



Certificate of Analysis

Number: 6030-21020006-003A

Artesia Laboratory

200 E Main St.
Artesia, NM 88210
Phone 575-746-3481Cimarex Energy
Cimarex Energy
7023 Norris Rd.
Carlsbad, NM 88220

Feb. 03, 2021

Station Name: Cascade 29 Fed CDP Check
Station Number: NCP1471196
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/C8Sampled By: Victor Velazquez
Sample Of: Gas Spot
Sample Date: 01/29/2021 12:54
Sample Conditions: 74 psig, @ 57 °F Ambient: 45 °F
Effective Date: 01/29/2021 12:54
Method: GPA-2261M
Cylinder No: 1111-002509
Instrument: 70104251 (Inficon GC-MicroFusion)
Last Inst. Cal.: 02/01/2021 0:00 AM
Analyzed: 02/03/2021 12:03:14 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+	6.411
Nitrogen	2.014	2.01099	2.443		GPM TOTAL C3+	3.254
Methane	71.112	71.01984	49.399		GPM TOTAL iC5+	0.523
Carbon Dioxide	4.441	4.43544	8.463			
Ethane	11.777	11.76142	15.333	3.157		
Propane	6.604	6.59513	12.609	1.824		
Iso-butane	0.820	0.81864	2.063	0.269		
n-Butane	2.019	2.01678	5.082	0.638		
Iso-pentane	0.446	0.44542	1.393	0.164		
n-Pentane	0.447	0.44622	1.396	0.162		
Hexanes Plus	0.451	0.45012	1.819	0.197		
	100.131	100.00000	100.000	6.411		



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Physical Properties	Total	C6+
Relative Density Real Gas	0.7993	3.2176
Calculated Molecular Weight	23.06	93.19
Compressibility Factor	0.9960	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1250	5141
Water Sat. Gas Base BTU	1229	5052
Ideal, Gross HV - Dry at 14.73 psia	1245.5	
Ideal, Gross HV - Wet	1223.8	
Calculated Gross BTU per ft³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	1248	5129
Water Sat. Gas Base BTU	1226	5040
Ideal, Gross HV - Dry at 14.73 psia	1242.6	
Ideal, Gross HV - Wet	1220.9	

Comments: H2S Field Content 0 ppm
Mcf/day 3602.8823

Hydrocarbon Laboratory Manager

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

CASCADE 29 FEDERAL 1 FLARE		Digital (gas)					8564	
		7/2021	8/4/2021	8/3/2021	8/2/2021	8/1/2021	7/31/2021	7/30/2021
▶ Static	(PSI)	13	13	13	13	13	13	13
Differential	(In H2O	0	0	0	0	0	0	1
Gas Flowed	(MCF)	0.0	0.0	0.0	0.0	0.0	22.0	59.0

1 hour

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 41880

QUESTIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 41880
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS**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 or flaring caused by an emergency or malfunction	Yes
Did or will this venting 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 or flaring	Yes, minor venting or flaring of natural gas.
The operator shall file a form C-141 instead of a form C-129 for a release that includes liquid during venting or flaring that is or may be a major or minor release under 19.13.297 NMAC.	
Was there or will there be at least 50 MCF of natural gas vented or flared during this event	Yes
Did this venting 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

Unregistered Facility Site

Please provide the facility details, if the venting or flaring occurred or is occurring at a facility that does not have an Facility ID (##) yet.

Facility or Site Name	Not answered.
Facility Type	Not answered.

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	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	4
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 or flaring was discovered or commenced	07/30/2021
Time venting or flaring was discovered or commenced	07:15 AM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	07/31/2021
Time venting or flaring was terminated	01:00 AM
Total duration of venting or flaring in hours, if venting or flaring has terminated	1
Longest duration of cumulative hours within any 24-hour period 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: High Line Pressure Gas Compressor Station Natural Gas Flared Spilled: 81 Mcf Recovered: 0 Mcf Lost: 81 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 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 or flaring a result of downstream activity	Yes
Date notified of downstream activity requiring this venting or flaring	Not answered.
Time notified of downstream activity requiring this venting 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	Flaring event caused by high line pressure on the Enlink system during compressor PM's. Out of operators control. Wells were shut-in to mitigate. Issue will resolve when line pressure comes back down.
Steps taken to limit the duration and magnitude of venting or flaring	As noted wells were shut-in to mitigate.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Cimarex will continue to take proactive steps to curtail flaring by shut in

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CONDITIONS

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	Action Number: 41880
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CONDITIONS

Created By	Condition	Condition Date
system	If the information provided in this report requires an amendment, submit a [C-129] Request to Amend Venting and/or Flaring Incident, utilizing your incident number from this event.	8/13/2021