

Field:

Certificate of Analysis

Number: 6030-21030124-006A

Artesia Laboratory 200 E Main St. Artesia, NM 88210 Phone 575-746-3481

Mar. 12, 2021

Chandler Montgomery Occidental Petroleum 1502 W Commerce Dr. Carlsbad, NM 88220

Mesa Verde Sampled By: Javier Lazo

Station Name: Mesa Verde BSU 18H LG Sample Of: Gas Spot
Station Number: 15538I Sample Date: 03/10/2021 09:30
Station Location: OXY Sample Conditions: 1185 psia, @ 89 °F Ambient: 67 °F

Sample Point:Meter RunEffective Date:03/10/2021 09:30Formation:QuarterlyMethod:GPA-2261MCounty:LeaCylinder No:5030-01186

Type of Sample: : Spot-Cylinder Instrument: 70104251 (Inficon GC-MicroFusion)

Heat Trace Used: N/A Last Inst. Cal.: 03/08/2021 0:00 AM

Sampling Method: Fill and Purge Analyzed: 03/12/2021 13:31:22 by EJR

Sampling Company: : SPL

Analytical Data

| Components | Un-normalized Mol % | Mol. % | Wt. % | GPM at 14.65 psia | | |
|--------------------------------|-----------------------------------|------------|---------|----------------------|----------------|-------|
| Hydrogen Sulfide | 0.000 | 0.000 | 0.000 | | GPM TOTAL C2+ | 6.195 |
| Nitrogen | 1.367 | 1.362 | 1.750 | | GPM TOTAL C3+ | 2.934 |
| Methane | 75.196 | 74.948 | 55.148 | | GPM TOTAL iC5+ | 0.331 |
| Carbon Dioxide | 1.568 | 1.563 | 3.155 | | | |
| Ethane | 12.258 | 12.217 | 16.849 | 3.261 | | |
| Propane | 6.378 | 6.357 | 12.857 | 1.748 | | |
| Iso-butane | 0.810 | 0.807 | 2.151 | 0.264 | | |
| n-Butane | 1.884 | 1.878 | 5.006 | 0.591 | | |
| Iso-pentane | 0.325 | 0.324 | 1.072 | 0.118 | | |
| n-Pentane | 0.325 | 0.324 | 1.072 | 0.117 | | |
| Hexanes Plus | 0.221 | 0.220 | 0.940 | 0.096 | | |
| | 100.332 | 100.000 | 100.000 | 6.195 | | |
| Calculated Physical Properties | | To | otal | C6+ | | |
| Relative Density Rea | al Gas | 0.7 | 553 | 3.2176 | | |
| Calculated Molecula | r Weight | 21 | .80 | 93.19 | | |
| Compressibility Factor | | 0.99 | 963 | | | |
| GPA 2172 Calculati | ion: | | | | | |
| Calculated Gross E | BTU per ft ³ @ 14.65 p | sia & 60°F | | | | |
| Real Gas Dry BTU | | | 259 | 5113 | | |
| Water Sat. Gas Base | e BTU | 12 | 237 | 5024 | | |
| Ideal, Gross HV - Dr | y at 14.65 psia | 125 | 3.9 | 5113.2 | | |
| Ideal, Gross HV - W | | 123 | 2.0 | 5023.7 | | |
| Net BTU Dry Gas - real gas | | 1. | 142 | | | |
| Net BTU Wet Gas - real gas | | 1 | 123 | | | |
| Comments: H2S F | Field Content 0 ppm | | | | | |

Comments. H23 Field Content o ppin

Mcf/day 839

- Cy Hatin

Hydrocarbon Laboratory Manager

The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality

assurance, unless otherwise states of the

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Quality Assurance:

Hage 1 of 1

EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: MV 18 CTB

Start Date: 06/30/2021 **End Date:** 06/30/2021

Cause: Preventative Maintenance

Duration of event: 0.2 hours **MCF Volume Flared:** 226

Method of Flared Gas Measurement: Flare Meter

1. Reason why this event was beyond Operator's control:

In this case, the flaring event occurred when a third-party vendor shut down the VRUs at Oxy's MV CTB in order to perform preventative maintenance on the VRU system. Once the maintenance was completed, the VRUs were put into service again and sale gas from the VRU to the gas gathering system was resumed. During the event, OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.

2. Steps Taken to limit duration and magnitude of venting or flaring:

Oxy resumed gas sales to the third-party system as soon as Hybon completed their preventative maintenance on the VRU system at MV 18 CTB. During the shut-in OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.

3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:

This was a routine maintenance event that required the shut-down of the VRU system at the facility.

<u>District I</u> 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

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 42360

QUESTIONS

| Operator: | OGRID: |
|-----------------------|--|
| OXY USA INC | 16696 |
| P.O. Box 4294 | Action Number: |
| Houston, TX 772104294 | 42360 |
| | Action Type: |
| | [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 | [30-015-44549] MESA VERDE BONE SPRING UNIT #018H | |
| Incident Facility | Not answered. | |

| Determination of Reporting Requirements | | | |
|--|---|--|--|
| Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide addional 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 | No | | |
| Is this considered a submission for a notification of a major venting and/or flaring | 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 | emergency flare due to third party issue | |

| 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 (C02) percentage, if greater than one percent | 2 | | |
| Oxygen (02) 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 Sufide (H2S) PPM quality requirement | Not answered. | | |
| Carbon Dioxide (C02) percentage quality requirement | Not answered. | | |
| Oxygen (02) percentage quality requirement | Not answered. | | |

| Date(s) and Time(s) | | |
|---|------------|--|
| Date venting and/or flaring was discovered or commenced | 06/30/2021 | |
| Time venting and/or flaring was discovered or commenced | 12:00 AM | |
| Time venting and/or flaring was terminated | 12:10 AM | |
| Cumulative hours during this event | 0 | |

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

| Natural Gas Flared (Mcf) Details | Cause: Other Other (Specify) Natural Gas Flared Released: 226 Mcf Recovered: 0 Mcf Lost: 226 Mcf] |
|---|--|
| Other Released Details | Not answered. |
| Additional details for Measured or Estimated Volume(s). Please specify | flare meter |
| 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. | |
| 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 | In this case, the flaring event occurred when a third-party vendor shut down the VRUs at Oxy's MV CTB in order to perform preventative maintenance on the VRU system. Once the maintenance was completed, the VRUs were put into service again and sale gas from the VRU to the gas gathering system was resumed. During the event, OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible. | | |
| Steps taken to limit the duration and magnitude of venting and/or flaring | Oxy resumed gas sales to the third-party system as soon as Hybon completed their preventative maintenance on the VRU system at MV 18 CTB. During the shut-in OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible. | | |
| Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring | This was a routine maintenance event that required the shut-down of the VRU system at the facility. | | |

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CONDITIONS

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| P.O. Box 4294 | Action Number: |
| Houston, TX 772104294 | 42360 |
| | Action Type: |
| | [C-129] Venting and/or Flaring (C-129) |

CONDITIONS

| Created By | Condition | Condition Date |
|---------------|--|----------------|
| shelbyschoepf | 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. | 8/16/2021 |