20.0 | | 1 | 03/14/22 | 03/15/22 | | |



Sample Data

| | 5 | ample D | ata | | | | |
|--|---|--------------|-----------------------------------|-------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ilie Gladde | en | | | Reported: 3/15/2022 6:19:13PM |
| | , | | | | | | |
| | (| Comp 53 - 2' | | | | | |
| | | E203057-05 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 90.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | Batch: 2211088 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 90.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 111 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | 143 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | | ample D | uu | | | | |
|--|---|--------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladde | en | | | Reported: 3/15/2022 6:19:13PM |
| | (| Comp 54 - 2' | | | | | |
| | | E203057-06 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 97.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 97.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 112 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | ND | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | 5 | ample D | ara | | | | |
|--|--|--------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Mana | ber: 2004 | nderbay 46-0001 Ilie Gladde | en | | | Reported: 3/15/2022 6:19:13PM |
| | | Comp 55 - 2' | | | | | |
| | | E203057-07 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.8 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.2 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.8 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.2 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 109 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | RAS | | Batch: 2212005 |
| Chloride | ND | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | D | ample D | ata | | | | |
|--|--------------|--------------|-------------|-------------|----------|----------|---------------------|
| Mack Energy | Project Name | e: Thu | nderbay | | | | |
| 7 W. Compress Road | Project Num | ber: 2004 | 20046-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Mana | iger: Nata | ilie Gladde | en | | | 3/15/2022 6:19:13PM |
| | | Comp 56 - 2' | | | | | |
| | | E203057-08 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 98.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 98.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 93.4 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2212005 |
| Chloride | 46.4 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | | ample D | uuu | | | | |
|--|--------------------------------|--------------|-------------------|-------------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numbe | | nderbay 6-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | | lie Gladde | en | | | 3/15/2022 6:19:13PM |
| | (| Comp 57 - 2' | | | | | |
| | | E203057-09 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 98.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 98.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 114 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | 65.7 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | D | ample D | ata | | | | |
|--|--|--------------|-----------------------------------|-------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numl Project Mana | ber: 2004 | nderbay 46-0001 Ilie Gladde | en | | | Reported: 3/15/2022 6:19:13PM |
| | | Comp 58 - 2' | | | | | |
| | | E203057-10 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.0 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 98.8 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.0 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 98.8 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212015 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 115 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | RAS | | Batch: 2212005 |
| Chloride | 139 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | 5 | ample D | ara | | | | |
|--|---|--------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladdo | en | | | Reported: 3/15/2022 6:19:13PM |
| | (| Comp 59 - 2' | | | | | |
| | | E203057-11 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.1 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 92.1 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 96.0 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2212005 |
| Chloride | 154 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | 5 | ample D | ata | | | | |
|--|-------------------------------|--------------|--------------------|-------------|---------------------|----------|-----------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numb | | nderbay 16-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | | lie Gladd | | 3/15/2022 6:19:13PM | | |
| Antoia IVII, 00210 | | | ine Gladu | | | | 5,15,2622 0.19.151 14 |
| | (| Comp 60 - 2' | | | | | |
| | | E203057-12 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.3 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.3 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 97.2 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | RAS | | Batch: 2212005 |
| Chloride | 203 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | 5 | ample D | ala | | | | |
|--|----------------------------------|--------------|--------------------|-------------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numb | er: 2004 | nderbay 46-0001 | Reported: | | | |
| Artesia NM, 88210 | Project Manager: Natalie Gladder | | | en | | | 3/15/2022 6:19:13PM |
| | (| Comp 61 - 2' | | | | | |
| | | E203057-13 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 97.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 91.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 97.9 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 101 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2212005 |
| Chloride | 48.0 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | D. | ample D | ata | | | | |
|--|--------------------------------|--------------------------------|--------------------|-------------|-----------|---------------------|----------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numbe | | nderbay 46-0001 | | Reported: | | |
| Artesia NM, 88210 | e e | Project Manager: Natalie Glade | | | | 3/15/2022 6:19:13PM | |
| | (| Comp 62 - 2' | | | | | |
| | | E203057-14 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 90.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 90.7 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 99.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 97.6 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2212005 |
| Chloride | 56.6 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | | ample D | uu | | | | |
|--|--|--------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 16-0001 Ilie Gladde | en | | | Reported: 3/15/2022 6:19:13PM |
| | (| Comp 63 - 2' | | | | | |
| | | E203057-15 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 92.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.6 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 92.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.6 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 100 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | 137 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | | ampic D | uu | | | | |
|--|---|--------------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladde | en | | | Reported: 3/15/2022 6:19:13PM |
| | (| Comp 64 - 2' | | | | | |
| | | E203057-16 | | | | | |
| Analyte | Result | Reporting Limit | Dil | lution | Prepared | Analyzed | Notes |
| • | mg/kg | mg/kg | | Analyst: | * | j | Batch: 2211088 |
| Volatile Organic Compounds by EPA 8260B Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | Batch: 2211000 |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 93.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 98.5 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 93.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 98.5 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 96.3 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | 167 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | D. | ample D | ata | | | | |
|--|---------------------------------|--------------|--------------------|-------------|----------|---------------------|----------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numbe | | nderbay 16-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manager: Natalie Gladde | | | en | | 3/15/2022 6:19:13PM | |
| | (| Comp 65 - 2' | | | | | |
| | | E203057-17 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 118 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.9 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 105 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 118 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 97.9 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 105 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | 81.4 | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | 69.9 | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 96.9 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | 22.1 | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



| | 50 | imple D | ara | | | | |
|--|---|--------------|-----------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladdo | en | | | Reported: 3/15/2022 6:19:13PM |
| | C | Comp 66 - 2' | | | | | |
| |] | E203057-18 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 102 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 104 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 102 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 104 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 96.9 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | ND | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | | imple D | | | | | |
|--|--------------------------------|--------------|-----------------------|----------|----------|----------------|---|
| Mack Energy | Project Name: | | nderbay | | | | D (1 |
| 7 W. Compress Road Artesia NM, 88210 | Project Numbe Project Manag | | 46-0001 11:2 Gladd | | | | Reported: 3/15/2022 6:19:13PM |
| Ancsia INM, 86210 | Floject Manag | ci. India | Natalie Gladden | | | | 5/15/2022 0.17.151 WI |
| | C | 'omp 67 - 2' | | | | | |
| | - | E203057-19 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 94.1 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | : IY | Batch: 2211088 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 94.1 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | : ЛL | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 97.7 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212005 |
| Chloride | ND | 20.0 | | 1 | 03/14/22 | 03/15/22 | |


| | 5 | ample D | ara | | | | |
|--|--|--------------|-----------------------------------|---------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 Ilie Gladde | en | | | Reported: 3/15/2022 6:19:13PM |
| | (| Comp 68 - 2' | | | | | |
| | | E203057-20 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst | IY | | Batch: 2211088 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 92.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 99.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | IY | | Batch: 2211088 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 92.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 99.3 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | JL | | Batch: 2212015 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 96.5 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | RAS | | Batch: 2212005 |
| Chloride | ND | 20.0 | | 1 | 03/14/22 | 03/15/22 | |



QC Summary Data

| Mack Energy | | | | underbay | | | | | |
|---|----------------|------------------|----------------|----------------|--------------|-------------|--------------|--------------|-------------------|
| | | Project Name: | | 046-0001 | | | | | Reported: |
| 7 W. Compress Road | | Project Number: | | | | | | | |
| Artesia NM, 88210 | | Project Manager: | Na | atalie Gladden | | | | 3/ | 15/2022 6:19:13PM |
| | | Volatile Organic | Compo | unds by EPA | A 82601 | B | | | Analyst: IY |
| Analyte | | Reporting | Spike | Source | D | Rec | DDD | RPD Limit | |
| | Result | Limit | Level mg/kg | Result | Rec % | Limits % | RPD % | Limit % | Natas |
| | mg/kg | mg/kg | mg/kg | mg/kg | 70 | 70 | %0 | 70 | Notes |
| Blank (2211088-BLK1) | | | | | | | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| 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 | 0.468 | | 0.500 | | 93.5 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.500 | | 0.500 | | 99.9 | 70-130 | | | |
| LCS (2211088-BS1) | | | | | | | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| Benzene | 2.88 | 0.0250 | 2.50 | | 115 | 70-130 | • | | - |
| Ethylbenzene | 2.98 | 0.0250 | 2.50 | | 119 | 70-130 | | | |
| Toluene | 2.98 | 0.0250 | 2.50 | | 119 | 70-130 | | | |
| | 2.86 | 0.0250 | 2.50 | | 119 | 70-130 | | | |
| o-Xylene | 2.80 5.76 | | 2.30 5.00 | | 114 | 70-130 | | | |
| p,m-Xylene | 5.76 8.62 | 0.0500 | 5.00 7.50 | | 115 | 70-130 | | | |
| Fotal Xylenes | | 0.0250 | 0.500 | | 97.6 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.488 | | 0.500 | | 97.0 101 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 | 0.507 0.528 | | 0.500 | | 101 | 70-130 | | | |
| - | 0.520 | | 0.200 | | | | _ | | |
| Matrix Spike (2211088-MS1) | | | | Source: E | 203057- | 01 | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| Benzene | 2.67 | 0.0250 | 2.50 | ND | 107 | 48-131 | | | |
| Ethylbenzene | 2.72 | 0.0250 | 2.50 | ND | 109 | 45-135 | | | |
| Toluene | 2.69 | 0.0250 | 2.50 | ND | 108 | 48-130 | | | |
| o-Xylene | 2.63 | 0.0250 | 2.50 | ND | 105 | 43-135 | | | |
| p,m-Xylene | 5.26 | 0.0500 | 5.00 | ND | 105 | 43-135 | | | |
| Total Xylenes | 7.89 | 0.0250 | 7.50 | ND | 105 | 43-135 | | | |
| Surrogate: Bromofluorobenzene | 0.487 | | 0.500 | | 97.4 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.510 | | 0.500 | | 102 | 70-130 | | | |
| Matrix Spike Dup (2211088-MSD1) | | | | Source: E | 203057- | 01 | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| Benzene | 2.89 | 0.0250 | 2.50 | ND | 116 | 48-131 | 8.08 | 23 | |
| Ethylbenzene | 2.89 | 0.0250 | 2.50 | ND | 116 | 45-135 | 6.31 | 27 | |
| Toluene | 2.87 | 0.0250 | 2.50 | ND | 115 | 48-130 | 6.47 | 24 | |
| o-Xylene | 2.80 | 0.0250 | 2.50 | ND | 112 | 43-135 | 6.28 | 27 | |
| | 5.58 | | 5.00 | ND | 112 | 43-135 | 5.86 | 27 | |
| p,m-Xylene Total Xylenes | 5.58 8.38 | 0.0500 0.0250 | 5.00 7.50 | ND ND | 112 | 43-135 | 5.80 6.00 | 27 | |
| • | | 0.0250 | | IND. | | | 0.00 | 21 | |
| Surrogate: Bromofluorobenzene | 0.486 | | 0.500 | | 97.1 07.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.490 | | 0.500 | | 97.9 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.508 | | 0.500 | | 102 | 70-130 | | | |



QC Summary Data

| | | QC D | | ary Data | | | | | |
|--|--------|--|----------------|---|-----------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | hunderbay 0046-0001 fatalie Gladden | | | | | Reported: 3/15/2022 6:19:13PM |
| | N | onhalogenated O | rganics | by EPA 801 | 5D - GR | 0 | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211088-BLK1) | | | | | | | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.468 | | 0.500 | | 93.5 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.500 | | 0.500 | | 99.9 | 70-130 | | | |
| LCS (2211088-BS2) | | | | | | | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | 64.4 | 20.0 | 50.0 | | 129 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.476 | | 0.500 | | 95.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.479 | | 0.500 | | 95.7 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.512 | | 0.500 | | 102 | 70-130 | | | |
| Matrix Spike (2211088-MS2) | | | | Source: E | 203057-01 | l | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | 64.3 | 20.0 | 50.0 | ND | 129 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.485 | | 0.500 | | 97.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.476 | | 0.500 | | 95.2 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.524 | | 0.500 | | 105 | 70-130 | | | |
| Matrix Spike Dup (2211088-MSD2) | | | | Source: E | 203057-01 | 1 | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | 61.7 | 20.0 | 50.0 | ND | 123 | 70-130 | 4.16 | 20 | |
| Surrogate: Bromofluorobenzene | 0.469 | | 0.500 | | 93.8 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.2 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.512 | | 0.500 | | 102 | 70-130 | | | |
| | | | | | | | | | |



QC Summary Data

| | | QC D | u 111111 | aly Data | • | | | | |
|--|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 3/15/2022 6:19:13PM |
| | Nonh | alogenated Org | anics by | v 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 (2212015-BLK1) | | | | | | | Prepared: 0 | 3/14/22 / | Analyzed: 03/15/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 54.1 | | 50.0 | | 108 | 50-200 | | | |
| LCS (2212015-BS1) | | | | | | | Prepared: 0 | 3/14/22 A | Analyzed: 03/15/22 |
| Diesel Range Organics (C10-C28) | 450 | 25.0 | 500 | | 90.1 | 38-132 | | | |
| Surrogate: n-Nonane | 45.7 | | 50.0 | | 91.4 | 50-200 | | | |
| Matrix Spike (2212015-MS1) | | | | Source: F | 203057- | 11 | Prepared: 0 | 3/14/22 A | Analyzed: 03/15/22 |
| Diesel Range Organics (C10-C28) | 453 | 25.0 | 500 | ND | 90.6 | 38-132 | | | |
| Surrogate: n-Nonane | 42.5 | | 50.0 | | 85.0 | 50-200 | | | |
| Matrix Spike Dup (2212015-MSD1) | | | | Source: F | 203057- | 11 | Prepared: 0 | 3/14/22 A | Analyzed: 03/15/22 |
| Diesel Range Organics (C10-C28) | 455 | 25.0 | 500 | ND | 91.0 | 38-132 | 0.442 | 20 | |
| Surrogate: n-Nonane | 47.8 | | 50.0 | | 95.5 | 50-200 | | | |



QC Summary Data

| | | | | <i>J</i> – | - | | | | |
|--|-----------------|--|-------------------------|--|---------------------------|--------------------|---------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 3/15/2022 6:19:13PM |
| | | Anions | by EPA | 300.0/9056A | | | | | 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 (2212005-BLK1) | | | | | | | Prepared: 0 | 3/14/22 | Analyzed: 03/15/22 |
| Chloride LCS (2212005-BS1) | ND | 20.0 | | | | | Prepared: 0 | 3/14/22 | Analyzed: 03/15/22 |
| Chloride Matrix Spike (2212005-MS1) | 247 | 20.0 | 250 | Sources | 98.7 E 203057-(| 90-110 | Proporad: 0 | 2/14/22 | Analyzed: 03/15/22 |
| Chloride | 347 | 20.0 | 250 | 116 | 92.5 | 80-120 | i iepaieu. 0. | 5/14/22 1 | -maryzeu. 05/15/22 |
| Matrix Spike Dup (2212005-MSD1) | | | | Source: 1 | E203057-0 | 01 | Prepared: 0 | 3/14/22 | Analyzed: 03/15/22 |
| Chloride | 355 | 20.0 | 250 | 116 | 95.6 | 80-120 | 2.22 | 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.



| Γ | Mack Energy | Project Name: | Thunderbay | |
|---|--------------------|------------------|-----------------|----------------|
| | 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| | Artesia NM, 88210 | Project Manager: | Natalie Gladden | 03/15/22 18:19 |

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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





| Client: MACK ENCREY Project: THANDER BAY | Bill To | | L | | La | ab Us | e On | ly | | TA | r I | EPA Pr | ogran |
|---|---|-----------------|------------|------------|--------------|-------------|-------------|--|--------------|----------|-------------------|---------------|----------|
| Project: THYNDER BAY | Attention: ESS | 10 | Lab | WO# | ~ | | | Number | 1D 20 | 3D | Standard | CWA | SDV |
| Project Manager: | City State Zin WOBBS NA | 882.40 | Eo | 103 | 05 | | | sis and Method | 11.1 | 1.1. | \sim | | |
| City, State, Zip | Address: 2427 W. County City, State, Zip HOGBS NA Phone: 575 390.63 Email: NATALIE GLA | 97 | 15-7 | | | ГÍ | Analy | | | TT | - | | RCI |
| Phone: | Email: NATALIE GLA | FODEN | 8015 | 8015 | | | | | 2 | | | State | |
| Email: | | | 8 Aq C | by 8 | 3021 | 260 | 010 | 300.0 | à | | NM CO | UT AZ | TX |
| Time Date Sampled Matrix No. of Containers Sample ID | | Lab Number | DRO/ORO by | GRO/DRO by | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | Ocloc | | | Remarks | |
| 3-7-22 5 1 COMP | 49-2- | 1- | | | | | | | X | | | | |
| Comp | 50.2- | 2 | | | | | | | 1 | | 1 | | |
| Comp | 51-2' | 3 | - | | | | | | | | | | |
| COMP | 52 - 2- | 4 | | | | | | | \mathbf{Y} | | - | | |
| | 53.2- | 5 | | | | | | | | | | | |
| Comp | 54-2- | 6 | | | | | | | | | | | |
| comp | 55-2- | 7 | | | | | | | 1 | | | | |
| | 56.2- | 8 | | | | | | | 1 | | | | |
| Comp | 57-2- | 9 | | | | | | | | | | | |
| | 58.2- | 10 | | | | | | | | | | | |
| Additional Instructions: | | | | | | | | | | | | | |
| , (field sampler), attest to the validity and authenticity of this sample. I am a date or time of collection is considered fraud and may be grounds for legal ac | ware that tampering with or intentionally mislabellin tion. <u>Sampled by MARC</u> | g the sample lo | cation | 17 | | | | s requiring thermal pro in ice at an avg temp a | | | | | l or rec |
| Relinquished by: (Signature) Date Time | Received by: (Signature) | Date 3.8.2 | | | 44. | 5 | Recei | ived on ice: | Lab L | lse Only | | $^{-2}C_{ij}$ | 138 |
| Relinquished by: (Signature) Date Time | Received by: (Signature) | Date 3.10-2 | | Time | | | | | \smile | | | (z. | |
| Reliminguished by: (Signature) Date Time | Received by: (Signature) | Date | ~ | Time | -0 | | | Temp °C | T2 | | <u>T3</u> | | 1 |
| ample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other | | Container | Туре | :g-g | lass, r | log - pol | lv/pla | stic. ag - amber | glass. v | - VOA | | 10. | - |
| Note: Samples are discarded 30 days after results are reported unles samples is applicable only to those samples received by the laborato | s other arrangements are made. Hazardous sa | mples will be | return | ned to | client | or dis | posed | of at the client e | xpense. | The repo | rt for the analys | is of the ab | ove |

Project Information

Page 2 of 9

| oject: THUNSELGAY | Attention: $E_{SS}^{Bill To}$ | | 1.1 | | | ab Us | se On | | | | TA | | EPA P | rogram |
|---|--|-----------------|-----------------|-----------------|--------------|---|-------------|----------------|-----------|-----------------------|----------|--|--------------|-------------|
| oject: THUNSELGAY | Attention: CSS Address: 2497 W. CONNTY | an | | WO# | | - | | Number | 1D | 2D | 3D | Standard | CWA | SDW |
| ddress: | City, State, Zido Bas N. M 8 | 22115 | Ea | 100 | OC. | 21 | | orle-a | | | | | 10.00 | NE |
| ty, State, Zip | Phone: 575 390-639 | 240 | - | - | | 1. | Analy | sis and Me | thod | - | <u> </u> | | | RCR |
| none: | Email: NATALIE GLAS | IDEN | S | 5 | | | | | | ちろ | t I | | C11 | |
| nail: | | 100.1 | 801 | 801 | | | | 0 | | 5 | | NM CO | State | TYL |
| port due by: | | | Vd C | Vd C | 8021 | 260 | 010 | 300. | | 5 | | NIVI CO | UTAZ | TX |
| Time Date Sampled Matrix No. of Containers Sample ID | | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | 660°C | | | Remarks | |
| 3-7-22 S. 1 Comp | 59-2- | 11 | Ĩ. | | | | | | | X | | | | |
| ((Comp | 66-2- | 12 | | | | | | | | 1 | | | | |
| Comp | 61.2 | 13 | 8 | | | | | | | \backslash | | | | |
| Comp | 62-2- | 14 | | | | | | | | | | | | |
| ()) comp | 63-2 | 15 | | | | | | | | | | | | |
| _ Comp | 64-2- | Ko | | | | | | | | | | | | |
| Comp | 65.2 | 17 | | _ | | | | | | $\left \right\rangle$ | | | | |
| Comp | 66-2- | 18 | | | | | - | | | | | | | |
| | 67-2- | 19 | | | | | | | | | | | | |
| | 68.2- | 20 | | | | 1.7 | | | | 1 | | | | |
| Iditional Instructions: | | | | | | | | | | | | | | |
| ield sampler), attest to the validity and authenticity of this sample. I am a e or time of collection is considered fraud and may be grounds for legal a | aware that tampering with or intentionally mislabelling ction. <u>Sampled by:</u> | the sample lo | cation | r | 2 | - | | | | | | ved on ice the day th C on subsequent day | | d or receiv |
| linquished by: (Signature) Date Time | 45 pm And | Date 3.8.2 | 22 | Time /4 | 45 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | Rece | ived on ice | | ab Us | e Only | | 20 | 1.20 |
| Inquished by: (Signature) Date Time 3 · 9 · 22 / (Inquished by: (Signature) Date Time | 30 Received by: (Signature) | Date 3.10 | | Time |):3 | 0 | <u>T1</u> | | <u>T2</u> | | | <u>T3</u> | | |
| | Received by: (Signature) 🥿 | Date | | Time | | | AVG | Temp °C_ | 4 | | | 103 | n sid | 10 |
| nple Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other | | Container | Туре | : g - g | lass, p | p - pc | ly/pla | stic, ag - ar | nber gla | ss, v - ' | VOA | | | |
| ote: Samples are discarded 30 days after results are reported unles | ss other arrangements are made. Hazardous sa | mples will be | return | ned to | client | or di | sposer | of at the cl | ent expe | nse. T | he repo | rt for the analys | is of the ab | ove |
| mples is applicable only to those samples received by the laborate | ry with this COC. The liability of the laboratory i | s limited to th | ne amo | nunt n | aid for | ront | he ren | ort | | | | | | |

Received by OCD: 6/15/2022 4:07:07 PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| lient: | Mack Energy D | ate Received: | 03/10/22 10 | 0:30 | Work Order ID: E203057 |
|--|--|--|--|-------------------|---|
| Phone: | (575) 390-6397 D | ate Logged In: | 03/09/22 09 | 9:53 | Logged In By: Caitlin Christian |
| Email: | | le Date: | 03/15/22 1 | 7:00 (3 day TAT) | |
| Chain o | f Custody (COC) | | | | |
| 1. Does 1 | the sample ID match the COC? | | Yes | | |
| 2. Does 1 | the number of samples per sampling site location match | the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: <u>U</u> | JPS |
| 4. Was th | ne COC complete, i.e., signatures, dates/times, requested | l analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in th i.e, 15 minute hold time, are not included in this disucssion. | e field, | Yes | | Comments/Resolution |
| Sample ' | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | e COC indicate standard TAT, or Expedited TAT? | | Yes | | Project has been seperated into 2 reports |
| Sample | <u>Cooler</u> | | | | due to amount of samples. Workorders are |
| 7. Was a | sample cooler received? | | Yes | | as follows: |
| 8. If yes, | was cooler received in good condition? | | Yes | | E203057 COC page 1&2 of 5, E203058 |
| 9. Was tl | he sample(s) received intact, i.e., not broken? | | Yes | | COC pages 3,4& 5 of 5. Sample times not |
| 10. Were | e custody/security seals present? | | No | | |
| 11. If yes | s, were custody/security seals intact? | | NA | | provided on the COC. |
| 12. Was t | he sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re | | Yes | | |
| | | cerveu w/r 15 | | | |
| 13. If no | minutes of sampling visible ice, record the temperature. Actual sample ter | | <u>C</u> | | |
| | minutes of sampling visible ice, record the temperature. Actual sample ten | | <u>C</u> | | |
| Sample | minutes of sampling | | <u>C</u> No | | |
| Sample 14. Are a | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> | | | | |
| <u>Sample</u> 14. Are a 15. Are ⁹ | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? | | No | | |
| Sample 14. Are a 15. Are ^v 16. Is the | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? | | No NA | | |
| Sample 14. Are a 15. Are v 16. Is the 17. Was | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? | | No NA NA | | |
| Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1 | minutes of sampling visible ice, record the temperature. Actual sample ter Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? | nperature: <u>4°</u> | No NA NA NA | | |
| Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers <u>bel</u> | nperature: <u>4°</u> s collected? | No NA NA NA Yes | | |
| Sample 14. Are a 15. Are v 16. Is the 17. Was 18. Are n 19. Is the Field La 20. Were | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers <u>bel</u> e field sample labels filled out with the minimum inform | nperature: <u>4°</u> s collected? | No NA NA Yes Yes | | |
| Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers <u>bel</u> e field sample labels filled out with the minimum inform Sample ID? | nperature: <u>4°</u> s collected? | No NA NA Yes Yes | | |
| Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers <u>bel</u> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? | nperature: <u>4°</u> s collected? | No NA NA Yes Yes Yes No | | |
| Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I 0 0 | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers <u>bel</u> field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? | nperature: <u>4°</u> s collected? | No NA NA Yes Yes | | |
| Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I C Sample | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers <u>bel</u> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? | nperature: <u>4°</u> collected? ation: | No NA NA Yes Yes Yes No | | |
| Sample 14. Are a 15. Are ³ 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I C Sample 21. Does | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers <u>bel</u> field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> | nperature: <u>4°</u> collected? ation: | No NA NA Yes Yes No No | | |
| Sample 14. Are a 15. Are ³ 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S 1 C Sample 21. Does 22. Are s | minutes of sampling visible ice, record the temperature. Actual sample ter <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> the COC or field labels indicate the samples were preservation | nperature: <u>4°</u> collected? ation: erved? | No NA NA Yes Yes No No | | |
| Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S 10. 21. Does 22. Are s 24. Is lat | minutes of sampling visible ice, record the temperature. Actual sample ter Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta | nperature: <u>4°</u> collected? ation: erved? | No NA NA Yes Yes No No No | | |
| Sample 14. Are a 15. Are 3 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were 5 20. Were 21. Does 22. Are 5 24. Is lat Multiph | minutes of sampling visible ice, record the temperature. Actual sample ter Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta ase Sample Matrix. | nperature: <u>4°</u> collected? ation: erved? ds? | No NA NA Yes Yes No No No | | |
| Sample 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were S 20. Were 21. Does 22. Are a 24. Is lat Multiph 26. Does | minutes of sampling visible ice, record the temperature. Actual sample ter Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta | nperature: <u>4°</u> collected? ation: erved? ils? | No NA NA Yes Yes No No No NA No | | |
| Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were Sample 21. Does 22. Are s 24. Is lat Multiph 26. Does 27. If yer | minutes of sampling visible ice, record the temperature. Actual sample ter Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta ase Sample Matrix the sample have more than one phase, i.e., multiphase? | nperature: <u>4°</u> collected? ation: erved? ils? | No NA NA Yes Yes No No No No No | | |
| Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were Sample 21. Does 22. Are s 24. Is lat Multiph 26. Does 27. If ye: | minutes of sampling visible ice, record the temperature. Actual sample ter Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? hon-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta ase Sample Matrix the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyze | nperature: <u>4°</u> collected? ation: erved? ils? d? | No NA NA Yes Yes No No No No No | | |

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



envirotech Inc.

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5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay

Work Order: E203058

Job Number: 20046-0001

Received: 3/10/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/15/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/15/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E203058 Date Received: 3/10/2022 10:30:00AM

Natalie Gladden,



Page 407 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/10/2022 10:30:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

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Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | | Sample Sum | v | | |
|--------------------|---------------|------------------|-----------------|----------|------------------|
| Mack Energy | | Project Name: | Thunderbay | | Reported: |
| 7 W. Compress Road | | Project Number: | 20046-0001 | | - |
| Artesia NM, 88210 | | Project Manager: | Natalie Gladden | | 03/15/22 18:43 |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| Comp 69 - 2' | E203058-01A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 70 - 2' | E203058-02A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 71 - 2' | E203058-03A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 72 - 2' | E203058-04A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 73 - 2' | E203058-05A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 74 - 2' | E203058-06A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 75 - 2' | E203058-07A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 76 - 2' | E203058-08A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 77 - 2' | E203058-09A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 78 - 2' | E203058-10A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 79 - 2' | E203058-11A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 80 - 2' | E203058-12A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 81 - 2' | E203058-13A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 82 - 2' | E203058-14A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 83 - 2' | E203058-15A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 84 - 2' | E203058-16A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 85 - 2' | E203058-17A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 86 - 2' | E203058-18A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 87 - 2' | E203058-19A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 88 - 2' | E203058-20A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| 'omp 89 - 2' | E203058-21A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| 'omp 90 - 2' | E203058-22A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| comp 91 - 2' | E203058-23A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| 'omp 92 - 2' | E203058-24A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |
| Comp 93 - 3' | E203058-25A | Soil | 03/07/22 | 03/10/22 | Glass Jar, 4 oz. |



| | | ampic D | | | | | |
|--|--|--------------|------------------------------------|--------------|---------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | L | | | Reported: 3/15/2022 6:43:50PM |
| | (| Comp 69 - 2' | | | | | |
| | | E203058-01 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilut | tion P | repared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | A | Analyst: RKS | | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 0. | 3/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 0. | 3/11/22 | 03/14/22 | |
| oluene | ND | 0.0250 | 1 | 0. | 3/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | 1 | 0. | 3/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 0. | 3/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 0. | 3/11/22 | 03/14/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 95.1 % | 70-130 | 0. | 3/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | A | Analyst: RKS | | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 0. | 3/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 95.9 % | 70-130 | 0. | 3/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | , Analyst: JL | | | Batch: 2212014 | |
| Diesel Range Organics (C10-C28) | 66.1 | 25.0 | 1 | 03 | 3/14/22 | 03/14/22 | |
| Dil Range Organics (C28-C36) | 109 | 50.0 | 1 | 03 | 3/14/22 | 03/14/22 | |
| Surrogate: n-Nonane | | 112 % | 50-200 | 0. | 3/14/22 | 03/14/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | A | Analyst: RAS | | | Batch: 2212006 |
| Chloride | ND | 20.0 | 1 | 0. | 3/14/22 | 03/15/22 | |

Sample Data



Sample Data

| | | impic D | ucu | | | |
|--|----------------|-------------|-------------|----------|----------------|---------------------|
| Mack Energy | Project Name: | Thu | nderbay | | | |
| 7 W. Compress Road | Project Numbe | r: 2004 | 46-0001 | | Reported: | |
| Artesia NM, 88210 | Project Manage | er: Nata | lie Gladden | | | 3/15/2022 6:43:50PM |
| | С | omp 70 - 2' | | | | |
| |] | E203058-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.5 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 96.5 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2212014 | |
| Diesel Range Organics (C10-C28) | 35.2 | 25.0 | 1 | 03/14/22 | 03/14/22 | |
| Dil Range Organics (C28-C36) | 59.0 | 50.0 | 1 | 03/14/22 | 03/14/22 | |
| Surrogate: n-Nonane | | 113 % | 50-200 | 03/14/22 | 03/14/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | ND | 20.0 | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | 50 | ample D | ala | | | |
|--|--------------------------------|--------------------|--------------------|----------|---------------------|----------------|
| Mack Energy | Project Name: | | nderbay 46-0001 | | | Reported: |
| 7 W. Compress Road Artesia NM, 88210 | Project Numbe Project Manag | | ilie Gladden | | 3/15/2022 6:43:50PM | |
| , | , , | | | | | |
| | | E203058-03 | | | | |
| | | | | | | |
| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Foluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.0 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.7 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | kg Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | 34.8 | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | 63.9 | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 112 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | yst: RAS | | Batch: 2212006 |
| Chloride | ND | 20.0 | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | Si | ample D | ลเล | | | |
|--|--------------------------------|--------------|-------------------------|---|----------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | D () |
| 7 W. Compress Road Artesia NM, 88210 | Project Numbe Project Manag | | 46-0001 alie Gladden | Reported: 3/15/2022 6:43:50PM | | |
| Alesia Niv, 00210 | , , | | | | | 5/15/2022 0.15.5011 |
| | C | Comp 72 - 2' | | | | |
| | | E203058-04 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.2 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | yst: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 96.0 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Anal | Analyst: JL | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | yst: RAS | | Batch: 2212006 |
| Chloride | 67.0 | 20.0 | 1 | 03/14/22 | 03/15/22 | |



| | 56 | ampic D | ala | | | |
|--|---|--------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | (| Comp 73 - 2' | | | | |
| | | E203058-05 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| thylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| oluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| -Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 94.5 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 97.5 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| urrogate: n-Nonane | | 115 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2212006 |
| Chloride | 70.2 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



Sample Data

| | | ampic D | aca | | | |
|--|---------------------------------|--------------|--------------------|----------|---|----------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Number | | nderbay 46-0001 | | Reported: 3/15/2022 6:43:50PM | |
| Artesia NM, 88210 | Project Manag | | alie Gladden | | | |
| | (| Comp 74 - 2' | | | | |
| | | E203058-06 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 94.6 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 97.2 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 115 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 72.7 | 20.0 | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | | ampic D | | | | |
|--|---------------|--------------|--------------|----------|----------|---|
| Mack Energy | Project Name: | | nderbay | | | D |
| 7 W. Compress Road | Project Numbe | | 46-0001 | | | Reported: 3/15/2022 6:43:50PM |
| Artesia NM, 88210 | Project Manag | er: Nata | ilie Gladden | | | 3/15/2022 6:43:50PM |
| | 0 | Comp 75 - 2' | | | | |
| | | E203058-07 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.7 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 96.3 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 112 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 80.1 | 20.0 | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | | impic D | ucu | | | |
|--|---|--------------|------------------------------------|-------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | (| Comp 76 - 2' | | | | |
| | | E203058-08 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.6 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 96.3 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | 40.2 | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | 69.1 | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 111 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2212006 |
| Chloride | ND | 20.0 | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | 50 | imple D | ala | | | |
|--|---------------|--------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | |
| 7 W. Compress Road | Project Numbe | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Nata | ilie Gladden | | | 3/15/2022 6:43:50PM |
| | C | 'omp 77 - 2' | | | | |
| |] | E203058-09 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| thylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| oluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| -Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| otal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 94.1 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 96.7 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| urrogate: n-Nonane | | 112 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 173 | 20.0 | 1 | 03/14/22 | 03/15/22 | |



Sample Data

| | 56 | impic D | aia | | | |
|--|---|--------------|------------------------------------|-------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | (| Comp 78 - 2' | | | | |
| | | E203058-10 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| oluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| -Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 93.7 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 98.8 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 114 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 183 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



Sample Data

| | | ampic D | aia | | | |
|--|---|--------------|------------------------------------|-------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | (| Comp 79 - 2' | | | | |
| | | E203058-11 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.6 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.0 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Analyst: JL | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 111 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2212006 |
| Chloride | 180 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



| | 56 | ampic D | ala | | | |
|--|---|--------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | C | Comp 80 - 2' | | | | |
| | | E203058-12 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.5 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.7 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 115 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 87.6 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



| | 50 | imple D | ala | | | |
|--|---------------|--------------|--------------|----------|----------------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | |
| 7 W. Compress Road | Project Numbe | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Nata | alie Gladden | | | 3/15/2022 6:43:50PM |
| | C | Comp 81 - 2' | | | | |
| | - | E203058-13 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| thylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| oluene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/14/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 94.6 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/14/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 99.7 % | 70-130 | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2212014 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| urrogate: n-Nonane | | 116 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 83.9 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



| | 5 | ampic D | ala | | | |
|--|---|--------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | per: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | (| Comp 82 - 2' | | | | |
| | | E203058-14 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| thylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| oluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| -Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| otal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 94.1 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | Batch: 2211089 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 99.9 % | 70-130 | 03/11/22 | 03/15/22 | |
| onhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| urrogate: n-Nonane | | 116 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 215 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |

Sample Data

| | 50 | imple D | ala | | | |
|--|--|--------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manage | er: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| Artesia Nivi, 86210 | , , | | ine Gladden | | | 3/13/2022 0.43.30FW |
| | | comp 83 - 2' | | | | |
| |] | E203058-15 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.7 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.8 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 114 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 85.9 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



Sample Data

| | 56 | impic D | ala | | | |
|--|---|--------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 alie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | C | Comp 84 - 2' | | | | |
| | - | E203058-16 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.5 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | Batch: 2211089 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.4 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 112 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 178 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |

| | | imple D | uta | | | |
|--|----------------|--------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name: | Thu | nderbay | | | |
| 7 W. Compress Road | Project Number | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Nata | lie Gladden | | | 3/15/2022 6:43:50PM |
| | 0 | Comp 85 - 2' | | | | |
| | | E203058-17 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.0 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.6 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 108 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2212006 |
| Chloride | 185 | 20.0 | 1 | 03/14/22 | 03/15/22 | |

| | 56 | ampic D | ata | | | |
|--|---|--------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | (| Comp 86 - 2' | | | | |
| | | E203058-18 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | :: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 93.2 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | | Batch: 2211089 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.9 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Gurrogate: n-Nonane | | 110 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2212006 |
| Chloride | 173 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



Sample Data

| | 56 | ampic D | ala | | | |
|--|---|--------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/15/2022 6:43:50PM |
| | C | Comp 87 - 2' | | | | |
| | | E203058-19 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.5 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | Batch: 2211089 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.2 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | | Batch: 2212014 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 111 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 93.1 | 20.0 | 1 | 03/14/22 | 03/15/22 | |
| | | | | | | |



| | | ampic D | | | | |
|--|-------------------------------|--------------|--------------------|---------------------|----------------|----------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numb | | nderbay 46-0001 | | Reported: | |
| Artesia NM, 88210 | Project Manag | | | 3/15/2022 6:43:50PM | | |
| | (| Comp 88 - 2' | | | | |
| | | E203058-20 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: RKS | | Batch: 2211089 |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.4 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: RKS | | Batch: 2211089 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.7 % | 70-130 | 03/11/22 | 03/15/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analyst: JL | | Batch: 2212014 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 111 % | 50-200 | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212006 |
| Chloride | 149 | 20.0 | 1 | 03/14/22 | 03/15/22 | |



| | | ampie D | uu | | | | |
|--|---------------------------------|--------------|--------------------|-------------|----------|----------------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Number | er: 2004 | nderbay 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladde | en | | | 3/15/2022 6:43:50PM |
| | (| Comp 89 - 2' | | | | | |
| | | E203058-21 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211087 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 113 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 94.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 76.2 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | Batch: 2211087 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 113 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 94.6 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 76.2 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2212009 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 118 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212004 |
| Chloride | 147 | 20.0 | | 1 | 03/14/22 | 03/14/22 | |



| | | ample D | uu | | | | |
|--|-------------------------------|--------------|--------------------|----------|----------|----------|---------------------|
| Mack Energy 7 W. Compress Road | Project Name: Project Numb | er: 2004 | nderbay 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladde | en | | | 3/15/2022 6:43:50PM |
| | (| Comp 90 - 2' | | | | | |
| | | E203058-22 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2211087 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/14/22 | |
| Fotal Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 98.1 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 73.0 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211087 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/14/22 | |
| Surrogate: Bromofluorobenzene | | 98.1 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.4 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Surrogate: Toluene-d8 | | 73.0 % | 70-130 | | 03/11/22 | 03/14/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst | : JL | | Batch: 2212009 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 119 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst | : RAS | | Batch: 2212004 |
| Chloride | 141 | 20.0 | | 1 | 03/14/22 | 03/14/22 | |


| | D | ample D | ata | | | | |
|--|----------------|--------------|-----------|-----------|---------------------|----------|----------------|
| Mack Energy | Project Name: | | nderbay | | | | |
| 7 W. Compress Road | Project Number | | | Reported: | | | |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladd | | 3/15/2022 6:43:50PM | | |
| | (| Comp 91 - 2' | | | | | |
| | | E203058-23 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Di | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2211087 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 79.4 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 95.7 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 66.7 % | 70-130 | | 03/11/22 | 03/15/22 | SI |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst | : IY | | Batch: 2211087 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 79.4 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 95.7 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 66.7 % | 70-130 | | 03/11/22 | 03/15/22 | S1 |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2212009 |
| Diesel Range Organics (C10-C28) | 50.2 | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Oil Range Organics (C28-C36) | 82.8 | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 124 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212004 |
| Chloride | ND | 20.0 | | 1 | 03/14/22 | 03/14/22 | |



| | D | ampie D | uu | | | | |
|--|------------------------------|--------------|--------------------|----------|---------------------|----------|----------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | ber: 2004 | nderbay 46-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | lie Gladde | en | 3/15/2022 6:43:50PM | | |
| | (| Comp 92 - 2' | | | | | |
| | | E203058-24 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | lution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2211087 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 67.6 % | 70-130 | | 03/11/22 | 03/15/22 | SI |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | : IY | | Batch: 2211087 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 67.6 % | 70-130 | | 03/11/22 | 03/15/22 | SI |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | : JL | | Batch: 2212009 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 120 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212004 |
| Chloride | ND | 20.0 | | 1 | 03/14/22 | 03/14/22 | |



| | 5 | ampie D | uu | | | | |
|--|------------------------------|--------------|-------------------|----------|---------------------|----------|----------------|
| Mack Energy 7 W. Compress Road | Project Name Project Numb | er: 2004 | nderbay 6-0001 | | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | lie Gladde | | 3/15/2022 6:43:50PM | | |
| | (| Comp 93 - 3' | | | | | |
| | | E203058-25 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211087 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| p-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| o,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/15/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 66.5 % | 70-130 | | 03/11/22 | 03/15/22 | SI |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211087 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/15/22 | |
| Surrogate: Bromofluorobenzene | | 101 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/15/22 | |
| Surrogate: Toluene-d8 | | 66.5 % | 70-130 | | 03/11/22 | 03/15/22 | SI |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2212009 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/14/22 | 03/15/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/14/22 | 03/15/22 | |
| Surrogate: n-Nonane | | 121 % | 50-200 | | 03/14/22 | 03/15/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2212004 |
| Chloride | 146 | 20.0 | | 1 | 03/14/22 | 03/14/22 | |



QC Summary Data

| | | QC 51 | | • | | | | | |
|----------------------------------|--------------|----------------------------|--------------|---------------|---------|--------|-------------|-------------|-------------------|
| Mack Energy | | Project Name: | | underbay | | | | | Reported: |
| 7 W. Compress Road | | Project Number: 20046-0001 | | | | | | | |
| Artesia NM, 88210 | | Project Manager: | Na | talie Gladden | | | | 3/ | 15/2022 6:43:50PM |
| | | Volatile Organic | Compo | unds by EPA | A 82601 | B | Analyst: IY | | |
| Analyte | | Reporting | Spike | Source | | Rec | | RPD | |
| | Result | Limit | Level | Result | Rec | Limits | RPD | Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211087-BLK1) | | | | | | | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| o-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.525 | | 0.500 | | 105 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.325 | | 0.500 | | 87.1 | 70-130 | | | |
| | | | | | | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.531 | | 0.500 | | 106 | 70-150 | | | |
| LCS (2211087-BS1) | | | | | | | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| Benzene | 2.83 | 0.0250 | 2.50 | | 113 | 70-130 | | | |
| Ethylbenzene | 2.90 | 0.0250 | 2.50 | | 116 | 70-130 | | | |
| Toluene | 2.89 | 0.0250 | 2.50 | | 115 | 70-130 | | | |
| o-Xylene | 2.80 | 0.0250 | 2.50 | | 112 | 70-130 | | | |
| p,m-Xylene | 5.59 | 0.0500 | 5.00 | | 112 | 70-130 | | | |
| Total Xylenes | 8.40 | 0.0250 | 7.50 | | 112 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.488 | | 0.500 | | 97.6 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.497 | | 0.500 | | 99.4 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.518 | | 0.500 | | 104 | 70-130 | | | |
| Matrix Spike (2211087-MS1) | | | | Source: E | 203056- | 02 | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| Benzene | 2.79 | 0.0250 | 2.50 | ND | 112 | 48-131 | | | |
| Ethylbenzene | 2.84 | 0.0250 | 2.50 | ND | 113 | 45-135 | | | |
| Toluene | 2.83 | 0.0250 | 2.50 | ND | 113 | 48-130 | | | |
| o-Xylene | 2.73 | 0.0250 | 2.50 | ND | 109 | 43-135 | | | |
| p,m-Xylene | 5.48 | 0.0500 | 5.00 | ND | 110 | 43-135 | | | |
| Total Xylenes | 8.20 | 0.0250 | 7.50 | ND | 109 | 43-135 | | | |
| Surrogate: Bromofluorobenzene | 0.489 | | 0.500 | | 97.8 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.514 | | 0.500 | | 103 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.507 | | 0.500 | | 101 | 70-130 | | | |
| Matrix Spike Dup (2211087-MSD1) | | | | Source: E | 203056- | 02 | Prepared: 0 | 3/11/22 Ana | lyzed: 03/15/22 |
| Benzene | 2.82 | 0.0250 | 2.50 | ND | 113 | 48-131 | 1.14 | 23 | • |
| Ethylbenzene | 2.92 | 0.0250 | 2.50 | ND | 117 | 45-135 | 2.78 | 27 | |
| Toluene | 2.92 | 0.0250 | 2.50 | ND | 117 | 48-130 | 3.15 | 24 | |
| p-Xylene | 2.79 | 0.0250 | 2.50 | ND | 112 | 43-135 | 2.32 | 27 | |
| | 5.62 | | 5.00 | ND | 112 | 43-135 | 2.52 | 27 | |
| p,m-Xylene Total Xylenes | 5.62 8.41 | 0.0500 0.0250 | 5.00 7.50 | ND | 112 | 43-135 | 2.60 | 27 27 | |
| • | | 0.0250 | | nD | | | 2.31 | <i>21</i> | |
| Surrogate: Bromofluorobenzene | 0.490 | | 0.500 | | 97.9 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.492 | | 0.500 | | 98.3 | 70-130 | | | |
| | | | | | | | | | |



QC Summary Data

| | | QC D | umme | in y Data | a | | | | |
|---------------------------------------|----------|--------------------|----------------|------------------|-----------|---------------|-------------|--------------|---------------------|
| Mack Energy | | Project Name: | | hunderbay | | | | | Reported: |
| 7 W. Compress Road | | Project Number: | | 0046-0001 | | | | | |
| Artesia NM, 88210 | | Project Manager: | N | atalie Gladder | 1 | | | | 3/15/2022 6:43:50PM |
| | | Volatile O | rganics l | oy EPA 802 | 21B | | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211089-BLK1) | | | | | | | Prepared 0 | 3/11/22 A | nalyzed: 03/14/22 |
| · · · · · | ND | 0.0250 | | | | | rieparea. o | | nary2001 00/1 1/22 |
| Benzene | ND ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | | 0.0250 | | | | | | | |
| o-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | 0.00 | | 02.4 | 70.120 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.47 | | 8.00 | | 93.4 | 70-130 | | | |
| LCS (2211089-BS1) | | | | | | | Prepared: 0 | 3/11/22 A | nalyzed: 03/14/22 |
| Benzene | 4.82 | 0.0250 | 5.00 | | 96.5 | 70-130 | | | |
| Ethylbenzene | 5.16 | 0.0250 | 5.00 | | 103 | 70-130 | | | |
| Toluene | 5.34 | 0.0250 | 5.00 | | 107 | 70-130 | | | |
| p-Xylene | 5.13 | 0.0250 | 5.00 | | 103 | 70-130 | | | |
| p,m-Xylene | 10.5 | 0.0500 | 10.0 | | 105 | 70-130 | | | |
| Total Xylenes | 15.6 | 0.0250 | 15.0 | | 104 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.60 | | 8.00 | | 95.0 | 70-130 | | | |
| Matrix Spike (2211089-MS1) | | | | Source: | E203058-0 |)1 | Prepared: 0 | 3/11/22 A | nalyzed: 03/14/22 |
| Benzene | 5.16 | 0.0250 | 5.00 | ND | 103 | 54-133 | | | |
| Ethylbenzene | 5.48 | 0.0250 | 5.00 | ND | 110 | 61-133 | | | |
| Toluene | 5.69 | 0.0250 | 5.00 | ND | 114 | 61-130 | | | |
| o-Xylene | 5.43 | 0.0250 | 5.00 | ND | 109 | 63-131 | | | |
| o,m-Xylene | 11.1 | 0.0500 | 10.0 | ND | 111 | 63-131 | | | |
| Total Xylenes | 16.5 | 0.0250 | 15.0 | ND | 110 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.66 | | 8.00 | | 95.7 | 70-130 | | | |
| Matrix Spike Dup (2211089-MSD1) | | | | Source: | E203058-0 |)1 | Prepared: 0 | 3/11/22 A | nalyzed: 03/14/22 |
| Benzene | 4.83 | 0.0250 | 5.00 | ND | 96.5 | 54-133 | 6.59 | 20 | |
| Ethylbenzene | 5.17 | 0.0250 | 5.00 | ND | 103 | 61-133 | 5.95 | 20 | |
| Toluene | 5.34 | 0.0250 | 5.00 | ND | 107 | 61-130 | 6.21 | 20 | |
| o-Xylene | 5.12 | 0.0250 | 5.00 | ND | 102 | 63-131 | 5.93 | 20 | |
| p,m-Xylene | 10.5 | 0.0500 | 10.0 | ND | 105 | 63-131 | 5.85 | 20 | |
| Total Xylenes | 15.6 | 0.0250 | 15.0 | ND | 104 | 63-131 | 5.87 | 20 | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.63 | | 8.00 | | 95.4 | 70-130 | | | |
| Sarrogane. + Dromochioroboth2che-1 1D | 7.05 | | | | | | | | |



QC Summary Data

| | | $\mathbf{x} \in \mathcal{Z}$ | | ii y Data | | | | | |
|--|--------|--|----------------|--|--------------------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 3/15/2022 6:43:50PM |
| Nonhalogenated Organics by EPA 8015D - GRO | | | | | | | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211087-BLK1) | | | | | | | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.525 | | 0.500 | | 105 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.436 | | 0.500 | | 87.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.531 | | 0.500 | | 106 | 70-130 | | | |
| LCS (2211087-BS2) | | | | | | | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | 51.6 | 20.0 | 50.0 | | 103 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.513 | | 0.500 | | 103 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.469 | | 0.500 | | 93.8 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.489 | | 0.500 | | 97.8 | 70-130 | | | |
| Matrix Spike (2211087-MS2) | | | | Source: I | E 203056- (| 02 | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | 76.6 | 20.0 | 50.0 | ND | 153 | 70-130 | | | M7 |
| Surrogate: Bromofluorobenzene | 0.487 | | 0.500 | | 97.4 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.490 | | 0.500 | | 97.9 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.450 | | 0.500 | | 89.9 | 70-130 | | | |
| Matrix Spike Dup (2211087-MSD2) | | | | Source: I | E 203056- (| 02 | Prepared: 0 | 3/11/22 A | Analyzed: 03/15/22 |
| Gasoline Range Organics (C6-C10) | 69.1 | 20.0 | 50.0 | ND | 138 | 70-130 | 10.3 | 20 | M7 |
| Surrogate: Bromofluorobenzene | 0.462 | | 0.500 | | 92.3 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.345 | | 0.500 | | 69.0 | 70-130 | | | SI |
| Surrogate: Toluene-d8 | 0.740 | | 0.500 | | 148 | 70-130 | | | S1 |



QC Summary Data

| | | QC D | umme | ii y Data | L | | | | |
|--|--------|--|----------------|--|--------------------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 3/15/2022 6:43:50PM |
| | No | nhalogenated (| Organics | by EPA 801 | 5D - Gl | RO | | | Analyst: RKS |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211089-BLK1) | | | | | | | Prepared: 0 | 3/11/22 An | alyzed: 03/14/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.77 | | 8.00 | | 97.2 | 70-130 | | | |
| LCS (2211089-BS2) | | | | | | | Prepared: 0 | 3/11/22 An | alyzed: 03/14/22 |
| Gasoline Range Organics (C6-C10) | 49.2 | 20.0 | 50.0 | | 98.3 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.66 | | 8.00 | | 95.8 | 70-130 | | | |
| Matrix Spike (2211089-MS2) | | | | Source: I | E 203058- (| 01 | Prepared: 0 | 3/11/22 An | alyzed: 03/14/22 |
| Gasoline Range Organics (C6-C10) | 48.7 | 20.0 | 50.0 | ND | 97.3 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.83 | | 8.00 | | 97.9 | 70-130 | | | |
| Matrix Spike Dup (2211089-MSD2) | | | | Source: I | E 203058 -(| 01 | Prepared: 0 | 3/11/22 An | alyzed: 03/14/22 |
| Gasoline Range Organics (C6-C10) | 48.9 | 20.0 | 50.0 | ND | 97.8 | 70-130 | 0.542 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 7.96 | | 8.00 | | 99.5 | 70-130 | | | |



QC Summary Data

| | | QC DI | u I I I I I I I | ary Data | | | | | |
|---|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Fhunderbay 20046-0001 Natalie Gladden | | | | | Reported: 3/15/2022 6:43:50PM |
| | Nonh | alogenated Orga | anics by | v 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 (2212009-BLK1) | | | | | | | Prepared: 0 | 3/14/22 A | nalyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36) | ND ND | 25.0 50.0 | | | | | | | |
| Surrogate: n-Nonane | 63.1 | | 50.0 | | 126 | 50-200 | | | |
| LCS (2212009-BS1) | | | | | | | Prepared: 0 | 3/14/22 A | analyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) | 448 | 25.0 | 500 | | 89.6 | 38-132 | | | |
| Surrogate: n-Nonane | 55.4 | | 50.0 | | 111 | 50-200 | | | |
| Matrix Spike (2212009-MS1) | | | | Source: E | 203058- | 24 | Prepared: 0 | 3/14/22 A | analyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) | 458 | 25.0 | 500 | ND | 91.7 | 38-132 | | | |
| Surrogate: n-Nonane | 53.8 | | 50.0 | | 108 | 50-200 | | | |
| Matrix Spike Dup (2212009-MSD1) | | | | Source: E | 203058- | 24 | Prepared: 0 | 3/14/22 A | analyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) | 472 | 25.0 | 500 | ND | 94.4 | 38-132 | 2.94 | 20 | |
| Surrogate: n-Nonane | 59.1 | | 50.0 | | 118 | 50-200 | | | |



QC Summary Data

| | | QC DI | u I I I I I I I | ary Data | | | | | |
|---|-----------------|--|-------------------------|---|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 3/15/2022 6:43:50PM |
| | Nonh | alogenated Orga | anics by | v 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 (2212014-BLK1) | | | | | | | Prepared: 0 | 3/14/22 A | nalyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36) | ND ND | 25.0 50.0 | | | | | | | |
| Surrogate: n-Nonane | 53.7 | | 50.0 | | 107 | 50-200 | | | |
| LCS (2212014-BS1) | | | | | | | Prepared: 0 | 3/14/22 A | analyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) | 454 | 25.0 | 500 | | 90.8 | 38-132 | | | |
| Surrogate: n-Nonane | 49.8 | | 50.0 | | 99.5 | 50-200 | | | |
| Matrix Spike (2212014-MS1) | | | | Source: E | 203058- | 08 | Prepared: 0 | 3/14/22 A | analyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) | 482 | 25.0 | 500 | 40.2 | 88.3 | 38-132 | | | |
| Surrogate: n-Nonane | 52.6 | | 50.0 | | 105 | 50-200 | | | |
| Matrix Spike Dup (2212014-MSD1) | | | | Source: E | 203058- | 08 | Prepared: 0 | 3/14/22 A | analyzed: 03/14/22 |
| Diesel Range Organics (C10-C28) | 491 | 25.0 | 500 | 40.2 | 90.2 | 38-132 | 1.98 | 20 | |
| Surrogate: n-Nonane | 52.2 | | 50.0 | | 104 | 50-200 | | | |



QC Summary Data

| | | $\mathbf{x} \in \mathbf{v}$ | •••••• | | | | | | |
|--|-----------------|--|-------------------------|--|----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay)046-0001 atalie Gladder | 1 | | | | Reported: 3/15/2022 6:43:50PM |
| | | Anions | by EPA 3 | 300.0/9056 A | 4 | | | | 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 (2212004-BLK1) | | | | | | | Prepared: 0 | 3/14/22 | Analyzed: 03/14/22 |
| Chloride LCS (2212004-BS1) | ND | 20.0 | | | | | Prepared: 0 | 3/14/22 | Analyzed: 03/14/22 |
| Chloride | 255 | 20.0 | 250 | | 102 | 90-110 | Trepared. 0 | 5/14/22 1 | mary2ed. 05/14/22 |
| Matrix Spike (2212004-MS1) | | | | Source: | E203056- | 01 | Prepared: 0 | 3/14/22 | Analyzed: 03/14/22 |
| Chloride | 346 | 20.0 | 250 | 98.5 | 99.1 | 80-120 | | | |
| Matrix Spike Dup (2212004-MSD1) | | | | Source: | E203056- | 01 | Prepared: 0 | 3/14/22 | Analyzed: 03/14/22 |
| Chloride | 347 | 20.0 | 250 | 98.5 | 99.5 | 80-120 | 0.314 | 20 | |



QC Summary Data

| | | $\mathbf{x} = \mathbf{v}$ | | ary Dan | ~ | | | | |
|--|-----------------|--|-------------------------|---|-----------|--------------------|--------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Fhunderbay 20046-0001 Natalie Gladden | L | | | | Reported: 3/15/2022 6:43:50PM |
| | | Anions | by EPA | 300.0/9056A | \ | | | | 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 (2212006-BLK1) | | | | | | | Prepared: 0 | 3/14/22 / | Analyzed: 03/15/22 |
| Chloride LCS (2212006-BS1) | ND | 20.0 | | | | | Prepared: 0 | 3/14/22 | Analyzed: 03/15/22 |
| Chloride | 241 | 20.0 | 250 | | 96.4 | 90-110 | | | |
| Matrix Spike (2212006-MS1) | | | | Source: | E203058-0 | 01 | Prepared: 0. | 3/14/22 | Analyzed: 03/15/22 |
| Chloride | 259 | 20.0 | 250 | ND | 104 | 80-120 | | | |
| Matrix Spike Dup (2212006-MSD1) | | | | Source: | E203058-0 | 01 | Prepared: 02 | 3/14/22 | Analyzed: 03/15/22 |
| Chloride | 258 | 20.0 | 250 | ND | 103 | 80-120 | 0.198 | 20 | |

QC Summary Report Comment:

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



| Mack Energy | Project Name: | Thunderbay | |
|--------------------|------------------|-----------------|----------------|
| 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| Artesia NM, 88210 | Project Manager: | Natalie Gladden | 03/15/22 18:43 |

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M7 Matrix Spike was outside the acceptance limits.

S1 Surrogate spike recovery was outside of the established acceptance limits.

ND Analyte NOT DETECTED at or above the reporting limit

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

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



Project Information

Page 3 of 5

Received by OCD: 6/15/2022 4:07:07 PM

| Client: | MACK | ENER | LGY | | | Attention: SS | | 1 | | _ | | se On | | | | TA | Т | EPA P | rogram |
|------------------|------------------------|----------------|----------------------------|--|--------------|---|---------------------|---------|------------|--------------|-------------|-------------|----------------------|-----------|----------|--------|-----------------------|---------------|--------------|
| Project: | THYM | OERBA | Υ | | | Attention: 455 | | Lab | WO | | ~ | Job 1 | Number | 10 |) 2D | 3D | Standard | CWA | SDW |
| | lanager: | | | | | Address 2427 W. COUNTY | Con un | Lo | 103 | 05 | | | X46-000 | | | | 200 | | |
| Address: | | | | | | City, State, Zip HoBBS NM Phone: 575 390-0 | 8840 | | - | | | Analy | sis and Meth | nod | | | | | RCR |
| City, Stat | e, Zip | | | | | Phone: 373 376-6 | 341 | | | | | | | | 5 | | | | |
| Phone: Email: | | | | | | Email: NATALIE G | AUJEN | 8015 | 8015 | | | | | | ちと | | | State | |
| Report d | ue by: | | - | | | | | þ | by 8 | 021 | 093 | 10 | 000.00 | | 15 | | NM CO | UT AZ | TX |
| Time | | | No. of | T | | | Lab | ORO | DRO | by 8 | y 82 | Is 60 | de 3 | | 0 | | X | and and | |
| Sampled | Date Sampled | Matrix | Containers | Sample ID |) | | Number | DRO/ORO | GRO/DRO by | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | B60 001 | | | Remarks | |
| | 327-22 | S | 1 | Co | MP | 69-2- | 1 | | | | | | | | X | | | | |
| | (| (| 1 | - | | 70.2- | 2 | | | | | | | | 1 | | | | |
| | | | | 1. | | 71-2- | 3 | - | | | | | | | | | | | |
| | | | | | | 72-2- | 4 | | | | | | | | T | | | | |
| | | | | | | 73.2- | 5 | | | | | | | | | | | | |
| | | | | Co | | 74-2- | 6 | | | | | | | | 1 | | | | |
| | | | | CON | P | 75-2- | 7 | | | | | | | | 1 | | | | |
| | | | | Com | P | 76.21 | 8 | | | | | | | | | | 2 | | |
| | | | | Col | nP | 77-2- 78.21 | 9 | | | | | | | | 1 | | | | |
| | 1 | t | | Co | mp | 78.21 | 10 | | | | | | | | | | | | |
| ddition | al Instruction | ns: | | | 100 C | | | | | - | | | | - | | J. | | | |
| (field samp | ler), attest to the | validity and | authenticit | y of this samp | le. I am awa | re that tampering with or intentionally mislab n. <u>Sampled by: MAC</u> | elling the sample I | ocation | in | 7 | | 1.000 | | | | | ived on ice the day t | | ed or receiv |
| ate or time | of collection is co | nsidered fra | | | | | | N | | 1 | | packed | in ice at an avg ter | | | | C on subsequent day | r s ., | |
| Jalo | AT D | inte | | 822 | Time | Received by: (Signature) | - 3.8.2 | 2 | | 44 | 5 | Rece | ived on ice: | | Lab Us | se Onl | | | |
| X | ed by: (Signature | | | 9.22 | Time 163 | | A 310 | 22 | | :3 | Q | T1 | | <u>T2</u> | | | Т3 | 1 | |
| | V | | Date | | Time | Received by: (Signature) | Date | | Time | | | AVG | Temp °C | 4 | | | 103 | | |
| ample Matr | ix: S - Soil, Sd - Sol | lid, Sg - Slud | ge, A - Aque | ous, O - Othe | r | | Containe | r Type | : g - p | lass, r |) - DO | olv/pla | stic. ag - am | ber gl | ass, v - | VOA | | | |
| iote: Samp | les are discarde | d 30 days i | after result mples rece | s are report | ed unless c | ther arrangements are made. Hazardou | s samples will be | e retur | ned to | client | or di | inneer | f of at the clie | of own | onco | Thoron | art for the enals | ir of the al | hous |

envirotech

Page 4 of

Received by OCD: 6/15/2022 4:07:07 PM

| lient: MACK ENERGY | Bill To | | 11 | | | b Use | e Onl | Y | | T. | AT | EPA P | rograr |
|--|--|--------------------|---------|------------|--------------|-------------|-------------|--------------------|----------|-------------|--|--------------|-----------|
| Client: MACK ENERGY Project: THUNDENDAY Project Manager: | Attention: ESS | 1 00 | Lab | WO# | ~ | 0 | Job N | umber | 1D : | 2D 3D | Standard | CWA | SDV |
| Address: | Address: 2427 W. CO4NT City, State, ZipHOBBS N.A. Phone: 575 390-6397 | 88240 | RI E208 | | | | | is and Method | | - | etc. | | DCF |
| City, State, Zip | Phone: 575 390.6397 | | - | | - | Ť | | | i T | | | | RCI |
| Phone: | Email: NATAUR 664 | DEN | 8015 | 8015 | | | | | | | | State | |
| Email: Report due by: | 그는 바람이 가지 않는 것은 것이 없어. | | S I | S Aq C | 3021 | 260 | 010 | 300.0 | | 9 | NM CO | UT AZ | TX |
| Time Date Sampled Matrix No. of Containers Sample ID | | Lab Number | DRO/ORO | GRO/DRO by | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | 0600 | | Remarks | |
| 3-7-22 S. 1 COMP | 79.2- | 11 | | | | | | | | X | | | |
| | 80.2- | 12 | | | | | | | | 1 | | | |
| | 81-2- | 13 | 1 | | | | | | | | | | |
| Comp | 82-2- | 14 | | | | | | | | | | | |
| | 83-2- | 15 | | | | | | | | $(\square$ | | | |
| COMP | 84-2 | 16 | | | | | _ | | | | | | |
| Comp | 85-2- 86-2- 87-2- | 17 | | | | | | | | | | | |
| Comp | 86.2- | 18 | | | | | | | | 1 | | | |
| COMP | 87.2 | 19 | | | _ | _ | | | | 1 | | | |
| Additional Instructions: | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| (field sampler), attest to the validity and authenticity of this sample. I am a late or time of collection is considered fraud and may be grounds for legal at | ware that tampering with or intentionally mislabell tion. Sampled by: MALC R | ling the sample lo | Carlon, | 2 | e | | | | | | ceived on ice the day th 5 °C on subsequent day | | d or rece |
| etinquished by: (Signature) Date Time | Received by: [Signature] | Date 3.8.2 | 12 | Timo | 45 | | Receiv | ved on ice: | Y | Use On N | ly | ЧС. | 1 |
| relinquistied by: (Signature) Date Time | 30 Received by: (Signarure) | 13/106 | 2 | 10 | :30 |) T | 1 | | T2 | | Т3 | | 2 |
| | Received by: (Signature) | Date | | Time | | | 1.5 | emp °C | 4 | | | 10 | |
| ample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other | | Container | Type: | g - gl | ass, p | - poly | v/plas | tic ag - amber | r glass, | v - VOA | | | |
| lote: Samples are discarded 30 days after results are reported unles amples is applicable only to those samples received by the laborato | s other arrangements are made. Hazardous | samples will be | return | ned to | client | or disp | posed | of at the client e | expense | e. The rep | port for the analys | is of the ab | ove |

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Project Information

Released to Imaging: 9/30/2022 10:09:16 AM

Chain of Custody

Page <u>5</u> of <u>5</u>

| Project: THunglash Project Manager: Address: City, State, Zip Phone: Email: | City, State, Zip HOGAS NM 8 | TYRO | Lab | WO# | # | | lloh | Numbe | r | 1D | 20 | 3D | Standard | CIALS | EPA Program | |
|---|---|------------------------------|---------|-----------------|--------------|-------------|-------------|----------------|-------------|----------|---------|----------|---------------------------------------|---------------|--------------|--|
| Address: ity, State, Zip Phone: | City, State, Zip HOGAS NM 8 | Address: 2427 W. COYNTYRO F. | | 100 -00 | 0-1 | 3 | | | anal | 10 | 20 | 50 | Stanuaru | CWA | SDW | |
| City, State, Zip Phone: | City, State, Zip HOGAS NM 88240 | | Eo | NAX | 058 | | - | sile. | | | | | 2 | | | |
| hone: | Phone: 575 390-6397 | | - | | _ | - | Analy | sis and | Method | - | | | 1.1.1 | | RCRA | |
| | | 100 | | | | 111 | 10.1 | | | | | | | | | |
| | Email: NATALIA GLA | 008 N | 3015 | 3015 | | | | - | | | | | | State | | |
| Report due by: | | | by 8015 | by 8 | 021 | 60 | 10 | 00.00 | | | U | | NM CO | UT AZ | TX | |
| | | Lab | - CRO | DRO | by 8 | v 82 | s 60 | de 3 | | | 600 | | A | | | |
| Sampled Date Sampled Matrix No. of Containers Sample ID | | Number | DRO/ORO | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | | 38 | | 1 | Remarks | | |
| 3.7-22 S 1. CONP | 88.7- | 20 | | | | | | | | | X | | 1. | | | |
| C Comp | 89-2- | 21 | | | | | | | | | F | - | | | | |
| | | 22 | | | | | - | | | | | - | | | | |
| | 90.2 | | - | - | | - | | | | - | + | - | - | | | |
| | 91-2- | 23 | | | | | | | | _ | | _ | - | | | |
| COMP | 92-2 | 24 | | _ | | | | | | | | | | | | |
| COMP | 93-3- | 25 | | | | | | | | | | | | | | |
| Cel Chertesue | ALADO | | | | | | | | | | T | | | | | |
| Cotol a la | 0000000 | | | | | | | - | | - | + | | | | | |
| California de la | appendence | | | | | _ | - | | | - | 1 | - | | | | |
| Cart Carter | an ser to go | - | | | - | | _ | _ | | | | _ | | | | |
| | | | | - | | | | | | | | | | | | |
| dditional Instructions: | | | | | | | | | | | | | | | | |
| (field sampler), attest to the validity and authenticity of this sample. I ar | n aware that tampering with or intentionally mislabelling | the sample lo | cation. | - | | | Samples | s requiring | thermal pre | servatio | on must | be recei | ved on ice the day th | ev are sample | d or receive | |
| ate optime of collection is considered fraud and may be grounds for lega | action. Sampled by: | | | | | | | | | | | | C on subsequent day | | - of receive | |
| elinquished by (Signature) Date 21 Time | Received by: (Signature) | Date | | Time | | _ | 2 | | - | Lab | o Use | Only | | 1. A.T. | | |
| elinquiched by (Signature) Date 5-8-24 Time | An ho | 3.8.2 | 22 | 1 | 444 | 5 | Rece | ived or | ice: | (YY | | | | 0 | | |
| elinquished by: (Signature) Date Time | Received by: (Signature) | Date | | Time | | ~ | | | | - | | | | 12 | 7. 32 | |
| Jan Jol 3.9.22 1 | 30 alevents | 3/06 | 2 | | 5:3 | 0 | T1 | | | Г2 | | | T3 | - 1 | | |
| elinquished by: (Signature) Date Time | Received by: (Signature) | Date | | Time | | | | | - 11 | | | | 5 . 1 . A. A. | | ista da | |
| mple Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other | | Containor | Tunor | | lass - | | | Temp ° | | | | | · · · · · · · · · · · · · · · · · · · | 17 P. | 10.1 | |
| ote: Samples are discarded 30 days after results are reported un moles is applicable optications and the same second seco | ess other arrangements are made | Container | roture | B-B | ass, p | por di | ny/pla | stic, ag | - amber | glass, | , V - V | AU | | 1. (.t.) | | |
| imples is applicable only to those samples received by the labora | tory with this COC. The liability of the laboratory is | limited to th | ne amo | unt n | aid for | r on th | posec | ort. | e client e | xpense | e. Th | ne repo | ort for the analys | is of the ab | ove | |
| | , and the second method with the indefatory is | | ie anio | on p | | onti | rerep | 011. | | | | | | | | |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy Da | te Received: | 03/10/22 1 | 0:30 | Work Order ID: E203058 |
|---|--|--|--|-------------------|---|
| Phone: | (575) 390-6397 Da | te Logged In: | 03/09/22 0 | 9:55 | Logged In By: Caitlin Christian |
| Email: | | ie Date: | | 7:00 (3 day TAT) | |
| Chain o | f Custody (COC) | | | | |
| 1. Does | the sample ID match the COC? | | Yes | | |
| 2. Does | the number of samples per sampling site location match | the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: <u>U</u> | JPS_ |
| 4. Was t | he COC complete, i.e., signatures, dates/times, requested | analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in the | e field, | Yes | | Commonte/Decolution |
| | i.e, 15 minute hold time, are not included in this disucssion. | | | - | <u>Comments/Resolution</u> |
| | Turn Around Time (TAT) | | | | Project has been seperated into 2 reports |
| | e COC indicate standard TAT, or Expedited TAT? | | Yes | | • • • |
| Sample | | | 37 | | due to amount of samples. Workorders are |
| | sample cooler received? | | Yes | | as follows: |
| • | , was cooler received in good condition? | | Yes | | E203057 COC page 1&2 of 5, E203058 |
| | he sample(s) received intact, i.e., not broken? | | Yes | | COC pages 3,4& 5 of 5. Sample times not |
| | e custody/security seals present? | | No | | provided on the COC. |
| 11. If ye | s, were custody/security seals intact? | | NA | | |
| 12. Was 1 | he sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re- minutes of sampling | | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sample tem | nnoratura. 1º | C | | |
| | visioie iee, ieeeita ale temperataret i itetaal bampie ten | nperature. <u>+</u> | | | |
| | Container | nperature. <u>+</u> | <u>c</u> | | |
| Sample | | nperature. <u>4</u> | <u>C</u> No | | |
| Sample 14. Are | <u>Container</u> | nperature. <u>+</u> | | | |
| <u>Sample</u> 14. Are 15. Are | <u>Container</u> aqueous VOC samples present? | nperature. <u>+</u> | No | | |
| <u>Sample</u> 14. Are 15. Are 16. Is th | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? | претаците. <u>-</u> | No NA | | |
| Sample 14. Are 15. Are 16. Is th 17. Was | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? | nperature. <u>+</u> | No NA NA | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? | | No NA NA NA | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers subel | collected? | No NA NA Yes | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers bbel e field sample labels filled out with the minimum inform | collected? | No NA NA Yes Yes | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers <u>abel</u> e field sample labels filled out with the minimum inform Sample ID? | collected? | No NA NA Yes Yes Yes | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field L: 20. Wer | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers <u>thel</u> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? | collected? | No NA NA Yes Yes Yes No | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La | <u>Container</u> aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers <u>abel</u> e field sample labels filled out with the minimum inform Sample ID? | collected? | No NA NA Yes Yes Yes | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field L: 20. Were Sample | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? | collected? ation: | No NA NA Yes Yes Yes No | | |
| Sample 14. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were Sample 21. Doc | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers ubel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation | collected? ation: | No NA NA Yes Yes No No | | |
| Sample 14. Are 15. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were Sample 21. Doc 22. Are | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers ubel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were preserved | collected? ation: erved? | No NA NA Yes Yes No No | | |
| Sample 14. Are 15. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 20. Were 21. Doc: 22. Are 24. Is la | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? | collected? ation: erved? | No NA NA Yes Yes No No No | | |
| Sample 14. Are 15. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 20. Were 21. Doc: 22. Are 24. Is la Multiph | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta | collected? ation: erved? ds? | No NA NA Yes Yes No No No | | |
| Sample 14. Are 15. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Wer 20. Wer 21. Doe 22. Are 24. Is la Multiph 26. Doe | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta tase Sample Matrix | collected? ation: erved? ls? | No NA NA Yes Yes No No No NA No | | |
| Sample 14. Are 15. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 20. Were 21. Doc: 22. Are 24. Is la Multiph 26. Doc: 27. If ye | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation a the COC or field labels indicate the samples were prese sample(s) correctly preserved? to filteration required and/or requested for dissolved meta tase Sample Matrix s the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyzed | collected? ation: erved? ls? | No NA NA Yes Yes No No No No No | | |
| Sample 14. Are 15. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 21. Doc: 22. Are 24. Is la Multiph 26. Doc: 27. If ye | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation a the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta tase Sample Matrix s the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyzed tract Laboratory. | collected? ation: erved? ils? d? | No NA NA Yes Yes No No No No No No No No | | |
| Sample 14. Are 15. Are 15. Are 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 21. Doc: 22. Are 24. Is la Multiph 26. Doc: 27. If ye Subcom 28. Are | Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation a the COC or field labels indicate the samples were prese sample(s) correctly preserved? to filteration required and/or requested for dissolved meta tase Sample Matrix s the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyzed | collected? ation: erved? ls? | No NA NA Yes Yes No No No No No | Subcontract Lab | : na |

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







5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay Fed Com #1

Work Order: E203075

Job Number: 20046-0001

Received: 3/11/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/14/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/14/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Fed Com #1 Workorder: E203075 Date Received: 3/11/2022 7:30:00AM

Natalie Gladden,



Page 450 of 508

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/11/2022 7:30:00AM, under the Project Name: Thunderbay Fed Com #1.

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

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

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

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

Respectfully,

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

Field Offices:

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Sample Summary

| | | Sample Sum | mai y | | |
|--------------------|---------------|------------------|-------------------|----------|------------------|
| Mack Energy | | Project Name: | Thunderbay Fed Co | om #1 | Reported: |
| 7 W. Compress Road | | Project Number: | 20046-0001 | | Tieporteur |
| Artesia NM, 88210 | | Project Manager: | Natalie Gladden | | 03/14/22 17:02 |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| SW Comp 1 - 2' | E203075-01A | Soil | 03/09/22 | 03/11/22 | Glass Jar, 4 oz. |
| SW Comp 2 -2' | E203075-02A | Soil | 03/09/22 | 03/11/22 | Glass Jar, 4 oz. |
| SW Comp 3 - 2' | E203075-03A | Soil | 03/09/22 | 03/11/22 | Glass Jar, 4 oz. |
| SW Comp 4 - 2' | E203075-04A | Soil | 03/09/22 | 03/11/22 | Glass Jar, 4 oz. |
| SW Comp 5 - 2' | E203075-05A | Soil | 03/09/22 | 03/11/22 | Glass Jar, 4 oz. |
| SW Comp 6 - 2' | E203075-06A | Soil | 03/09/22 | 03/11/22 | Glass Jar, 4 oz. |
| | | | | | |



| | Sample Data | | | | | | | | | | | | |
|--|----------------------------|--------------|--------------------------|-----------|----------|---------------------|--|--|--|--|--|--|--|
| Mack Energy 7 W. Compress Road | Project Nam Project Num | | nderbay Fed C 46-0001 | om #1 | | Reported: | | | | | | | |
| Artesia NM, 88210 | Project Man | ager: Nata | lie Gladden | | | 3/14/2022 5:02:05PM | | | | | | | |
| | S | W Comp 1 - 2 | 2' | | | | | | | | | | |
| | | E203075-01 | | | | | | | | | | | |
| | | Reporting | | | | | | | | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes | | | | | | | |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | Ana | lyst: IY | | Batch: 2211080 | | | | | | | |
| Benzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |
| Toluene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |
| o-Xylene | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |
| Total Xylenes | ND | 0.0250 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |
| Surrogate: Bromofluorobenzene | | 90.5 % | 70-130 | 03/11/22 | 03/11/22 | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | 03/11/22 | 03/11/22 | | | | | | | | |
| Surrogate: Toluene-d8 | | 98.7 % | 70-130 | 03/11/22 | 03/11/22 | | | | | | | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Ana | lyst: IY | | Batch: 2211080 | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |
| Surrogate: Bromofluorobenzene | | 90.5 % | 70-130 | 03/11/22 | 03/11/22 | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | 70-130 | 03/11/22 | 03/11/22 | | | | | | | | |
| Surrogate: Toluene-d8 | | 98.7 % | 70-130 | 03/11/22 | 03/11/22 | | | | | | | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Ana | lyst: JL | | Batch: 2211066 | | | | | | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/10/22 | 03/11/22 | | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/10/22 | 03/11/22 | | | | | | | | |
| Surrogate: n-Nonane | | 111 % | 50-200 | 03/10/22 | 03/11/22 | | | | | | | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Ana | lyst: RAS | | Batch: 2211073 | | | | | | | |
| Chloride | ND | 20.0 | 1 | 03/11/22 | 03/11/22 | | | | | | | | |

Sample Data



Sample Data

| | | ampic D | | | | | |
|--|---|--------------------|--------------------------------------|-------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manaş | er: 2004 | nderbay Fe 46-0001 Ilie Gladde | | 1 | | Reported: 3/14/2022 5:02:05PM |
| | S | W Comp 2 -2 | • | | | | |
| | | E203075-02 | | | | | |
| Analyte | Result | Reporting Limit | Dilı | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.2 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 98.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.2 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 98.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 109 % | 50-200 | | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst:] | RAS | | Batch: 2211073 |
| Chloride | 150 | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | ~ | | | | | | |
|--|--|--------------------|--|--------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Num Project Mana | ber: 2004 | nderbay Fed 46-0001 ılie Gladden | | | | Reported: 3/14/2022 5:02:05PM |
| · | SW Comp 3 - 2' | | | | | | |
| | 3 | E203075-03 | 2 | | | | |
| | | | | | | | |
| Analyte | Result | Reporting Limit | Dilut | tion I | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | Organic Compounds by EPA 8260B mg/kg mg/kg Analyst: IY | | | | | Batch: 2211080 | |
| Benzene | ND | 0.0250 | 1 | (| 3/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | (| 3/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | (| 3/11/22 | 03/11/22 | |
| p-Xylene | ND | 0.0250 | 1 | (| 3/11/22 | 03/11/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | (| 3/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | (| 3/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.0 % | 70-130 | Ċ |)3/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | C |)3/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.7 % | 70-130 | (|)3/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | 1 | Analyst: IY | | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | (| 3/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 92.0 % | 70-130 | C |)3/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | 70-130 | C |)3/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.7 % | 70-130 | 0 |)3/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | 1 | Analyst: JL | | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | (| 3/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | (| 3/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 114 % | 50-200 | (| 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | 1 | Analyst: RAS | 5 | | Batch: 2211073 |
| Chloride | 148 | 20.0 | 1 | (| 3/11/22 | 03/11/22 | |



Sample Data

| | 5 | ample D | uu | | | | |
|--|--|----------------------|--------|----------|----------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | t Number: 20046-0001 | | | | | Reported: 3/14/2022 5:02:05PM |
| | SV | V Comp 4 - 2 | 2' | | | | |
| | | E203075-04 | | | | | |
| | | Reporting | 51 | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | Organic Compounds by EPA 8260B mg/kg mg/kg Analyst: IY | | IY | | Batch: 2211080 | | |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 91.3 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 99.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | JL | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 114 % | 50-200 | | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211073 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | ~• | impic D | | | | | |
|--|--|--------------|--------------------------------------|----------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay Fe 46-0001 Ilie Gladde | | 1 | | Reported: 3/14/2022 5:02:05PM |
| | SV | V Comp 5 - 2 | 2' | | | | |
| | | E203075-05 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dil | ution | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | ganic Compounds by EPA 8260B mg/kg mg/kg Analyst: IY | | | Batch: 2211080 | | | |
| Benzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | | 1 | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 90.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 98.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: | IY | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 90.6 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 98.7 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: | Л | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | 1 | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 114 % | 50-200 | | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: | RAS | | Batch: 2211073 |
| Chloride | ND | 20.0 | | 1 | 03/11/22 | 03/11/22 | |



Sample Data

| | | impic D | | | | | |
|--|--|--------------------|--|----------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay Fec 46-0001 Ilie Gladder | | | | Reported: 3/14/2022 5:02:05PM |
| | SV | V Comp 6 - 2 | 2' | | | | |
| | | E203075-06 | | | | | |
| Analyte | Result | Reporting Limit | Dilu | ition | Prepared | Analyzed | Notes |
| Volatile Organic Compounds by EPA 8260B | ganic Compounds by EPA 8260B mg/kg mg/kg Analyst: IY | | | Batch: 2211080 | | | |
| Benzene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| Toluene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| o-Xylene | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | l | 03/11/22 | 03/11/22 | |
| Total Xylenes | ND | 0.0250 | 1 | l | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 90.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | | Analyst: IY | | | Batch: 2211080 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | l | 03/11/22 | 03/11/22 | |
| Surrogate: Bromofluorobenzene | | 90.1 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Surrogate: Toluene-d8 | | 100 % | 70-130 | | 03/11/22 | 03/11/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | | Analyst: JL | | | Batch: 2211066 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 1 | 03/10/22 | 03/11/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | l | 03/10/22 | 03/11/22 | |
| Surrogate: n-Nonane | | 114 % | 50-200 | | 03/10/22 | 03/11/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | | Analyst: RA | AS | | Batch: 2211073 |
| Chloride | ND | 20.0 | 1 | l | 03/11/22 | 03/11/22 | |



QC Summary Data

| | | | | v | | | | | |
|---|----------------|----------------------------------|----------------|--------------------------|----------------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | underbay Fed 046-0001 | Com #1 | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | Na | atalie Gladden | | | | | 3/14/2022 5:02:05PM |
| | V | olatile Organi | c Compo | unds by EPA | A 8260E | 3 | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211080-BLK1) | | | | | |] | Prepared: 0 | 3/10/22 Ai | nalyzed: 03/11/22 |
| Benzene | ND | 0.0250 | | | | | | | |
| Ethylbenzene | ND | 0.0250 | | | | | | | |
| Toluene | ND | 0.0250 | | | | | | | |
| p-Xylene | ND | 0.0250 | | | | | | | |
| p,m-Xylene | ND | 0.0500 | | | | | | | |
| Total Xylenes | ND | 0.0250 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.446 | | 0.500 | | 89.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.507 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| LCS (2211080-BS1) | | | | | |] | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Benzene | 2.85 | 0.0250 | 2.50 | | 114 | 70-130 | | | |
| Ethylbenzene | 3.05 | 0.0250 | 2.50 | | 122 | 70-130 | | | |
| Foluene | 3.01 | 0.0250 | 2.50 | | 121 | 70-130 | | | |
| p-Xylene | 2.93 | 0.0250 | 2.50 | | 117 | 70-130 | | | |
| o,m-Xylene | 5.82 | 0.0500 | 5.00 | | 116 | 70-130 | | | |
| Total Xylenes | 8.76 | 0.0250 | 7.50 | | 117 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.480 | | 0.500 | | 96.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.515 | | 0.500 | | 103 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.524 | | 0.500 | | 105 | 70-130 | | | |
| LCS Dup (2211080-BSD1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Benzene | 2.77 | 0.0250 | 2.50 | | 111 | 70-130 | 2.60 | 23 | |
| Ethylbenzene | 2.93 | 0.0250 | 2.50 | | 117 | 70-130 | 3.83 | 27 | |
| Foluene | 2.92 | 0.0250 | 2.50 | | 117 | 70-130 | 3.32 | 24 | |
| p-Xylene | 2.80 | 0.0250 | 2.50 | | 112 | 70-130 | 4.66 | 27 | |
| p,m-Xylene | 5.64 | 0.0500 | 5.00 | | 113 | 70-130 | 3.29 | 27 | |
| Total Xylenes | 8.43 | 0.0250 | 7.50 | | 112 | 70-130 | 3.75 | 27 | |
| | | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.486 | | 0.500 | | 11.1 | /0 100 | | | |
| Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 | 0.486 0.505 | | 0.500 | | 101 | 70-130 | | | |

QC Summary Data

| | | QU N | Juiiiii | | a | | | | |
|--|--------|--|----------------|---|------|---------------|-------------|--------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number Project Manager | : : | Thunderbay Fec 20046-0001 Natalie Gladder | | | | | Reported: 3/14/2022 5:02:05PM |
| Alusia IVII, 00210 | Nor | halogenated | | | | RO | | | Analyst: IY |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | - |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2211080-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: Bromofluorobenzene | 0.446 | | 0.500 | | 89.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.507 | | 0.500 | | 101 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.492 | | 0.500 | | 98.4 | 70-130 | | | |
| LCS (2211080-BS2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 60.8 | 20.0 | 50.0 | | 122 | 70-130 | | | |
| Surrogate: Bromofluorobenzene | 0.475 | | 0.500 | | 95.0 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.486 | | 0.500 | | 97.1 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.527 | | 0.500 | | 105 | 70-130 | | | |
| LCS Dup (2211080-BSD2) | | | | | | | Prepared: 0 | 3/10/22 A | nalyzed: 03/11/22 |
| Gasoline Range Organics (C6-C10) | 63.5 | 20.0 | 50.0 | | 127 | 70-130 | 4.31 | 20 | |
| Surrogate: Bromofluorobenzene | 0.476 | | 0.500 | | 95.1 | 70-130 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.511 | | 0.500 | | 102 | 70-130 | | | |
| Surrogate: Toluene-d8 | 0.515 | | 0.500 | | 103 | 70-130 | | | |
| | | | | | | | | | |



QC Summary Data

| | | QC D | u 111111 | ary Data | • | | | | |
|---|-----------------|--|-------------------------|---|----------|--------------------|-------------|--------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Fhunderbay Fed 20046-0001 Natalie Gladden | Com #1 | | | | Reported: 3/14/2022 5:02:05PM |
| | Nonh | alogenated Org | anics by | y 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 (2211066-BLK1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36) | ND ND | 25.0 50.0 | | | | | | | |
| Surrogate: n-Nonane | 55.5 | | 50.0 | | 111 | 50-200 | | | |
| LCS (2211066-BS1) | | | | | | | Prepared: 0 | 3/10/22 A | Analyzed: 03/10/22 |
| Diesel Range Organics (C10-C28) | 458 | 25.0 | 500 | | 91.5 | 38-132 | | | |
| Surrogate: n-Nonane | 54.1 | | 50.0 | | 108 | 50-200 | | | |
| Matrix Spike (2211066-MS1) | | | Source: H | 203053- | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 | |
| Diesel Range Organics (C10-C28) | 488 | 25.0 | 500 | ND | 97.6 | 38-132 | | | |
| Surrogate: n-Nonane | 53.6 | | 50.0 | | 107 | 50-200 | | | |
| Matrix Spike Dup (2211066-MSD1) | | | | Source: I | 203053- | 17 | Prepared: 0 | 3/10/22 A | Analyzed: 03/11/22 |
| Diesel Range Organics (C10-C28) | 485 | 25.0 | 500 | ND | 97.0 | 38-132 | 0.628 | 20 | |
| Surrogate: n-Nonane | 53.5 | | 50.0 | | 107 | 50-200 | | | |



QC Summary Data

| | | - | | ť | | | | | | |
|------------------------|--------|--------------------|----------------------------------|------------------|----------|---------------|---------------|--------------|--------------------|--|
| Mack Energy | | Project Name: | Т | hunderbay Fe | d Com #1 | | | | Reported: | |
| 7 W. Compress Road | | Project Number | : 2 | 0046-0001 | | | | | | |
| Artesia NM, 88210 | | Project Manager | Project Manager: Natalie Gladden | | | | 3/14/2022 5:0 | | | |
| | | Anions | by EPA | 300.0/9056 | 4 | | | | Analyst: RAS | |
| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | | |
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes | |
| Blank (2211073-BLK1) | | | | | | | Prepared: 0. | 3/10/22 | Analyzed: 03/11/22 | |
| Chloride | ND | 20.0 | | | | | | | | |
| LCS (2211073-BS1) | | | | | | | Prepared: 03 | 3/10/22 | Analyzed: 03/11/22 | |
| Chloride | 247 | 20.0 | 250 | | 98.6 | 90-110 | | | | |
| LCS Dup (2211073-BSD1) | | | | | | | Prepared: 0. | 3/10/22 | Analyzed: 03/11/22 | |
| Chloride | 248 | 20.0 | 250 | | 99.2 | 90-110 | 0.587 | 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.



| Γ | Mack Energy | Project Name: | Thunderbay Fed Com #1 | |
|---|--------------------|------------------|-----------------------|----------------|
| | 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| | Artesia NM, 88210 | Project Manager: | Natalie Gladden | 03/14/22 17:02 |

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Release

| | 1 |
|------|----|
| Page | of |
| | |

| | Lab Use Only | | | | | | 1 | _ | TAT | EPA Program | | |
|--|--|--|-----------------|---|-------------|-------------|-----------------|----------------|--------------|--|----------------|--------------|
| t: Mall Energy ct: <u>Thundlubay Kel Com#1</u> ct Manager: Matt Buckles ess: | Attention: Autolia (Iladdon Address: 0724 NW County rd City, State, Zip Hobbs MM 85240 | | | ess: 0724 NW Countyrd = 203075 20046-0001 | | | | | 2D 3 | TAT D Standard | CWA | SDWA RCRA |
| State, Zip e: l: ort due by: 555 | Phone: 575-393-9018 Email: Natalie @ energystaffing [[c.c. Nationated@ pubroustaffing/[c.co | ab mber | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | IC NM | c TX | | State UT AZ | TX |
| he Date Matrix No. of Containers Sample ID | Nu | ab of a boot a b | GRO/ | BTEX | voct | Metal | Chlori | BGDOC | BGDOC | | Remarks | |
| 3/9 50il 1 Sw Ca | ompil-ia | - | | | a | | · • | 4 | 2 | - | 1 | |
| SS SU CO | ompa-a' | 2 | | | | | | 4 | | | _ | |
| Sw C | pmp 1 - a' pmp 2 - a' pmp 3 - a' | | | | | | | | | | | |
| 500 0 | omp 4-2' | 4 | | | | | | / | | | | |
| () SW C | pmp5-a' | 5 | | | | | | 4 | | | | |
| ((Sw. (| $\frac{2mp 4 - 2}{2mp 5 - 2}$ | 8 | - | - | | | | / | | | | |
| | | | + | - | - | | | - | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| litional Instructions: | | | | | | Lance | | | | | 1 | Led - second |
| ld sampler), attest to the validity and authenticity of this sample. or time of collection is considered fraud and may be grounds for | | e sample lo | cation, | | | | | np above | 0 but less t | e received on ice the day nan 6 °C on subsequent da | | ned of recei |
| alcata Contact S/10/22 | 540 Received by: (Signature) Dat | 10.22 | Z Tin | 154 | 10 | Rec | eived on ice: | | ab Use | Only | | |
| Aquished by: (Signature) Date Time | | 11/20 | | 7:0 | 30 | T1 | G Temp °C_ | <u>T2</u> 4 | | <u> T3</u> | | |
| ole Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other | | ntainer T | vpe; g | - glass | . p - r | | lastic, ag - am | ber gla | ISS. V - V | OA | | |

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Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy D | ate Received: | 03/11/22 07: | 30 | Work Order ID: E203075 |
|---|---|--------------------------------|--|----------------|-----------------------------------|
| Phone: | (575) 746-9547 D | ate Logged In: | 03/10/22 17: | 20 | Logged In By: Caitlin Christian |
| Email: | natalie@energystaffingllc.com D | ue Date: | 03/11/22 17: | 00 (0 day TAT) | |
| Chain o | f Custody (COC) | | | | |
| 1. Does 1 | the sample ID match the COC? | | Yes | | |
| 2. Does 1 | the number of samples per sampling site location match | the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: C | Courrier |
| 4. Was th | ne COC complete, i.e., signatures, dates/times, requested | d analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted in th i.e, 15 minute hold time, are not included in this disucssion. | e field, | Yes | | Comments/Resolution |
| Sample ' | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | e COC indicate standard TAT, or Expedited TAT? | | Yes | | Sample times not provided on COC. |
| Sample | <u>Cooler</u> | | | | |
| 7. Was a | sample cooler received? | | Yes | | |
| 8. If yes, | was cooler received in good condition? | | Yes | | |
| 9. Was th | ne sample(s) received intact, i.e., not broken? | | Yes | | |
| 10. Were | e custody/security seals present? | | No | | |
| 11. If yes | s, were custody/security seals intact? | | NA | | |
| 12. Was t | he sample received on ice? If yes, the recorded temp is 4°C, i.e Note: Thermal preservation is not required, if samples are re- minutes of sampling | | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sample te | mperature: 4° | С | | |
| | · · · · · · · · · · · · · · · · · · · | I | | | |
| Sample | Container | | | | |
| | Container aqueous VOC samples present? | | No | | |
| 14. Are a | aqueous VOC samples present? | | No NA | | |
| 14. Are a 15. Are ' | aqueous VOC samples present? VOC samples collected in VOA Vials? | | | | |
| 14. Are a 15. Are 7 16. Is the | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? | | NA | | |
| 14. Are a 15. Are ^v 16. Is the 17. Was | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? | | NA NA | | |
| 14. Are a 15. Are ¹ 16. Is the 17. Was 18. Are 1 | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? | s collected? | NA NA NA | | |
| 14. Are a 15. Are ¹ 16. Is the 17. Was 18. Are 1 | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? a appropriate volume/weight or number of sample container | s collected? | NA NA NA Yes | | |
| 14. Are a 15. Are V 16. Is the 17. Was 18. Are n 19. Is the Field La | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? a appropriate volume/weight or number of sample container | | NA NA NA Yes | | |
| 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container thel e field sample labels filled out with the minimum inform Sample ID? | | NA NA NA Yes | | |
| 14. Are a 15. Are v 16. Is the 17. Was 18. Are n 19. Is the Field La 20. Were S | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? | | NA NA Yes Yes Yes No | | |
| 14. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were S | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? | | NA NA NA Yes Yes | | |
| 14. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were S I C Sample | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation | nation: | NA NA Yes Yes No No | | |
| 14. Are a 15. Are v 16. Is the 17. Was 18. Are u 19. Is the Field La 20. Were S I C Sample 21. Does | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were pres | nation: | NA NA Yes Yes No No | | |
| 14. Are a 15. Are v 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were Sample 21. Does 22. Are s | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation 5 the COC or field labels indicate the samples were press sample(s) correctly preserved? | nation: erved? | NA NA Yes Yes No No | | |
| 14. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were Sample 21. Does 22. Are s 24. Is lat | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation a the COC or field labels indicate the samples were press sample(s) correctly preserved? o filteration required and/or requested for dissolved met | nation: erved? | NA NA Yes Yes No No No | | |
| 14. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were 20. Were 21. Does 22. Are s 24. Is lath <u>Multiph</u> | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation a the COC or field labels indicate the samples were press sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix_ | nation: erved? als? | NA NA Yes Yes No No No NA | | |
| 14. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were Sample 21. Does 22. Are a 24. Is lat Multiph 26. Does | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation 5 the COC or field labels indicate the samples were press sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix is the sample have more than one phase, i.e., multiphase? | nation: erved? als? | NA NA Yes Yes No No No No No | | |
| 14. Are a 15. Are v 16. Is the 17. Was 18. Are u 19. Is the Field La 20. Were Sample 21. Does 22. Are s 24. Is lat Multiph 26. Does 27. If yet | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation a the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix s the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyzed | nation: erved? als? | NA NA Yes Yes No No No NA | | |
| 14. Are a 15. Are v 16. Is the 17. Was 18. Are u 19. Is the Field La 20. Were S 20. Were 21. Does 22. Are s 24. Is lat Multiph 26. Does 27. If ye: | aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation 5 the COC or field labels indicate the samples were press sample(s) correctly preserved? o filteration required and/or requested for dissolved met ase Sample Matrix is the sample have more than one phase, i.e., multiphase? | nation: erved? als? o | NA NA Yes Yes No No No No No | | |

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



envirotech Inc.

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5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Mack Energy

Project Name:

Thunderbay

Work Order: E203109

Job Number: 20046-0001

Received: 3/18/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 3/22/22

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. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 3/22/22

Natalie Gladden 7 W. Compress Road Artesia, NM 88210

Project Name: Thunderbay Workorder: E203109 Date Received: 3/18/2022 8:15:00AM

Natalie Gladden,



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Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/18/2022 8:15:00AM, under the Project Name: Thunderbay.

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

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

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

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

Respectfully,

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

Field Offices:

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

| | | Sample Sum | mary | | |
|--|---------------|--|---|----------|---------------------------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | Thunderbay 20046-0001 Natalie Gladden | | Reported: 03/22/22 16:34 |
| · · · · · · · · · · · · · · · · · · · | | | | | 05/22/22 10:51 |
| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
| Comp 18 | E203109-01A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 19 | E203109-02A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 20 | E203109-03A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 21 | E203109-04A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 22 | E203109-05A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 23 | E203109-06A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 24 | E203109-07A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 42 | E203109-08A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 46 | E203109-09A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 51 | E203109-10A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 65 | E203109-11A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 69 | E203109-12A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 70 | E203109-13A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 71 | E203109-14A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 76 | E203109-15A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| Comp 91 | E203109-16A | Soil | 03/17/22 | 03/18/22 | Glass Jar, 4 oz. |
| | | | | | |



| | | ampic D | | | | |
|--|---|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbe Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/22/2022 4:34:14PM |
| | | Comp 18 | | | | |
| | | E203109-01 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Anal | yst: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.0 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Anal | yst: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Anal | yst: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 133 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Anal | yst: RAS | | Batch: 2212083 |
| Chloride | 27.5 | 20.0 | 1 | 03/18/22 | 03/21/22 | |

Sample Data



Sample Data

| | | ampic D | uta | | | |
|--|--|------------|------------------------------------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/22/2022 4:34:14PM |
| | | Comp 19 | | | | |
| | | E203109-02 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.3 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 100 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | | Batch: 2212079 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 120 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2212083 |
| Chloride | 24.1 | 20.0 | 1 | 03/18/22 | 03/21/22 | |



Sample Data

| | 5 | ample D | ala | | | |
|--|--------------|------------|--------------|------------|----------------|---------------------|
| | Project Name | | nderbay | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | ılie Gladden | | | 3/22/2022 4:34:14PM |
| | | Comp 20 | | | | |
| | | E203109-03 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Ana | llyst: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.4 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analyst: IY | | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.3 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Ana | | Batch: 2212079 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 109 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Ana | ılyst: RAS | | Batch: 2212083 |
| Chloride | 24.6 | 20.0 | 1 | 03/18/22 | 03/21/22 | |



Sample Data

| | 5 | ampic D | ata | | | | |
|--|--|------------|------------------------------------|----------|----------|---|--|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 1lie Gladden | | | Reported: 3/22/2022 4:34:14PM | |
| | | Comp 21 | | | | | |
| | | E203109-04 | | | | | |
| | | Reporting | | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes | |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | st: IY | | Batch: 2212077 | |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.3 % | 70-130 | 03/18/22 | 03/19/22 | | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2212077 | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 98.6 % | 70-130 | 03/18/22 | 03/19/22 | | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | nhalogenated Organics by EPA 8015D - DRO/ORO mg/kg mg/kg Analyst: JL | | | | | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | | |
| Surrogate: n-Nonane | | 98.0 % | 50-200 | 03/18/22 | 03/21/22 | | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2212083 | |
| Chloride | 35.9 | 20.0 | 1 | 03/18/22 | 03/21/22 | | |
| | | | | | | | |

Sample Data

| | D | ampic D | ala | | | |
|--|---|------------|------------------------------------|----------------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numbo Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/22/2022 4:34:14PM |
| | | Comp 22 | | | | |
| | | E203109-05 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.3 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.5 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | Batch: 2212079 | | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 105 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212083 |
| Chloride | 22.8 | 20.0 | 1 | 03/18/22 | 03/21/22 | |
| | | | | | | |



Sample Data

| | D. | ampic D | ala | | | |
|--|---------------|------------|--------------|----------|----------------|---------------------|
| Mack Energy | Project Name: | | nderbay | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | alie Gladden | | | 3/22/2022 4:34:14PM |
| | | Comp 23 | | | | |
| | | E203109-06 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.0 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.4 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | | Batch: 2212079 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 107 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212083 |
| Chloride | 23.1 | 20.0 | 1 | 03/18/22 | 03/21/22 | |
| | | | | | | |



Sample Data

| | D | ample D | ata | | | |
|--|---------------|------------|--------------|----------|----------|---------------------|
| Mack Energy | Project Name | : Thu | nderbay | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | alie Gladden | | | 3/22/2022 4:34:14PM |
| | | Comp 24 | | | | |
| | | E203109-07 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.1 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.5 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | it: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 97.9 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212083 |
| Chloride | 62.2 | 20.0 | 1 | 03/18/22 | 03/21/22 | |



Sample Data

| | D | ampic D | ala | | | |
|--|--|------------|------------------------------------|----------|----------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/22/2022 4:34:14PM |
| | | Comp 42 | | | | |
| | | E203109-08 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 95.0 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.2 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 103 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | :: RAS | | Batch: 2212083 |
| Chloride | 25.3 | 20.0 | 1 | 03/18/22 | 03/21/22 | |
| | | | | | | |



Sample Data

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|--|---|------------|------------------------------------|-------------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name Project Numb Project Manag | er: 2004 | nderbay 46-0001 ılie Gladden | | | Reported: 3/22/2022 4:34:14PM |
| | | Comp 46 | | | | |
| | | E203109-09 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.7 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | Analyst: IY | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.6 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | | Batch: 2212079 | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 97.0 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212083 |
| Chloride | 24.6 | 20.0 | 1 | 03/18/22 | 03/21/22 | |



Sample Data

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|---------------|--|---|---|---|---|---|
| | | • | | | | |
| 5 | | | | | Reported: 3/22/2022 4:34:14PM | |
| Project Manag | ger: Nata | the Gladden | | | 5/22/2022 4.54.14FM | |
| | Comp 51 | | | | | |
| | E203109-10 | | | | | |
| | Reporting | | | | | |
| Result | Limit | Dilution | Prepared | Analyzed | Notes | |
| mg/kg | mg/kg | Analy | rst: IY | | Batch: 2212077 | |
| ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | | |
| ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | | |
| | 94.4 % | 70-130 | 03/18/22 | 03/19/22 | | |
| mg/kg | mg/kg | Analy | vst: IY | | Batch: 2212077 | |
| ND | 20.0 | 1 | 03/18/22 | 03/19/22 | | |
| | 99.1 % | 70-130 | 03/18/22 | 03/19/22 | | |
| mg/kg | mg/kg | Analy | rst: JL | | Batch: 2212079 | |
| ND | 25.0 | 1 | 03/18/22 | 03/21/22 | | |
| ND | 50.0 | 1 | 03/18/22 | 03/21/22 | | |
| | 88.9 % | 50-200 | 03/18/22 | 03/21/22 | | |
| mg/kg | mg/kg | Analy | st: RAS | | Batch: 2212083 | |
| 23.9 | 20.0 | 1 | 03/18/22 | 03/21/22 | | |
| | Project Name Project Numb Project Manag Result mg/kg ND ND ND ND ND ND ND ND ND ND ND ND ND | Project Name: Thu Project Number: 2004 Project Manager: Nata Project Manager: Nata Ecomp 51 E203109-10 E203109-10 Imit Mg/kg Mg/kg Mg/kg Mg/kg MD 0.0250 ND 20.0 gg/kg Mg/kg Mg/kg Mg/kg ND 25.0 ND 50.0 ND 50.0 ND 50.0 S8.9 % | Project Name: Thunderbay Project Namber: 20046-0001 Project Manager: Natalie Gladden E203109-10 Result Dilution Result Limit Dilution mg/kg mg/kg Analy ND 0.0250 1 ND 20.0 1 mg/kg mg/kg Analy ND 20.0 1 MD 25.0 1 ND 50.0 1 ND 50.0 1 ND 50.200 1 MB/kg Mg/kg <td< td=""><td>I hunderbay Project Name: 20046-0001 Project Manager: Natalie Gladden I state Gladden <th co<="" td=""><td>Project Number: $20046-0001$ Project Manager: Natalie Gladden Ecomp 51 Economous E203109-10 Economous Result Limit Dilution Prepared Analyzed Mg/kg mg/kg Analyzed Malie Malie Malie ND 0.0250 1 03/18/22 03/19/22 ND 20.0 1 03/18/22 03/19/22 MD 25.0 1 03/18/22 <th< td=""></th<></td></th></td></td<> | I hunderbay Project Name: 20046-0001 Project Manager: Natalie Gladden I state Gladden <th co<="" td=""><td>Project Number: $20046-0001$ Project Manager: Natalie Gladden Ecomp 51 Economous E203109-10 Economous Result Limit Dilution Prepared Analyzed Mg/kg mg/kg Analyzed Malie Malie Malie ND 0.0250 1 03/18/22 03/19/22 ND 20.0 1 03/18/22 03/19/22 MD 25.0 1 03/18/22 <th< td=""></th<></td></th> | <td>Project Number: $20046-0001$ Project Manager: Natalie Gladden Ecomp 51 Economous E203109-10 Economous Result Limit Dilution Prepared Analyzed Mg/kg mg/kg Analyzed Malie Malie Malie ND 0.0250 1 03/18/22 03/19/22 ND 20.0 1 03/18/22 03/19/22 MD 25.0 1 03/18/22 <th< td=""></th<></td> | Project Number: $20046-0001$ Project Manager: Natalie Gladden Ecomp 51 Economous E203109-10 Economous Result Limit Dilution Prepared Analyzed Mg/kg mg/kg Analyzed Malie Malie Malie ND 0.0250 1 03/18/22 03/19/22 ND 20.0 1 03/18/22 03/19/22 MD 25.0 1 03/18/22 <th< td=""></th<> |



Sample Data

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|--|-----------------|------------|------------------------------------|---|----------|----------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Number: | | nderbay 46-0001 ılie Gladden | Reported: 3/22/2022 4:34:14PM | | |
| | | Comp 65 | | | | |
| | | E203109-11 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Batch: 2212077 | | |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| thylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| oluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| -Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| ,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| urrogate: 4-Bromochlorobenzene-PID | | 94.2 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | Analyst: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| urrogate: 1-Chloro-4-fluorobenzene-FID | | 99.1 % | 70-130 | 03/18/22 | 03/19/22 | |
| onhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | :: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| urrogate: n-Nonane | | 102 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | : RAS | | Batch: 2212083 |
| Chloride | 24.8 | 20.0 | 1 | 03/18/22 | 03/21/22 | |
| | | | | | | |



Sample Data

| | D | ampic D | ala | | | |
|--|--|------------|------------------------------------|---|----------|----------------|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name: Project Number: Project Manager: | | nderbay 46-0001 ılie Gladden | Reported: 3/22/2022 4:34:14PM | | |
| | | Comp 69 | | | | |
| | | E203109-12 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | Batch: 2212077 | | |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/19/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.0 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | Analyst: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/19/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.4 % | 70-130 | 03/18/22 | 03/19/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 102 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212083 |
| Chloride | 25.6 | 20.0 | 1 | 03/18/22 | 03/21/22 | |
| | | | | | | |



Sample Data

| | | ampic D | ata | | | |
|--|---|------------|----------|----------|----------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | Project Name:ThunderbayProject Number:20046-0001Project Manager:Natalie Gladden | | | | | Reported: 3/22/2022 4:34:14PM |
| | | Comp 70 | | | | |
| | | E203109-13 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analys | | Batch: 2212077 | |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| p,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/20/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.8 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | st: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.1 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | st: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | st: RAS | | Batch: 2212083 |
| Chloride | 27.0 | 20.0 | 1 | 03/18/22 | 03/21/22 | |
| | | | | | | |



Sample Data

| | | ampic D | | | | |
|--|----------------|------------|----------------|----------|---------------------|----------------|
| Mack Energy | Project Name: | Thu | nderbay | | | |
| 7 W. Compress Road | Project Number | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | ger: Nata | ilie Gladden | | 3/22/2022 4:34:14PM | |
| | | Comp 71 | | | | |
| | | E203109-14 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | zg Analyst: IY | | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/20/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.3 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | t: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 99.8 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | t: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 109 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | t: RAS | | Batch: 2212083 |
| Chloride | 27.0 | 20.0 | 1 | 03/18/22 | 03/21/22 | |



Sample Data

| | D D | ample D | ลเล | | | |
|--|--------------|------------|--------------|----------------|----------|---------------------|
| Mack Energy | Project Name | | nderbay | | | |
| 7 W. Compress Road | Project Numb | | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Mana | ger: Nata | alie Gladden | | | 3/22/2022 4:34:14PM |
| | | Comp 76 | | | | |
| | | E203109-15 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analy | Batch: 2212077 | | |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| p-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/20/22 | |
| Fotal Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 94.2 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analy | vst: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 101 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analy | rst: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 104 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analy | rst: RAS | | Batch: 2212083 |
| Chloride | 24.5 | 20.0 | 1 | 03/18/22 | 03/21/22 | |
| | | | | | | |



Sample Data

| | | ampic D | utu | | | |
|--|---------------|------------|--------------|-------------|---------------------|----------------|
| Mack Energy | Project Name: | Thu | nderbay | | | |
| 7 W. Compress Road | Project Numbe | er: 2004 | 46-0001 | | | Reported: |
| Artesia NM, 88210 | Project Manag | er: Nata | ilie Gladden | | 3/22/2022 4:34:14PM | |
| | | Comp 91 | | | | |
| | | E203109-16 | | | | |
| | | Reporting | | | | |
| Analyte | Result | Limit | Dilution | Prepared | Analyzed | Notes |
| Volatile Organics by EPA 8021B | mg/kg | mg/kg | Analyst: IY | | | Batch: 2212077 |
| Benzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Ethylbenzene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Toluene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| o-Xylene | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| o,m-Xylene | ND | 0.0500 | 1 | 03/18/22 | 03/20/22 | |
| Total Xylenes | ND | 0.0250 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 4-Bromochlorobenzene-PID | | 93.8 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - GRO | mg/kg | mg/kg | Analys | Analyst: IY | | Batch: 2212077 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 03/18/22 | 03/20/22 | |
| Surrogate: 1-Chloro-4-fluorobenzene-F1D | | 100 % | 70-130 | 03/18/22 | 03/20/22 | |
| Nonhalogenated Organics by EPA 8015D - DRO/ORO | mg/kg | mg/kg | Analys | :: JL | | Batch: 2212079 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 03/18/22 | 03/21/22 | |
| Dil Range Organics (C28-C36) | ND | 50.0 | 1 | 03/18/22 | 03/21/22 | |
| Surrogate: n-Nonane | | 106 % | 50-200 | 03/18/22 | 03/21/22 | |
| Anions by EPA 300.0/9056A | mg/kg | mg/kg | Analys | : RAS | | Batch: 2212083 |
| Chloride | 25.5 | 20.0 | 1 | 03/18/22 | 03/21/22 | |



QC Summary Data

| | | QC DI | | ary Data | u. | | | | |
|-------------------------------------|-----------------|----------------------------------|----------------|------------------------|-----------|---------------|-------------|--------------|---------------------|
| Mack Energy 7 W. Compress Road | | Project Name: Project Number: | | hunderbay 0046-0001 | | | | | Reported: |
| Artesia NM, 88210 | | Project Manager: | | latalie Gladden | l | | | | 3/22/2022 4:34:14PM |
| | | Volatile O | rganics | by EPA 802 | 1B | | | | Analyst: IY |
| Analyte | D14 | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | |
| | Result mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | Notes |
| Blank (2212077-BLK1) | | | | | | | Prepared: 0 | 3/18/22 A | nalyzed: 03/19/22 |
| Benzene | ND | 0.0250 | | | | | 1 | | J |
| 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 | 7.40 | 0.0250 | 8.00 | | 92.5 | 70-130 | | | |
| LCS (2212077-BS1) | | | | | | | Prepared: 0 | 3/18/22 A | nalyzed: 03/19/22 |
| Benzene | 4.10 | 0.0250 | 5.00 | | 82.1 | 70-130 | | | |
| Ethylbenzene | 4.53 | 0.0250 | 5.00 | | 90.5 | 70-130 | | | |
| Foluene | 4.54 | 0.0250 | 5.00 | | 90.7 | 70-130 | | | |
| p-Xylene | 4.65 | 0.0250 | 5.00 | | 93.0 | 70-130 | | | |
| p,m-Xylene | 9.21 | 0.0500 | 10.0 | | 92.1 | 70-130 | | | |
| Total Xylenes | 13.9 | 0.0250 | 15.0 | | 92.4 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.54 | | 8.00 | | 94.2 | 70-130 | | | |
| Matrix Spike (2212077-MS1) | | | | Source: | E203109-0 | 01 | Prepared: 0 | 3/18/22 A | nalyzed: 03/19/22 |
| Benzene | 4.08 | 0.0250 | 5.00 | ND | 81.6 | 54-133 | | | |
| Ethylbenzene | 4.53 | 0.0250 | 5.00 | ND | 90.6 | 61-133 | | | |
| Toluene | 4.53 | 0.0250 | 5.00 | ND | 90.6 | 61-130 | | | |
| o-Xylene | 4.66 | 0.0250 | 5.00 | ND | 93.2 | 63-131 | | | |
| p,m-Xylene | 9.23 | 0.0500 | 10.0 | ND | 92.3 | 63-131 | | | |
| Total Xylenes | 13.9 | 0.0250 | 15.0 | ND | 92.6 | 63-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 7.71 | | 8.00 | | 96.4 | 70-130 | | | |
| Matrix Spike Dup (2212077-MSD1) | | | | Source: | E203109-0 | 01 | Prepared: 0 | 3/18/22 A | nalyzed: 03/19/22 |
| Benzene | 3.55 | 0.0250 | 5.00 | ND | 71.0 | 54-133 | 13.9 | 20 | |
| Ethylbenzene | 3.95 | 0.0250 | 5.00 | ND | 78.9 | 61-133 | 13.8 | 20 | |
| | | | 5.00 | ND | 78.9 | 61-130 | 13.8 | 20 | |
| Toluene | 3.95 | 0.0250 | 5.00 | ND | 70.7 | | 1510 | | |
| Toluene o-Xylene | 3.95 4.10 | 0.0250 0.0250 | 5.00 | ND | 82.1 | 63-131 | 12.7 | 20 | |
| | | | | | | | | | |
| o-Xylene | 4.10 | 0.0250 | 5.00 | ND | 82.1 | 63-131 | 12.7 | 20 | |



QC Summary Data

| | | QC B | uIIIII | ll y Dala | | | | | |
|--|-----------------|--|-------------------------|--|--------------------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 20 | hunderbay 0046-0001 atalie Gladden | | | | | Reported: 3/22/2022 4:34:14PM |
| | Noi | nhalogenated C | Organics | by EPA 801 | 5D - Gl | RO | | | 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 (2212077-BLK1) | | | | | | | Prepared: 0 | 3/18/22 A | analyzed: 03/19/22 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.13 | | 8.00 | | 102 | 70-130 | | | |
| LCS (2212077-BS2) | | | | | | | Prepared: 0 | 3/18/22 A | analyzed: 03/19/22 |
| Gasoline Range Organics (C6-C10) | 52.0 | 20.0 | 50.0 | | 104 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.19 | | 8.00 | | 102 | 70-130 | | | |
| Matrix Spike (2212077-MS2) | | | | Source: I | E203109-0 | 01 | Prepared: 0 | 3/18/22 A | analyzed: 03/19/22 |
| Gasoline Range Organics (C6-C10) | 52.5 | 20.0 | 50.0 | ND | 105 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.13 | | 8.00 | | 102 | 70-130 | | | |
| Matrix Spike Dup (2212077-MSD2) | | | | Source: I | E 203109- (| 01 | Prepared: 0 | 3/18/22 A | analyzed: 03/19/22 |
| Gasoline Range Organics (C6-C10) | 53.0 | 20.0 | 50.0 | ND | 106 | 70-130 | 0.989 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.06 | | 8.00 | | 101 | 70-130 | | | |



QC Summary Data

| | | QC D | u 1 1 1 1 1 1 | aly Data | | | | | |
|--|-----------------|--|-------------------------|---|----------|--------------------|---------------------------------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | Thunderbay 20046-0001 Natalie Gladden | | | | | Reported: 3/22/2022 4:34:14PM |
| | Nonh | alogenated Orga | anics by | y 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 (2212079-BLK1) | | | | | | | Prepared: 0 | 3/18/22 A | Analyzed: 03/21/22 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| Surrogate: n-Nonane | 51.2 | | 50.0 | | 102 | 50-200 | | | |
| LCS (2212079-BS1) | | | | | | | Prepared: 0 | 3/18/22 A | Analyzed: 03/21/22 |
| Diesel Range Organics (C10-C28) | 530 | 25.0 | 500 | | 106 | 38-132 | | | |
| Surrogate: n-Nonane | 67.7 | | 50.0 | | 135 | 50-200 | | | |
| Matrix Spike (2212079-MS1) | | | | Source: E203109-11 | | | Prepared: 03/18/22 Analyzed: 03/21/22 | | |
| Diesel Range Organics (C10-C28) | 516 | 25.0 | 500 | ND | 103 | 38-132 | | | |
| Surrogate: n-Nonane | 62.7 | | 50.0 | | 125 | 50-200 | | | |
| Matrix Spike Dup (2212079-MSD1) | | | | Source: F | 203109- | 11 | Prepared: 0 | 3/18/22 A | Analyzed: 03/21/22 |
| Diesel Range Organics (C10-C28) | 522 | 25.0 | 500 | ND | 104 | 38-132 | 1.18 | 20 | |
| Surrogate: n-Nonane | 63.3 | | 50.0 | | 127 | 50-200 | | | |



QC Summary Data

| | | $\chi \sim \sim$ | | | • | | | | |
|--|-----------------|--|-------------------------|---|-----------|--------------------|-------------|-------------------|---|
| Mack Energy 7 W. Compress Road Artesia NM, 88210 | | Project Name: Project Number: Project Manager: | 2 | hunderbay 0046-0001 Jatalie Gladden | | | | | Reported: 3/22/2022 4:34:14PM |
| | | Anions | by EPA | 300.0/9056A | | | | | 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 |
| | | | | | 70 | 70 | 70 | 70 | 10005 |
| Blank (2212083-BLK1) | | | | | | | Prepared: 0 | 3/18/22 | Analyzed: 03/21/22 |
| Chloride | ND | 20.0 | | | | | | | |
| LCS (2212083-BS1) | | | | | | | Prepared: 0 | 3/18/22 | Analyzed: 03/21/22 |
| Chloride | 252 | 20.0 | 250 | | 101 | 90-110 | | | |
| Matrix Spike (2212083-MS1) | | | | Source: l | E203109- | 01 | Prepared: 0 | 3/18/22 | Analyzed: 03/21/22 |
| Chloride | 327 | 20.0 | 250 | 27.5 | 120 | 80-120 | | | |
| Matrix Spike Dup (2212083-MSD1) | | | | Source: l | E203109-(| 01 | Prepared: 0 | 3/18/22 | Analyzed: 03/21/22 |
| Chloride | 315 | 20.0 | 250 | 27.5 | 115 | 80-120 | 3.75 | 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.



| Γ | Mack Energy | Project Name: | Thunderbay | |
|---|--------------------|------------------|-----------------|----------------|
| | 7 W. Compress Road | Project Number: | 20046-0001 | Reported: |
| | Artesia NM, 88210 | Project Manager: | Natalie Gladden | 03/22/22 16:34 |

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

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



Released

Page / of Z

| ent: Ma | all Ener | 21 | | | 1 | Bill To | | 1 | 100 | La | ab Us | se On | ly | 1 | | | TA | AT . | EPA F | rogram |
|--------------|------------------|----------------|----------------------|---|------------|--|---------------------------------|-----------------|-----------------|-------------------|-------------|-------------|----------------|---------------|--------------------|----------|-------------|-----------------|--------------------|------------------|
| oiect: | Thunder B | 4 | | | | Attention: Ess | <u></u> | Lab | WO# | | ~ | | Num | | 1D | 2D | 3D | Standa | d CWA | SDWA |
| piect M | lanager: |) | | | | Address: 2721 N CR | | Eá | 203 | 510 | 9 | 200 | 46 | -000 | | X | | | | |
| dress: | | | | | | City, State, Zip Hobs, Mm | | | - | | | Analy | sis ar | nd Method | ł | _ | | | - | RCRA |
| , State | e, Zip | | | | | Phone: | | | | | | | 1.0 | - | | | | and a | 2 | |
| ne: | | | | | | Email: Notalie | | 015 | 015 | | | | - | £ | 1.00 | | | - | State | 1-1 |
| ail: | | | | | | | | by 8 | by 8 | 121 | 60 | 0 | 0.00 | | WN | | | NM | CO UT AZ | IX |
| ort du | ue by: | | | | | | 1 | ORO | ORO | oy 80 | y 82 | s 601 | de 3 | | | TX | | C | | |
| ime npled | Date Sampled | Matrix | No. of Containers | Sample ID | | | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | ВТЕХ by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | BGDOC | BGDOC | | | Remark | 5 |
| | 3-17 | 5 | 1 | Comp 18 | | | 1 | | | | | | | | X | - | | | | |
| | - | 2 | | Comp 19 | | | 2 | | | | | | | | 1 | | 1.1 | | | |
| | | | | | | | 3 | | 1 | | | | | | | | | | | |
| | | | | Comp 20 | | | 11 | | | - | | | | | 5 | | | | | |
| _ | | | | Comp 21 | | | 9 | - | - | | - | - | - | | $\left(- \right)$ | - | - | | | |
| | | | | Comp 22 | | | 5 | - | _ | | | - | - | | | | - | | | |
| | | | | Comp 23 | | | 6 | | | | | | - | | | | | | | 121 |
| | | | | Comp 24 | | | 7 | | | | | | | | | | 1 | | | |
| | | | | Comp 42 | | | 8 | | | | | | | | | | | | | |
| | | | | | | | 9 | | | | | | | | | | | | | |
| | | | 1 | Comp 46 | | | 10 | | 1 | | | | | | 1 | | 1 | | | |
| ditio | nal Instru | ctions: | | Comp 51 | | | 10 | | - | L | 1 | - | | | C | I | 1 | | | |
| | | | v and authe | nticity of this same | le. Lama | aware that tampering with or intentionally mislab | elling the samp | le locat | tion, | | | | | | | | | | e day they are sam | pled or received |
| e or tim | e of collection | nts consider | ed fraud and | d may be grounds f | or legal a | ction. Sampled by | 02 | 2 | | | | packe | ed in ice | at an avg tem | p above | 0 but le | ess than | 6 °C on subsequ | ent days. | |
| | hed by: (Sign | | Da | te / / Ti | me 2:30 | Received by: (Signature) | Date 3-17- | 22 | Time | 14: | 30 | Red | reiver | d on ice: | | ab U | lse Or N | nly | | |
| | hed by: (Sigr | | Da | te Ti | me | Received by: (Signature) | Date 3/18 | | Time | 2 | 5 | | | | | | | <u></u> | | |
| linguis | bed by: (Sig | nature) | Da | and the second se | /73 me | Received by: (Signature) | Date | 100 | Time | *10 | | | | | | | | | | |
| U | | | | | | | | | | | | | | mp°C_ | | | | lan | | - |
| mple Ma | atrix: S - Soil, | Sd - Solid, Sg | - Sludge, A | - Aqueous, O - Oth | er | | Contain | er Typ | be:g- | glass | , p - I | poly/ | olastic | c, ag - amb | per gla | ass, v | - VOA | | | |
| ote: Sar | mples are di | scarded 30 | days after | results are reports received by the | ted unle | ess other arrangements are made. Hazardon ory with this COC. The liability of the laborat | us samples wi ory is limited | to the | eturne amou | d to c int pai | | | | | | | | | | |
| inples | applicable | only to the | oc sumple | c. courter of the | | | | | | | | - | > | | 5 | 1.5.6 | | | te | 1 |

Relation

Page $\underline{2}$ of $\underline{2}$

| ont. M | Wh Eners | 1 | | | | Bill T | 0 | 165 | | La | b Us | e On | ly | 200 | | | TA | T | | EPA P | rogram |
|---------------|-----------------|--------------|----------------------|--------------------|--------------------|--|------------------------------|-----------------|-----------------|--------------|-------------|-------------|----------------|---------------|----------|---------|-------------|----------------|--------------|----------|---------------|
| oiect. | hunder l | Sand | | | Atte | ention: | | Lab | WO# | | | Job | Num | | 1D | 2D, | 3D | Standa | | CWA | SDWA |
| piect N | lanager: |) | | | Add | ress: 2724 N CA | | Ex | WO# | 510 | 9 | | | -0001 | | X | | | | | |
| dress: | | | | | | | | Analy | sis ar | d Metho | d | | | 1.2 | 19 | | RCRA | | | | |
| , Stat | e, Zip | | | | Pho | ne: | | | | | | | | | | | | 1 | | | |
| one: | | | | | Ema | ail: Natalie | | 015 | 015 | 1.1 | | | | ē. | 1 | | | NINA | | State | TVI |
| ail: | | | | | \$ 34 m | | | by 8 | by 8 | 021 | 60 | 10 | 00.0 | | WN | X | | | CO U | I AZ | TX |
| port d | ue by: | | | 1 | 1. 1 | | Lab | ORO | DRO | by 8 | oy 82 | ls 60 | ide 3 | | | | | 1 | | 1.7 | |
| fime mpled | Date Sampled | Matrix | No. of Containers | Sample ID | | | Numbe | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | | BGDOC | BGDOC | | | Re | emarks | |
| | 3-17 | 5 | l | Comp 6! | 5 | | 11 | - | | | | | | | (| | | | | | |
| | X | 1 | | Comp 6° | 1 | | 12 | | 7 | | | 1-1 | | | | | | | | | |
| | | | | Cong 70 | | | 13 | | | | | | | C III | | | | | | | |
| | | | | | 1 | | 14 | 1 | | | | | | | | | | | | | |
| | | | | Comp 71 | | | 15 | | | | | | | | 5 | | | | | | |
| | | | | Comp 70 Comp 91 | | | 16 | | | | | | | | X | | | | | | × |
| | | | | Comp 911 | | | 8.3 | | | | | | | | | | | | | | |
| | | | | | | | 101 | | - | | | | - | | | | - | | | | |
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| | | | | - | | | | 74 | - | - | - | - | - | | 1 | | - | | | | |
| 1.1 | 11 | | | | | | | | | | | | | | _ | | | | | | |
| | nal Instru | | | | | that tampering with or inten | tionally midthelling the cam | | tion | | | Samp | les requ | ring thermal | preserva | ation m | ust be re | ceived on ice | the day they | are samp | ed or receive |
| | | | | | s for legal action | | | | | | | packe | ed in ice | at an avg tem | np above | 0 but l | ess than | 6 °C on subsec | uent days. | | |
| | hed by: (Sign | | Dat | | Time 2'30 | Received by: Signature | John 3.17 | 1.22 | Time | 143 | 20 | Rec | eive | l on ice: | | ab U | lse Or N | ly | | | |
| elinquis | hed by: (Sigr | nature) | Dat | | Time 1730 | Received by: (Signature | tu Date 3/18 | 1 | Time | - | - | T1 | | | T2 | | | Т3 | | | |
| elinquis | hed by: (Sig | nature) | Dat | | Time | Received by: (Signature | | | Time | | | 4 | G Ter | np °C 4 | 1 | | | | 1 | | |
| | atalia C. Call | ed colid for | - Sludge A | Aqueous, O - C | ther | | Contair | ner Tvr | be: g - | glass | , p - r | poly/r | olastic | , ag - ami | ber gla | ass, v | - VOA | | | | |
| ote: Sa | moles are di | scarded 30 | days after | results are rep | orted unless of | ther arrangements are mad with this COC. The liability of | le. Hazardous samples v | ill be re | eturne | d to c | lient o | or disp | osed o | of at the cli | ient ex | pense | . The | report for t | | | |

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

| Client: | Mack Energy | Date Received: | 03/18/22 08 | 8:15 | Work Order ID: E203109 |
|------------|---|--------------------------|-------------|------------------|--------------------------------------|
| Phone: | (575) 390-6397 | Date Logged In: | 03/17/22 14 | 4:59 | Logged In By: Caitlin Christian |
| Email: | Natalie@energystaffingllc.com | Due Date: | 03/21/22 1 | 7:00 (1 day TAT) | |
| Chain o | f Custody (COC) | | | | |
| 1. Does | the sample ID match the COC? | | Yes | | |
| 2. Does | the number of samples per sampling site location ma | atch the COC | Yes | | |
| 3. Were | samples dropped off by client or carrier? | | Yes | Carrier: C | 'ourrier |
| 4. Was th | he COC complete, i.e., signatures, dates/times, reque | ested analyses? | No | | |
| 5. Were | all samples received within holding time? Note: Analysis, such as pH which should be conducted i.e, 15 minute hold time, are not included in this disucss | | Yes | _ | Comments/Resolution |
| Sample | <u>Turn Around Time (TAT)</u> | | | | |
| 6. Did th | ne COC indicate standard TAT, or Expedited TAT? | | Yes | | Time sampled and project manager not |
| Sample | Cooler | | | | provided on the coc. |
| 7. Was a | sample cooler received? | | Yes | | |
| 8. If yes, | , was cooler received in good condition? | | Yes | | |
| 9. Was tl | he sample(s) received intact, i.e., not broken? | | Yes | | |
| 10. Were | e custody/security seals present? | | No | | |
| 11. If ye | s, were custody/security seals intact? | | NA | | |
| 12. Was t | the sample received on ice? If yes, the recorded temp is 4°C Note: Thermal preservation is not required, if samples a minutes of sampling | | Yes | | |
| 13. If no | visible ice, record the temperature. Actual sampl | e temperature: <u>4°</u> | <u>C</u> | | |
| Sample | Container | - <u> </u> | | | |
| | aqueous VOC samples present? | | No | | |
| | VOC samples collected in VOA Vials? | | NA | | |
| 16. Is the | e 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 1 | non-VOC samples collected in the correct container | 5? | Yes | | |
| 19. Is the | appropriate volume/weight or number of sample conta | iners collected? | Yes | | |
| Field La | abel | | | | |
| 20. Were | e field sample labels filled out with the minimum inf | ormation: | | | |
| | Sample ID? | | Yes | | |
| | Date/Time Collected? | | No | • | |
| | Collectors name? Preservation | | No | | |
| | s the COC or field labels indicate the samples were t | preserved? | No | | |
| | sample(s) correctly preserved? | | NA | | |
| | b filteration required and/or requested for dissolved i | metals? | No | | |
| | ase Sample Matrix | | | | |
| | s the sample have more than one phase, i.e., multiph | ase? | No | | |
| | s, does the COC specify which phase(s) is to be ana | | NA | | |
| | tract Laboratory | - | | | |
| Subcom | | 0 | No | | |
| | samples required to get sent to a subcontract laborat | ory? | INO | | |
| 28. Are s | samples required to get sent to a subcontract laborat a subcontract laboratory specified by the client and | | | Subcontract Lab | : na |

C

envirotech Inc.

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

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SITE PHOTOS











Mar 23, 2022 at 8:23:22 AM +33.002317,-104.057105 Lake Arthur NM 88253 United States Mack Energy Thunder Bay











| Received by OCD: 6/15 | /2022 4:07:07 PA | 1 | Page | 50 |
|--|--|------|--|----|
| If you have any questions or concerns, please let me know. Sincerely, | DOR: 8/20/18 API NO: 30-005-64308 RP NO: 2RP-4955 INCIDENT ID: NMAP1825441890 | All, | Natalie Gladden From: Sent: To: Subject: Importance: Tracking: | |
| ncerns, please let me know. 1 | DOR: 8/20/18 API NO: 30-005-64308 RP NO: 2RP-4955 INCIDENT ID: NMAP1825441890 | | Natalie Gladden Sunday, April 3, 2022 12:00 PM CFO_Spill, BLM_NM; ocduriline; emmrd, EMNRD, Hannlet, Rubert, EMNRD, Annus, James A, Hensley, Chad, EMNRD, Brat.lner, Mike, EMNRD; ocdoniline, emmrd, EMNRD NOTTIFICATION High Recipien CFO_Spill BLM_NM GroSpill BLM_NB Arens, amer, EMNRD Hanlet, Rubert, EMNRD Hanlet, Rubert, EMNRD Hensley, Chad, EMNRD Hensley, Chad, EMNRD Annus, James A Hensley, Chad, EMNRD Hensley, Chad, EMNRD Annus, James A Hensley, Chad, EMNRD Hensley, Chad, EMNRD Bracher, Mike, EMNRD Annus, James A | |

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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: <u>natalie@energystaffinglle.com</u>



2

Bamert Seed Company Inc.

 1897 CR 1018 Muleshoe, TX 79347
 (800) 262-9892
 Permit # TX00905

 BLM # 3 Shallow Sites
 Lot/Sales # SO-75021

| Kind & Variety | Pure Seed | Germ | Dormant | Hard Seed | Origin |
|---|-----------|-------------|---------|-----------|----------------|
| Bristlegrass Plains, (Setaria vulpiseta) | 12.74% | 11.00% | 77.00% | 0.00% | OK |
| Grama, Sideoats "Vaughn" (Bouteloua curtipendula) | 60.94% | 47.00% | 45.00% | 0.00% | ТХ |
| Green Sprangletop, "Van Horn" (Leptochloa dubia) | 22.88% | 87.00% | 11.00% | 0.00% | ТХ |
| Purity: 96.56% Inert Matter: 3.40% | Other C | Crop Seed: | 0.00% | Weed S | Seed: 0.01% |
| Noxious Weed Seed Per/Lb: None | Test | Date: 03/20 | 22 | | Net Wt: 25 lbs |



Page 3

State of New Mexico

Oil Conservation Division

| Page | 505 o | f 508 |
|------|-------|-------|
|------|-------|-------|

| Incident ID | |
|----------------|--|
| District RP | |
| Facility ID | |
| Application ID | |

Site Assessment/Characterization

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? | <u>125'</u> (ft bgs) |
|---|----------------------|
| Did this release impact groundwater or surface water? | 🗌 Yes 🛛 No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | 🗌 Yes 🖾 No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | 🗌 Yes 🛛 No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | 🗌 Yes 🛛 No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | 🗋 Yes 🔀 No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | 🗌 Yes 🛛 No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | 🗌 Yes 🛛 No |
| Are the lateral extents of the release within 300 feet of a wetland? | 🗌 Yes 🛛 No |
| Are the lateral extents of the release overlying a subsurface mine? | 🗌 Yes 🛛 No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | 🛛 Yes 🗌 No |
| Are the lateral extents of the release within a 100-year floodplain? | 🗌 Yes 🛛 No |
| Did the release impact areas not on an exploration, development, production, or storage site? | 🗌 Yes 🛛 No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
 Field data
- Data table of soil contaminant concentration data
- \boxtimes Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

| Received by OCD: 6/15/2 | 2022 4:07:07 PM State of New Mexico | | Page 506 of 50 |
|---|--|---|-------------------------------------|
| Form C-141 | | Incident ID | |
| Page 4 | Oil Conservation Division | District RP | |
| | | Facility ID | |
| | | Application ID | |
| public health or the envir failed to adequately invest | alie Grladden Date: 4 | relieve the operator of liability should thei vater, surface water, human health or the er for compliance with any other federal, sta | r operations have nvironment. In |
| Received by: | Dat | e: | |

State of New Mexico Oil Conservation Division

| Incident ID | |
|----------------|--|
| District RP | |
| Facility ID | |
| Application ID | |

Closure

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 (electronic submittals in .pdf format are preferred) 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.

| | Environmental and Regulatory Date: <u>(98/22</u> |
|---|--|
| email: <u>natalie@energystaffingllc.com</u> Telephone | :: <u>575-390-6397</u> |
| | |
| OCD Only | |
| Received by: | Date: |
| Closure approval by the OCD does not relieve the responsible party or remediate contamination that poses a threat to groundwater, surface w party of compliance with any other federal, state, or local laws and/or | of liability should their operations have failed to adequately investigate and vater, human health, or the environment nor does not relieve the responsible r regulations. |
| Closure Approved by: Buttan Hall | Date: 9/30/2022 |
| Printed Name: Brittany Hall | Title. Environmental Specialist |

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

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

District III

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

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

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

CONDITIONS

| Operator: | OGRID: |
|-----------------------|---|
| MACK ENERGY CORP | 13837 |
| P.O. Box 960 | Action Number: |
| Artesia, NM 882110960 | 117680 |
| | Action Type: |
| | [C-141] Release Corrective Action (C-141) |

CONDITIONS

| - | | |
|---------|--|-----------|
| Created | Condition | Condition |
| By | | Date |
| bhall | Closure approved. 2RP-4955 closed. Requires closure approval from the BLM. | 9/30/2022 |

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Action 117680