



Certificate of Analysis

Number: 6030-23110214-002A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Michael Gordon
Marathon Oil Corporation
4111 S. Tidwell
Carlsbad, NM 88220

Nov. 29, 2023

Station Name: BLUE STEEL FEE CTB GSC2
Station Number: 23997GSC2
Cylinder No: 1490
Instrument: 6030_GC2 (Agilent GC-7890B)
Last Inst. Cal.: 08/17/2023 18:47 PM
Analyzed: 11/29/2023 12:46:18 by EBH

Sampled By: S.L.
Sample Of: Gas Spot
Sample Date: 11/15/2023 10:25
Sample Conditions: 92 psig, @ 74 °F Ambient: 55 °F
Effective Date: 11/15/2023 10:25
Method: GPA-2261M

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia	
Hydrogen Sulfide	0.0000	0.0003	0.0005		GPM TOTAL C2+
Nitrogen	1.5810	1.6346	2.0637		GPM TOTAL C3+
Methane	72.1040	74.5490	53.8997		GPM TOTAL iC5+
Carbon Dioxide	1.5180	1.5695	3.1130		
Ethane	11.4570	11.8455	16.0526	3.162	
Propane	5.9660	6.1683	12.2584	1.696	
Iso-butane	0.7860	0.8127	2.1288	0.265	
n-Butane	1.8620	1.9251	5.0428	0.606	
Iso-pentane	0.4130	0.4270	1.3884	0.156	
n-Pentane	0.4420	0.4570	1.4860	0.165	
Hexanes Plus	0.5910	0.6110	2.5661	0.266	
	96.7200	100.0000	100.0000	6.316	

Calculated Physical Properties

	Total	C6+
Relative Density Real Gas	0.7688	3.2176
Calculated Molecular Weight	22.19	93.19
Compressibility Factor	0.9961	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1275	5113
Water Sat. Gas Base BTU	1253	5024
Ideal, Gross HV - Dry at 14.65 psia	1269.8	5113.2
Ideal, Gross HV - Wet	1247.5	5023.7

Comments: H2S Field Content 2.5 ppm

Hydrocarbon Laboratory Manager

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

Flaring/Venting Event Volume (MCF):	50
Flare or vent:	Vent
Date:	12/27/2024
Time discovered:	8:32:00 PM
Time terminated:	10:01:00 PM
Total Duration (hrs):	1.48

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

DEFINITIONS

Action 420666

DEFINITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 420666
	Action Type: [C-129] Venting and/or Flaring (C-129)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: • this application's operator, hereinafter "this operator"; • venting and/or flaring, hereinafter "vent or flare"; • any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms"; • the statements in (and/or attached to) this, hereinafter "the statements in this"; • and the past tense will be used in lieu of mixed past/present tense questions and statements.

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QUESTIONS

Action 420666

QUESTIONS

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	Action Number: 420666
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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	Unavailable.
Incident Facility	[fAPP2126036465] BLUE STEEL 21 FEE TB

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 this vent or flare caused by an emergency or malfunction	Yes
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	No
Is this considered a submission for a vent or flare 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 at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this vent or flare 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 vent or flare within an incorporated municipal boundary or within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

Equipment Involved	
Primary Equipment Involved	Production Tank
Additional details for Equipment Involved. Please specify	Venting from the thief hatch occurred during a malfunctioning dump valve from a separator onsite.

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	75
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	2
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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QUESTIONS, Page 2

Action 420666

QUESTIONS (continued)

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	Action Number: 420666
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	12/27/2024
Time vent or flare was discovered or commenced	08:32 PM
Time vent or flare was terminated	10:01 PM
Cumulative hours during this event	1

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Equipment Failure Dump Valve Natural Gas Vented Released: 50 Mcf Recovered: 0 Mcf Lost: 50 Mcf.
Natural Gas Flared (Mcf) Details	Not answered.
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	
Was this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	Not answered.
Downstream OGRID that should have notified this operator	Not answered.
Date notified of downstream activity requiring this vent or flare	Not answered.
Time notified of downstream activity requiring this vent or flare	Not answered.

Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True
Please explain reason for why this event was beyond this operator's control	The dump valve unexpectedly malfunctioned resulting in higher than normal pressures being sent to the tank.
Steps taken to limit the duration and magnitude of vent or flare	Upon discovery, the dump valve was adjusted to correct the issue.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Dump valve was adjusted to ensure proper operation.

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ACKNOWLEDGMENTS

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ACKNOWLEDGMENTS

☒	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a complete C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
☒	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
☒	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
☒	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
☒	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

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	Action Number: 420666
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
cswansonsteege	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.	1/14/2025