


LABORATORY SERVICES
Natural Gas Analysis
www.permianls.com

575.397.3713 2609 W Marland Hobbs NM 88240

For: Mewbourne Oil Company
 Attention: Mikey Smith
 P. O. Box 5270
 Hobbs, New Mexico 88241

Sample: Sta# 57566
 Identification: El Mar 21 W0DM (CDP)
 Company: Mewbourne
 Lease:
 Plant:

Sample Data: Sample Date: 5/3/2018
 Analysis Date: 5/7/2018
 Sample Temp: 99 F
 Sample Press.: 107 PSIA

Sampled by: Mikey Smith
 Analysis by: Vicki McDaniel
 Atmos Temp: 77 F
 Sample Time: 11:30 AM

H2S =

Press. Base: 14.65

Component Analysis

| | | Mol Percent | GPM Real | GPM Ideal |
|------------------|-----|----------------|--------------|--------------|
| Hydrogen Sulfide | H2S | | | |
| Nitrogen | N2 | 1.107 | | |
| Methane | C1 | 72.555 | | |
| Carbon Dioxide | CO2 | 0.127 | | |
| Ethane | C2 | 14.066 | 3.740 | 3.752 |
| Propane | C3 | 7.224 | 1.979 | 1.985 |
| I-Butane | IC4 | 0.816 | 0.266 | 0.266 |
| N-Butane | NC4 | 2.200 | 0.690 | 0.692 |
| I-Pentane | IC5 | 0.453 | 0.163 | 0.165 |
| N-Pentane | NC5 | 0.550 | 0.237 | 0.199 |
| Hexanes Plus | C6+ | <u>0.902</u> | <u>0.389</u> | <u>0.390</u> |
| | | 100.000 | 7.464 | 7.449 |

REAL BTU/CU.FT.

At 14.65 1348.7 Dry
 1326.6 Wet

At 14.696 1353.0 Dry
 1330.8 Wet

At 14.73 1356.1 Dry
 1333.9 Wet

Specific Gravity:

Calculated $\frac{(\text{Real})}{(\text{Ideal})} = \frac{0.788}{0.785}$

Remarks:

Mewbourne Oil Company

Natural Gas Flared Calculation Methodology

Metering low-pressure gas diverted from the Vapor Recovery Unit ("VRU") to backup flare is not technologically feasible. Gas volumes for VRU downtime events will be calculated using an average metered VRU gas to oil production ratio. This GOR is derived from available relevant data.

Average Metered VRU Gas to Oil Production GOR = 0.18 Mcf/BBL

Flared gas volume = GOR * Oil Production Volume (BBL)

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

QUESTIONS

Action 29699

QUESTIONS

| | |
|---|--|
| Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241 | OGRID: 14744 Action Number: 29699 Action Type: [C-129] Venting and/or Flaring (C-129) |
|---|--|

QUESTIONS**Determination of Reporting Requirements**

Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.

| | |
|--|---|
| Was or is this venting or flaring caused by an emergency or malfunction | Yes |
| Did or will this venting or flaring last eight hours or more cumulatively within any 24-hour period from a single event | Yes |
| Is this considered a submission for a notification of a major venting or flaring | Yes, minor venting or flaring of natural gas. |
| The operator shall file a form C-141 instead of a form C-129 for a release that includes liquid during venting or flaring that is or may be a major or minor release under 19.13.29.7 NMAC. | |
| Was there or will there be at least 50 MCF of natural gas vented or flared during this event | Yes |
| Did this venting or flaring result in the release of ANY liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water | No |

Unregistered Facility Site

Please provide the facility details, if the venting or flaring occurred or is occurring at a facility that does not have an Facility ID (##) yet.

| | |
|-----------------------|---------------------------------------|
| Facility or Site Name | EL MAR 21 WODM FEDERAL COM #2 BATTERY |
| Facility Type | Tank Battery - (TB) |

Equipment Involved

| | |
|---|-----------------|
| Primary Equipment Involved | Other (Specify) |
| Additional details for Equipment Involved. Please specify | VRU |

Representative Compositional Analysis of Vented or Flared Natural Gas

Please provide the mole percent for the percentage questions in this group.

| | |
|--|---------------|
| Methane (CH4) percentage | 73 |
| Nitrogen (N2) percentage, if greater than one percent | 1 |
| Hydrogen Sulfide (H2S) PPM, rounded up | 0 |
| Carbon Dioxide (CO2) percentage, if greater than one percent | 0 |
| Oxygen (O2) percentage, if greater than one percent | 0 |
| If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas. | |
| Methane (CH4) percentage quality requirement | Not answered. |
| Nitrogen (N2) percentage quality requirement | Not answered. |
| Hydrogen Sulfide (H2S) PPM quality requirement | Not answered. |
| Carbon Dioxide (CO2) percentage quality requirement | Not answered. |
| Oxygen (O2) percentage quality requirement | Not answered. |

Date(s) and Time(s)

| | |
|---|------------|
| Date venting or flaring was discovered or commenced | 05/25/2021 |
| Time venting or flaring was discovered or commenced | 08:00 AM |
| Is the venting or flaring event complete | Yes |
| Date venting or flaring was terminated | 05/25/2021 |
| Time venting or flaring was terminated | 08:00 PM |
| Total duration of venting or flaring in hours, if venting or flaring has terminated | 12 |
| Longest duration of cumulative hours within any 24-hour period during this event | 12 |

Measured or Estimated Volume of Vented or Flared Natural Gas

| | |
|--|--|
| Natural Gas Vented (Mcf) Details | Not answered. |
| Natural Gas Flared (Mcf) Details | Cause: Repair and Maintenance Production Tank Natural Gas Flared Spilled: 56 Mcf Recovered: 0 Mcf Lost: 56 Mcf] |
| Other Released Details | Not answered. |
| Additional details for Measured or Estimated Volume(s). Please specify | volume calculated |
| Is this a gas only submission (i.e. only Mcf values reported) | Yes, according to supplied volumes this appears to be a "gas only" report. |

Venting or Flaring Resulting from Downstream Activity

| | |
|--|---------------|
| Was or is this venting or flaring a result of downstream activity | Not answered. |
| Date notified of downstream activity requiring this venting or flaring | Not answered. |
| Time notified of downstream activity requiring this venting or flaring | Not answered. |

Steps and Actions to Prevent Waste

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|--|---|
| For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control. | True |
| Please explain reason for why this event was beyond your operator's control | VRU malfunctioned, gas was diverted to backup flare. |
| Steps taken to limit the duration and magnitude of venting or flaring | Repaired VRU |
| Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring | Continued routine preventative maintenance and daily operational inspections. |

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CONDITIONS

Action 29699

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| | Action Number: 29699 |
| | Action Type: [C-129] Venting and/or Flaring (C-129) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| system | If the information provided in this report requires an amendment, submit a [C-129] Request to Amend Venting and/or Flaring Incident, utilizing your incident number from this event. | 6/9/2021 |