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575.397.3713 2609 W Marland Hobbs NM 88240

## C6+ Gas Analysis Report

7273G	NLW1471295	Hallertau 5 Fed 8H Alloc	
Sample Point Code	Sample Point Name	Sample Point Location	
Laboratory Services	2021042151	0521	J Thorn - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
May 21, 2021 12:20	May 21, 2021 12:20	Jun 2, 2021 11:02	Jun 3, 2021
Date Sampled	Date Effective	Date Received	Date Reported
86.00	881.15	Torrance	102 @ 100
Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
Cimarex Energy		NG	
Operator		Lab Source Description	

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	0.7570	0.75744	
CO2 (CO2)	0.1630	0.16304	
Methane (C1)	77.0440	77.04513	
Ethane (C2)	11.4460	11.44578	3.0600
Propane (C3)	5.7520	5.75202	1.5840
I-Butane (IC4)	0.8420	0.84167	0.2750
N-Butane (NC4)	2.1040	2.10402	0.6630
I-Pentane (IC5)	0.4750	0.4746	0.1740
N-Pentane (NC5)	0.5480	0.54754	0.1990
Hexanes Plus (C6+)	0.8690	0.86876	0.3770
TOTAL	100.0000	100.0000	6.3320

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

Analyzer Information			
Device Type:	Gas Chromatograph	Device Make:	Shimadzu
Device Model:	GC-2014	Last Cal Date:	May 24, 2021

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
1,311.6	1,290.1	1,314.6	1,293.1

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.7582	0.7555
Molecular Weight	
21.8818	

C6+ Group Properties		
Assumed Composition		
C6 - 60.000%	C7 - 30.000%	C8 - 10.000%

Field H2S
0 PPM

**PROTREND STATUS:**

Passed By Validator on Jun 3, 2021

**DATA SOURCE:**

Imported

**PASSED BY VALIDATOR REASON:**

Close enough to be considered reasonable.

**VALIDATOR:**

Dustin Armstrong

**VALIDATOR COMMENTS:**

OK

HALLERTAU 5 FED BATTERY FLARE		Digital (gas) 16176												
		0/2021	11/9/2021	11/8/2021	11/7/2021	11/6/2021	11/5/2021	11/4/2021	11/3/2021	11/2/2021	11/1/2021	10/31/2021	10/30/2021	10/29/2021
▶ Static	(PSI)			62	131	105	111	122	107	98	131	131	111	129
Differential	(In H2O)			0	0	0	0	0	0	0	0	1	0	0
Gas Flowed	(MCF)			225.0	166.0	133.0	117.0	40.0	1.0	47.0	134.0	75.0	45.0	81.0
M.I. C.D.														

1,064

Intermittent flared 24 hours total.

**District I**

1625 N. French Dr., Hobbs, NM 88240  
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**District II**

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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 61528

**QUESTIONS**

Operator: CIMAREX ENERGY CO. OF COLORADO 600 N. Marienfeld Street Midland, TX 79701	OGRID: 162683
	Action Number: 61528
	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	[fAPP2126956613] Hallertau 5

**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	Yes
Is this considered a submission for a venting and/or flaring event	Yes, major 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	77
Nitrogen (N2) percentage, if greater than one percent	1
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
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	10/29/2021
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	24

**Measured or Estimated Volume of Vented or Flared Natural Gas**

Natural Gas Vented (Mcf) Details	Not answered.
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Natural Gas Flared (Mcf) Details	Cause: Equipment Failure   Gas Compressor Station   Natural Gas Flared   Released: 1,064 Mcf   Recovered: 0 Mcf   Lost: 1,064 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	As noted on previous report for this facility Cimarex is in the process of swapping compressors. Compressors continue to go down due to do multiple issues and the facility flared intermittently for a total of 24 hours for the week of 10/29-11/8
Steps taken to limit the duration and magnitude of venting and/or flaring	Since the facility flares intermittently the compressors are not down long enough to trigger out well shit in threshold. Our engineering team hopes to resolve the issues once compressors have been swap.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	As noted Cimarex is swapping compressors due to continuing issues at facility. The process is taking longer than anticipated and isolated compressor issues not associated with the swap continue to occur.

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CONDITIONS  
  
Action 61528

CONDITIONS

Operator: CIMAREX ENERGY CO. OF COLORADO 600 N. Marienfeld Street Midland, TX 79701	OGRID: 162683
	Action Number: 61528
	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.	11/12/2021