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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
		3/2021	10/12/2021	10/11/2021	10/10/2021	10/9/2021	10/8/2021	10/7/2021	10/6/2021	10/5/2021	10/4/2021	10/3/2021
▶ Static	(PSI)	107	115	132	119	63	84	59	59	61	61	63
Differential	(in H ₂ O)	0	0	0	0	0	0	0	0	0	0	0
Gas Flowed	(MCF)	55.0	42.0	119.0	36.0	72.0	47.0	0.0	83.0	0.0	0.0	225.0

10/3-10/13

679

7 Hours

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 56601

QUESTIONS

Operator: CIMAREX ENERGY CO. OF COLORADO 600 N. Marienfeld Street Midland, TX 79701	OGRID: 162683
	Action Number: 56601
	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	No
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	10/03/2021
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	7

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: 679 Mcf Recovered: 0 Mcf Lost: 679 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	Cimarex in the process of swapping compressors. There are intermittent periods of time where we have gone to flare. The issue will be resolved once all the swaps are complete. Flare report is from 10/3 -10/13
Steps taken to limit the duration and magnitude of venting and/or flaring	The process is taking alot longer. Normally we have to shut-in the wells, but in this instance we had another compressor that could run. We shut the old compressor down on 10/4 to start breaking it out. This means all of our production was going to the single unit. When it had any runtime issues we would have short periods of flare. Each of those compressor downtime events are isolated, so it is a new event each time. Then we got our new compressors started on 10/12, and each of those have a "break-in" period that we are working to fine tune the runtime. Any downtime events during that process would also go to flare momentarily. Cimarex should have most everything lined out, so we should improve.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	As noted Cimarex is in the process of swaping out compressors which the process takes a while.

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CONDITIONS

Action 56601

CONDITIONS

Operator: CIMAREX ENERGY CO. OF COLORADO 600 N. Marienfeld Street Midland, TX 79701	OGRID: 162683
	Action Number: 56601
	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.	10/18/2021