



|                       |                        |                             |                                          |
|-----------------------|------------------------|-----------------------------|------------------------------------------|
| 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**

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**District IV**

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

QUESTIONS

Action 29860

**QUESTIONS**

|                                                                   |                                                                                                      |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Operator:<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 | OGRID:<br>14744<br>Action Number:<br>29860<br>Action Type:<br>[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. |
| <b>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 19.13.297 NMAC.</b>                                                                                        |                                               |
| 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 | Red Hills West 21 W1AP Fed Com #2H 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                                                                                                             | 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             |
| <b>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</b> |               |
| 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                                 | 05/26/2021 |
| 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                                              | 05/26/2021 |
| 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: Equipment Failure   Other (Specify)   Natural Gas Flared   Spilled: 66 Mcf   Recovered: 0 Mcf   Lost: 66 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**

|  |
|--|
|  |
|--|

|                                                                                                                                |                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 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 malfunction, gas 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 preventive maintenance and daily operational inspections |

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CONDITIONS

Action 29860

**CONDITIONS**

|                                                                   |                                                        |
|-------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 | OGRID:<br>14744                                        |
|                                                                   | Action Number:<br>29860                                |
|                                                                   | Action Type:<br>[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       |