



**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# 62506-000  
Identification: Paduca 7/6 W1ED #2H  
Company: Mewbourne  
Lease:  
Plant:

Sample Data: Sample Date: 3/22/2018  
Analysis Date: 3/28/2018  
Sample Temp: 137 F  
Sample Press.: 270 PSIA

Sampled by: Mikey Smith  
Analysis by: Vicki McDaniel  
Atmos Temp: 72 F  
Sample Time: 1:20 PM

H2S =

Press. Base: 14.73

#### Component Analysis

|                  |     | Mol<br>Percent | GPM<br>Real  | GPM<br>Ideal |
|------------------|-----|----------------|--------------|--------------|
| Hydrogen Sulfide | H2S |                |              |              |
| Nitrogen         | N2  | 0.740          |              |              |
| Methane          | C1  | 75.903         |              |              |
| Carbon Dioxide   | CO2 | 0.094          |              |              |
| Ethane           | C2  | 12.275         | 3.282        | 3.274        |
| Propane          | C3  | 5.962          | 1.642        | 1.638        |
| I-Butane         | IC4 | 0.881          | 0.288        | 0.288        |
| N-Butane         | NC4 | 1.989          | 0.627        | 0.625        |
| I-Pentane        | IC5 | 0.475          | 0.172        | 0.173        |
| N-Pentane        | NC5 | 0.579          | 0.251        | 0.209        |
| Hexanes Plus     | C6+ | <u>1.102</u>   | <u>0.478</u> | <u>0.477</u> |
|                  |     | 100.000        | 6.740        | 6.684        |

REAL BTU/CU.FT.

At 14.65 1326.6 Dry  
1304.9 Wet

At 14.696 1330.8 Dry  
1309.0 Wet

At 14.73 1333.9 Dry  
1312.0 Wet

Specific Gravity:

Calculated  $\frac{(\text{Real})}{(\text{Ideal})} = \frac{0.768}{0.765}$

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 61454

**QUESTIONS**

|   |  |
|---|--|
| Operator:<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 | OGRID:<br>14744  |
|   | Action Number:<br>61454                                |
|   | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS****Prerequisites**

Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.

|                   |  |
|-------------------|--|
| Incident Well     | Not answered.  |
| Incident Facility | [fAPP2125739973] PADUCA 7/6 W1ED FED COM #2H BATTERY |

**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 and/or flaring caused by an emergency or malfunction  | Yes   |
| Did or will this venting and/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 venting and/or flaring event   | Yes, minor venting and/or flaring of natural gas. |
| An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.  |   |
| Was there or will there be at least 50 MCF of natural gas vented and/or flared during this event   | Yes   |
| Did this venting and/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  |
| Was the venting and/or flaring within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence  | No  |

**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                                     | 76 |
| 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 and/or flaring was discovered or commenced | 11/09/2021 |
| Time venting and/or flaring was discovered or commenced | 07:00 AM   |
| Time venting and/or flaring was terminated              | 11:00 PM   |
| Cumulative hours during this event                      | 16         |

**Measured or Estimated Volume of Vented or Flared Natural Gas**

|                                  |               |
|----------------------------------|---------------|
| Natural Gas Vented (Mcf) Details | Not answered. |
|----------------------------------|---------------|

|   |  |
|---|--|
| Natural Gas Flared (Mcf) Details  | Cause: Equipment Failure   Other (Specify)   Natural Gas Flared   Released: 83 Mcf   Recovered: 0 Mcf   Lost: 83 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 significant 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 and/or flaring a result of downstream activity      | Not answered. |
| Was notification of downstream activity received by you or your operator   | Not answered. |
| Downstream OGRID that should have notified you or your operator            | Not answered. |
| Date notified of downstream activity requiring this venting and/or flaring | Not answered. |
| Time notified of downstream activity requiring this venting and/or flaring | Not answered. |

**Steps and Actions to Prevent Waste**

|  |  |
|--|--|
| 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  |
| Steps taken to limit the duration and magnitude of venting and/or flaring  | Repaired VRU   |
| Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring                                     | Continued routine preventive maintenance and daily operational inspections |

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 61454

CONDITIONS

|   |  |
|---|--|
| Operator:<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 | OGRID:<br>14744  |
|   | Action Number:<br>61454                                |
|   | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

CONDITIONS

| Created By | Condition  | Condition Date |
|------------|--|----------------|
| zlacount   | If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event. | 11/12/2021     |