



Certificate of Analysis

Number: 6030-21010189-002A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Cimarex Energy
Cimarex Energy
7023 Norris Rd.
Carlsbad, NM 88220

Jan. 22, 2021

Station Name: Vaca Draw 20-17 5H CDP Check 2
Station Number: NCX
Station Location: Cimarex
Sample Point: Meter Run
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge
Sampling Company: SPL
C6+ Group Properties: 60/30/10% - C6/C7/C8

Sampled By: Victor Velazquez
Sample Of: Gas Spot
Sample Date: 01/21/2021 10:54
Sample Conditions: 69 psig, @ 64 °F Ambient: 45 °F
Effective Date: 01/21/2021 10:54
Method: GPA-2261M
Cylinder No: 5030-02194
Instrument: 70104251 (Inficon GC-MicroFusion)
Last Inst. Cal.: 01/11/2021 0:00 AM
Analyzed: 01/22/2021 12:18:02 by KNF

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Hydrogen Sulfide	0.000	0.00000	0.000		GPM TOTAL C2+	5.274
Nitrogen	2.563	2.60216	3.191		GPM TOTAL C3+	2.588
Methane	70.802	71.87283	50.481		GPM TOTAL iC5+	0.469
Carbon Dioxide	6.897	7.00160	13.490			
Ethane	9.858	10.00737	13.174	2.686		
Propane	5.053	5.12920	9.902	1.418		
Iso-butane	0.658	0.66754	1.699	0.219		
n-Butane	1.500	1.52217	3.873	0.482		
Iso-pentane	0.369	0.37448	1.183	0.137		
n-Pentane	0.373	0.37864	1.196	0.138		
Hexanes Plus	0.437	0.44401	1.811	0.194		
	98.510	100.00000	100.000	5.274		



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Physical Properties	Total	C6+
Relative Density Real Gas	0.7913	3.2176
Calculated Molecular Weight	22.84	93.19
Compressibility Factor	0.9963	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1163	5141
Water Sat. Gas Base BTU	1144	5052
Ideal, Gross HV - Dry at 14.73 psia	1159.0	
Ideal, Gross HV - Wet	1138.9	
Calculated Gross BTU per ft³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	1161	5129
Water Sat. Gas Base BTU	1141	5040
Ideal, Gross HV - Dry at 14.73 psia	1156.4	
Ideal, Gross HV - Wet	1136.2	

Comments: H2S Field Content 0 ppm
Mcf/day 4210.876

Hydrocarbon Laboratory Manager

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

VACA DRAW 20-17 FED 5H-73H CDP FLARE 2		Dig		
		9/7/2021	9/6/2021	9/5/2021
▶ Static	(PSI)	80	80	80
Differential	(In H ₂ O)	0	0	0
Gas Flowed	(MCF)	0.0	0.0	187.0

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 49658

QUESTIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 49658
	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	Not answered.
Incident Facility	[fAPP2126033457] VACA DRAW 20-17 FED 5H-73H

Determination of Reporting Requirements	
Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional 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 venting and/or flaring event	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	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	71
Nitrogen (N2) percentage, if greater than one percent	3
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	7
Oxygen (O2) 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 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	09/05/2021
Time venting and/or flaring was discovered or commenced	07:15 AM
Time venting and/or flaring was terminated	12:00 PM
Cumulative hours during this event	1

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

Natural Gas Flared (Mcf) Details	Cause: Other Valve Natural Gas Flared Released: 187 Mcf Recovered: 0 Mcf Lost: 187 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.
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

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	3rd party (Enlink) isolation valve shut-in on accident causing the facility to go to flare. Problem was identified quickly and resolved.
Steps taken to limit the duration and magnitude of venting and/or flaring	As noted the problem was identified quickly and resolved.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	Cimarex quickly identifies facility issues and deals with such mishaps.

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CONDITIONS

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Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 49658
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
jacosta01	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.	9/17/2021