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575.397.3713 2609 W Marland Hobbs NM 88240

## Extended Gas Analysis Report

|                       |                    |                             |                                          |
|-----------------------|--------------------|-----------------------------|------------------------------------------|
| 9684G                 | 62313-000          | Red Hills W. 21 W1AP FC #2H |                                          |
| Sample Point Code     | Sample Point Name  | Sample Point Location       |                                          |
| Laboratory Services   | 2020029675         | 1107                        | J Hernandez - Spot                       |
| Source Laboratory     | Lab File No        | Container Identity          | Sampler                                  |
| USA                   | USA                | USA                         | New Mexico                               |
| District              | Area Name          | Field Name                  | Facility Name                            |
| Feb 20, 2020 11:15    | Feb 20, 2020 11:15 | Feb 21, 2020 15:12          | Feb 24, 2020                             |
| Date Sampled          | Date Effective     | Date Received               | Date Reported                            |
| 41.00                 | BH                 | 135 @ 48                    |                                          |
| Ambient Temp (°F)     | Flow Rate (Mcf)    | Analyst                     | Press PSI @ Temp °F<br>Source Conditions |
| Mewbourne Oil Company |                    |                             | Meter Run                                |
| Operator              |                    |                             | Lab Source Description                   |

| Component              | Normalized Mol % | Un-Normalized Mol % | GPM    |
|------------------------|------------------|---------------------|--------|
| Nitrogen (N2)          | 0.7830           | 0.780019            |        |
| Carbon Dioxide (CO2)   | 0.1160           | 0.115447            |        |
| Hydrogen Sulfide (H2S) | 0.0000           | 0                   |        |
| Methane (C1)           | 77.2150          | 76.930256           |        |
| Ethane (C2)            | 12.6710          | 12.624213           | 3.3880 |
| Propane (C3)           | 5.8140           | 5.792838            | 1.6010 |
| IsoButane (IC4)        | 0.7450           | 0.742631            | 0.2440 |
| n-Butane (NC4)         | 1.5930           | 1.586629            | 0.5020 |
| IsoPentane (IC5)       | 0.2890           | 0.287798            | 0.1060 |
| n-Pentane (NC5)        | 0.3100           | 0.308368            | 0.1120 |
| Hexanes (C6's)         | 0.4640           | 0.463               | 0.1980 |
| TOTAL                  | 100.0000         | 99.6312             | 6.1510 |

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

## Analyzer Information

Device Type: Device Make:  
Device Model: Last Cal Date:

Gross Heating Values (Real, BTU/ft<sup>3</sup>)

|                       |  |                      |
|-----------------------|--|----------------------|
| 14.696 PSI @ 60.00 °F |  | 14.73 PSI @ 60.00 °F |
| Dry                   |  | Dry Saturated        |
| 1,274.5               |  | 1,282.2 1,260.4      |

## Calculated Total Sample Properties

GPA2145-16 \*Calculated at Contract Conditions

|                       |                        |
|-----------------------|------------------------|
| Relative Density Real | Relative Density Ideal |
| 0.7367                | 0.7342                 |
| Molecular Weight      |                        |
| 21.2660               |                        |

## C6+ Group Properties

Assumed Composition

|              |              |              |
|--------------|--------------|--------------|
| C6 - 38.429% | C7 - 33.518% | C8 - 28.053% |
|--------------|--------------|--------------|

Field H2S  
0 PPM

## PROTREND STATUS:

Passed By Validator on Feb 27, 2020

## DATA SOURCE:

Imported

## PASSED BY VALIDATOR REASON:

First sample taken @ this point, composition looks reasonable

## VALIDATOR:

Dustin Armstrong

## VALIDATOR COMMENTS:

OK



## Extended Gas Analysis Report

Sample Point Code - Name @ Location

Operator

9684G - 62313-000 - Red Hills W. 21 W1AP FC #2H

Mewbourne Oil Company

| Component              | Normalized Mol % | Un-Normalized Mol % | GPM    |
|------------------------|------------------|---------------------|--------|
| Nitrogen (N2)          | 0.7830           | 0.780019            |        |
| Carbon Dioxide (CO2)   | 0.1160           | 0.115447            |        |
| Hydrogen Sulfide (H2S) | 0.0000           | 0                   |        |
| Methane (C1)           | 77.2150          | 76.9303             |        |
| Ethane (C2)            | 12.6710          | 12.6242             | 3.3880 |
| Propane (C3)           | 5.8140           | 5.79284             | 1.6010 |
| IsoButane (IC4)        | 0.7450           | 0.742631            | 0.2440 |
| n-Butane (NC4)         | 1.5930           | 1.58663             | 0.5020 |
| IsoPentane (IC5)       | 0.2890           | 0.287798            | 0.1060 |
| n-Pentane (NC5)        | 0.3100           | 0.308368            | 0.1120 |
| Hexanes (C6's)         | 0.1800           | 0.179               | 0.0730 |
| Heptanes (C7's)        | 0.1500           | 0.15                | 0.0610 |
| Octanes (C8's)         | 0.0820           | 0.082               | 0.0400 |
| Nonanes (C9's)         | 0.0180           | 0.018               | 0.0100 |
| Decanes (C10's)        | 0.0040           | 0.004               | 0.0030 |
| Undecanes (C11's)      | 0.0030           | 0.003               | 0.0010 |
| Dodecanes (C12's)      | 0.0000           | 0                   | 0.0000 |

**BTEX**

| Component    | Normalized Mol % | Un-Normalized Mol % | GPM    |
|--------------|------------------|---------------------|--------|
| Benzene      | 0.0060           | 0.006               | 0.0020 |
| Toluene      | 0.0110           | 0.011               | 0.0040 |
| EthylBenzene | 0.0010           | 0.001               | 0.0000 |
| M+P Xylene   | 0.0070           | 0.007               | 0.0030 |
| O Xylene     | 0.0020           | 0.002               | 0.0010 |

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  
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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 54106

**QUESTIONS**

|                                                                   |                                                        |
|-------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 | OGRID:<br>14744                                        |
|                                                                   | Action Number:<br>54106                                |
|                                                                   | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS**

|                                                                                                                                                                    |                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>Prerequisites</b>                                                                                                                                               |                                                             |
| 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                                                                                                                                                  | [fAPP2125643542] RED HILLS WEST 21 W1AP FED COM #2H BATTERY |

|                                                                                                                                                                                                                                                                                              |                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>Determination of Reporting Requirements</b>                                                                                                                                                                                                                                               |                                                   |
| 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                                                |

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

|                                                                                                                               |               |
|-------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>                                                  |               |
| Please provide the mole percent for the percentage questions in this group.                                                   |               |
| Methane (CH4) percentage                                                                                                      | 77            |
| 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. |

|                                                         |            |
|---------------------------------------------------------|------------|
| <b>Date(s) and Time(s)</b>                              |            |
| Date venting and/or flaring was discovered or commenced | 09/27/2021 |
| Time venting and/or flaring was discovered or commenced | 12:00 AM   |
| Time venting and/or flaring was terminated              | 06:00 PM   |
| Cumulative hours during this event                      | 18         |

|                                                                     |               |
|---------------------------------------------------------------------|---------------|
| <b>Measured or Estimated Volume of Vented or Flared Natural Gas</b> |               |
| Natural Gas Vented (Mcf) Details                                    | Not answered. |

|                                                                           |                                                                                                                        |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Natural Gas Flared (Mcf) Details                                          | Cause: Equipment Failure   Other (Specify)   Natural Gas Flared   Released: 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 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 |

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CONDITIONS  
  
Action 54106

CONDITIONS

|                                                                   |                                                        |
|-------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 | OGRID:<br>14744                                        |
|                                                                   | Action Number:<br>54106                                |
|                                                                   | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

CONDITIONS

| Created By | Condition                                                                                                                                                                          | Condition Date |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| zlaount    | 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. | 10/12/2021     |