

Atchafalaya Measurement, Inc.
 416 East Main Street Artesia, NM 88210 575-746-3481

Inficon Micro GC Fusion F08904 R03RR2

	Sample Information
Sample Name	Marathon__Cave Lion 2,6,8,9 Gas Sales Check__GC1-121019-05
Station Number	45420GSC
Lease Name	Cave Lion 2,6,8,9 Gas Sales Check
Analysis For	Marathon Oil
Producer	Marathon Oil
Field Name	N/A
County/State	Lea,NM
Frequency/Spot Sample	Quarterly
Sampling Method	Fill Empty
Sample Deg F	84
Atmos Deg F	46
Flow Rate	1497.069
Line PSIG	57
Date/Time Sampled	12-6-19
Cylinder Number	N/A
Cylinder Clean Date	N/A
Sampled By	Jonah Reza
Analysis By	Pat Silvas
Verify Date/Calibration	12-9-19
Report Date	2019-12-10 11:36:52

Component Results

Component Name	Ret. Time	Peak Area	Norm%	PPMV	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	23.040	11106.2	2.07025	20702.500	0.000
H2S	46.000	0.0	0.00000	0.000	0.000
Methane	23.840	296316.8	70.10290	701029.000	0.000
Carbon Dioxide	28.180	1215.7	0.18677	1867.700	0.000
Ethane	37.220	106190.9	15.04009	150400.900	4.016
Propane	78.160	78971.4	8.41457	84145.700	2.315
i-butane	28.840	56296.9	0.83571	8357.100	0.273
n-Butane	30.420	157241.9	2.25673	22567.300	0.710
i-pentane	35.540	30957.0	0.39116	3911.600	0.143
n-Pentane	37.620	33200.7	0.39773	3977.300	0.144
Hexanes Plus	120.000	25087.0	0.30409	3040.900	0.132
Total:			100.00000	1000000.000	7.733

Results Summary

Result	Dry	Sat. (Base)
Total Raw Mole% (Dry)	101.85779	
Pressure Base (psia)	14.650	
Temperature Base	60.00	
Gross Heating Value (BTU / Ideal cu.ft.)	1329.7	1306.5
Gross Heating Value (BTU / Real cu.ft.)	1335.3	1312.5
Relative Density (G), Ideal	0.7869	0.7840
Relative Density (G), Real	0.7899	0.7873
Compressibility (Z) Factor	0.9958	0.9954

Flaring/Venting Event Volume (MCF):	145.88
Flare or vent:	Flare
Date:	8/22/2022
Time discovered:	6:00 AM
Time terminated:	6:28 AM
Total Duration (hrs):	0:28

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District IV
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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

DEFINITIONS

Action 193096

DEFINITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 193096
	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 193096

QUESTIONS

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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	[30-025-45422] CAVE LION 5 TB FEDERAL #012H
Incident Facility	Unavailable.

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	No
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	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

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	70
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	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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QUESTIONS, Page 2

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QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	08/22/2022
Time vent or flare was discovered or commenced	06:00 AM
Time vent or flare was terminated	06:28 AM
Cumulative hours during this event	0

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Downhole Well Maintenance Well Natural Gas Vented Released: 146 Mcf Recovered: 0 Mcf Lost: 146 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	WO rig supervisor was trying to reduce wellhead pressure prior to nipping down the production tree and nipping up the BOP. The pressure reduction was conducted for safety reasons.
Steps taken to limit the duration and magnitude of vent or flare	The WO supervisor did not blow the well down to zero psi but rather limited the blow down period.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	A temporary flare will be attempted to be used. Well blowdown had to be completed for safety reasons and downhole well maintenance.

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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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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.	3/6/2023