



Certificate of Analysis

Number: 6030-20040126-003A

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

Teresa Edwards
 Marathon Oil Corporation
 4111 S. Tidwell
 Carlsbad, NM 88220

Apr. 20, 2020

| | | | |
|-------------------|--|--------------------|-------------------------------------|
| Station Name: | Black River 374 3,8,10 Facility Gas Sales Allo | Sampled By: | Chris Myers |
| Station Number: | 18355GSA | Sample Of: | Gas Spot |
| Sample Point: | Meter Run | Sample Date: | 04/17/2020 |
| Type of Sample: | Spot-Cylinder | Sample Conditions: | 69.5 psig, @ 87.9 °F Ambient: 57 °F |
| Heat Trace Used: | N/A | Effective Date: | 04/17/2020 |
| Sampling Method: | Fill and Purge | Method: | GPA-2261M |
| Sampling Company: | SPL | Cylinder No: | 5030-00480 |
| Analyzed: | 04/20/2020 11:23:02 by User1 | Instrument: | 6030_GC2 (Agilent 7890B) |
| | | Last Inst. Cal.: | 03/02/2020 9:09 AM |

Analytical Data

| Components | Un-normalized Mol % | Mol. % | Wt. % | GPM at 14.65 psia | | |
|----------------|---------------------|-----------|---------|-------------------|----------------|-------|
| Nitrogen | 1.141 | 1.14683 | 1.488 | | GPM TOTAL C2+ | 6.111 |
| Methane | 76.993 | 77.38611 | 57.498 | | GPM TOTAL C3+ | 3.020 |
| Carbon Dioxide | 0.071 | 0.07136 | 0.145 | | GPM TOTAL iC5+ | 0.693 |
| Ethane | 11.522 | 11.58083 | 16.127 | 3.091 | | |
| Propane | 5.509 | 5.53713 | 11.308 | 1.523 | | |
| Iso-butane | 0.712 | 0.71564 | 1.926 | 0.234 | | |
| n-Butane | 1.803 | 1.81221 | 4.878 | 0.570 | | |
| Iso-pentane | 0.432 | 0.43421 | 1.451 | 0.158 | | |
| n-Pentane | 0.509 | 0.51160 | 1.709 | 0.185 | | |
| Hexanes Plus | 0.800 | 0.80408 | 3.470 | 0.350 | | |
| | 99.492 | 100.00000 | 100.000 | 6.111 | | |

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|---|--------------|------------|
| Calculated Physical Properties | Total | C6+ |
| Relative Density Real Gas | 0.7481 | 3.2176 |
| Calculated Molecular Weight | 21.59 | 93.19 |
| Compressibility Factor | 0.9962 | |
| GPA 2172 Calculation: | | |
| Calculated Gross BTU per ft³ @ 14.65 psia & 60°F | | |
| Real Gas Dry BTU | 1288 | 5113 |
| Water Sat. Gas Base BTU | 1266 | 5024 |
| Ideal, Gross HV - Dry at 14.65 psia | 1283.4 | 5113.2 |
| Ideal, Gross HV - Wet | 1260.9 | 5023.7 |

Comments: H2S Field Content 0 ppm

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

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|-------------------------------------|------------|
| Flaring/Venting Event Volume (MCF): | 53.16 |
| Flare or vent: | Flare |
| Date: | 10/18/2021 |
| Time discovered: | 1:02 AM |
| Time terminated: | 2:20 AM |
| Total Duration (hrs): | 1:18 |

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 58029

QUESTIONS

| | |
|--|--|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 58029 |
| | Action Type: [C-129] Venting and/or Flaring (C-129) |

QUESTIONS

| | |
|---|---|
| Prerequisites | |
| <i>Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.</i> | |
| Incident Well | Not answered. |
| Incident Facility | [fAPP2125238645] BLACK RIVER 374 STATE FS |

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| Determination of Reporting Requirements | |
| <i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i> | |
| 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 venting and/or flaring event | Yes, minor venting and/or flaring of natural gas. |
| <i>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.</i> | |
| 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 |

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| Equipment Involved | |
| Primary Equipment Involved | Not answered. |
| Additional details for Equipment Involved. Please specify | Not answered. |

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| Representative Compositional Analysis of Vented or Flared Natural Gas | |
| <i>Please provide the mole percent for the percentage questions in this group.</i> | |
| 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 |
| <i>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</i> | |
| 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. |

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| Date(s) and Time(s) | |
| Date venting and/or flaring was discovered or commenced | 10/18/2021 |
| Time venting and/or flaring was discovered or commenced | 01:02 AM |
| Time venting and/or flaring was terminated | 02:20 AM |
| Cumulative hours during this event | 1 |

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

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| Natural Gas Flared (Mcf) Details | Cause: Equipment Failure Producing Well Natural Gas Flared Released: 53 Mcf Recovered: 0 Mcf Lost: 53 Mcf] |
| Other Released Details | Not answered. |
| Additional details for Measured or Estimated Volume(s). Please specify | Not answered. |
| 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

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| 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

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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 | Equipment Malfunction |
| Steps taken to limit the duration and magnitude of venting and/or flaring | As soon as flaring due to an equipment failure was identified, repairs were made as soon as practicable. |
| Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring | As soon as the equipment failure was found, repairs were made. |

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CONDITIONS
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CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| icastro | 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. | 10/26/2021 |