LABORATORY SERVICES Natural Gas Analysis
www.permianls.com
575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

Sample Point Code	Sample Point Name	Sample Point Location
7273G	NLW1471295	Hallertau 5 Fed 8H Alloc

Source Laboratory	Lab File No	Container Identity	Sampler
Laboratory Services	2021042151	0521	J Thorn - Spot

District	Area Name	Field Name	Facility Name
USA	USA	USA	New Mexico

Date Sampled	Date Effective	Date Received	Date Reported
May 21, 2021 12:20	May 21, 2021 12:20	Jun 2, 2021 11:02	Jun 3, 2021

Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
86.00	881.15	Torrance	102 @ 100

Operator	Lab Source Description
Cimarex Energy	NG

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 Â°F		14.73 PSI @ 60.00 Â°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)

		0/2021	7/9/2021	7/8/2021	7/7/2021	7/6/2021
Static	(PSI)	64	85	47	49	48
Differential	(In H2O	0	0	0	0	0
Gas Flowed	(MCF)	0.0	0.0	0.0	19.0	286.0
MeterFlareReason					CURTAILMENT - G	CURTAILMENT - G
Comments (F5)					DCP high line psi	dcp high line psi

HALLERTAU 5 FED 7H-11H & 16H

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 37322

QUESTIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 37322
	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 addional guidance.	
Was or is this venting or flaring caused by an emergency or malfunction	No
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 19.15.29.7 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 occuring at a facility that does not have an Facility ID (f#) yet.	
Facility or Site Name	HALLERTAU 5 FED BATTERY FLARE
Facility Type	Flare Stack - (FS)

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 (C02) percentage, if greater than one percent	0
Oxygen (02) 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 Sufide (H2S) PPM quality requirement	*Not answered.*
Carbon Dioxide (C02) percentage quality requirement	*Not answered.*
Oxygen (02) percentage quality requirement	*Not answered.*

Date(s) and Time(s)	
Date venting or flaring was discovered or commenced	07/06/2021
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	07/07/2021
Time venting or flaring was terminated	01:00 AM
Total duration of venting or flaring in hours, if venting or flaring has terminated	3
Longest duration of cumulative hours within any 24-hour period during this event	3

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: 305 Mcf | Recovered: 0 Mcf | Lost: 305 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

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 attributed to third party gatherer DCP
Steps taken to limit the duration and magnitude of venting or flaring	Field engineer in communication with DCP.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Cimarex will continue to take proactive measures in regards to its communication and relationship with DCP in regards to its gathering system disruptions.

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CONDITIONS

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Operator:	OGRID:
CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	215099
	Action Number: 37322
	Action Type: [C-129] Venting and/or Flaring (C-129)

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.	7/21/2021