



Certificate of Analysis

Number: 6030-20120155-001A

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

Matt Erickson
 Marathon Oil Corporation
 4111 S. Tidwell
 Carlsbad, NM 88220

Dec. 22, 2020

Station Name:	Cypress 2,4 Sales Check	Sampled By:	Derek Sauder
Station Number:	17537SC	Sample Of:	Gas Spot
Station Location:	Marathon	Sample Date:	12/18/2020
Sample Point:	RGA	Sample Conditions:	55 psig, @ 60 °F Ambient: 50 °F
Type of Sample:	Spot-Cylinder	Effective Date:	12/18/2020
Heat Trace Used:	N/A	Method:	GPA-2261M
Sampling Method:	Fill and Purge	Cylinder No:	5030-03846
Sampling Company:	SPL	Instrument:	6030_GC6 (Inficon GC-3000 Micro)
Analyzed:	12/22/2020 10:35:00 by PGS	Last Inst. Cal.:	12/21/2020 0:00 AM

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	9.915	9.94163	12.196		GPM TOTAL C2+	5.873
Methane	68.046	68.22579	47.932		GPM TOTAL C3+	2.982
Carbon Dioxide	1.305	1.30845	2.522		GPM TOTAL iC5+	0.649
Ethane	10.806	10.83458	14.267	2.891		
Propane	5.471	5.48577	10.594	1.508		
Iso-butane	0.875	0.87711	2.233	0.286		
n-Butane	1.709	1.71332	4.361	0.539		
Iso-pentane	0.357	0.35784	1.131	0.131		
n-Pentane	0.389	0.38973	1.231	0.141		
Hexanes Plus	0.864	0.86578	3.533	0.377		
	99.737	100.0000	100.000	5.873		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7909	3.2176
Calculated Molecular Weight	22.83	93.19
Compressibility Factor	0.9965	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1178	5113
Water Sat. Gas Base BTU	1158	5024
Ideal, Gross HV - Dry at 14.65 psia	1173.9	5113.2
Ideal, Gross HV - Wet	1153.4	5023.7

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):	59.27
Flare or vent:	Flare
Date:	8/15/2021
Time discovered:	8:21 PM
Time terminated:	10:39 PM
Total Duration (hrs):	2:18

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 44284

QUESTIONS

Operator: MARATHON OIL PERMIAN LLC 5555 San Felipe St. Houston, TX 77056	OGRID: 372098
	Action Number: 44284
	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	[30-015-44374] CYPRESS FEE 23 27 9 #002H
Incident Facility	Not answered.

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 notification of a major venting and/or flaring	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

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	68
Nitrogen (N2) percentage, if greater than one percent	10
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	1
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.

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	08/15/2021
Time venting and/or flaring was discovered or commenced	08:21 PM
Time venting and/or flaring was terminated	10:39 PM
Cumulative hours during this event	2

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

Natural Gas Flared (Mcf) Details	Cause: High Line Pressure Producing Well Natural Gas Flared Released: 59 Mcf Recovered: 0 Mcf Lost: 59 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	
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	High Line Pressure - No Notification Received
Steps taken to limit the duration and magnitude of venting and/or flaring	no notification was provided as required per NMAC 19.15.28.8 (D). As soon as flaring was identified, immediate actions were taken to limit magnitude of flaring/venting.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	Increased Back Pressure Relief Valve to limit potential flaring during downstream upsets but still maintain safety at the facility

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CONDITIONS

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Operator: MARATHON OIL PERMIAN LLC 5555 San Felipe St. Houston, TX 77056	OGRID: 372098
	Action Number: 44284
	Action Type: [C-129] Venting and/or Flaring (C-129)

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.	8/24/2021