



## C6+ Gas Analysis Report

9943G	NCW0001156	Liverboat 12-1 WOMD FC 1H WH Allo	
Sample Point Code	Sample Point Name	Sample Point Location	
Laboratory Services	2021041321	0461	J Thorn - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
Apr 22, 2021 10:50	Apr 22, 2021 10:50	May 5, 2021 11:11	May 6, 2021
Date Sampled	Date Effective	Date Received	Date Reported
57.00	2,322.52	Torrance	96 @ 96
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)	1.0570	1.05739	
CO2 (CO2)	0.0690	0.06907	
Methane (C1)	77.4000	77.39957	
Ethane (C2)	11.2140	11.21445	2.9980
Propane (C3)	5.7010	5.70076	1.5700
I-Butane (IC4)	0.8420	0.84187	0.2750
N-Butane (NC4)	2.0190	2.01877	0.6360
I-Pentane (IC5)	0.4110	0.41093	0.1500
N-Pentane (NC5)	0.4820	0.48245	0.1750
Hexanes Plus (C6+)	0.8050	0.80474	0.3490
TOTAL	100.0000	100.0000	6.1530

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 3, 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
1,298.4	1,277.3	1,301.4	1,280.3

## Calculated Total Sample Properties

GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.7512	0.7486
Molecular Weight	
21.6865	

## C6+ Group Properties

Assumed Composition		
C6 - 60.000%	C7 - 30.000%	C8 - 10.000%

 Field H2S  
 0 PPM

## PROTREND STATUS:

Passed By Validator on May 7, 2021

## DATA SOURCE:

Imported

## PASSED BY VALIDATOR REASON:

Previous sample was suspect

## VALIDATOR:

Dustin Armstrong

## VALIDATOR COMMENTS:

OK

RIVERBOAT 12-1 FED COM CDP FLARE		Digital (gas)					19621	
		4/2021	7/13/2021	7/12/2021	7/11/2021	7/10/2021	7/9/2021	7/8/2021
▶ Static	(PSI)	69	73	100	85	85	95	105
	Differential (In H2O)	0	0	0	0	0	0	0
	Gas Flowed (MCF)	0.0	0.0	0.0	0.0	0.0	31.0	166.0

**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 37413

**QUESTIONS**

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 37413
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b>	
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	Not answered.
Prerequisite conflict detected	The following conflicts were detected and must be resolved to submit this application: • identify the well and/or facility involved in the venting and/or flaring.

<b>Determination of Reporting Requirements</b>	
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	No
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 notification of a major venting and/or flaring	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 within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	Not answered.

<b>Equipment Involved</b>	
Primary Equipment Involved	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>	
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.

<b>Date(s) and Time(s)</b>	
Date venting and/or flaring was discovered or commenced	07/08/2021
Time venting and/or flaring was discovered or commenced	07:15 AM
Time venting and/or flaring was terminated	01:00 AM
Cumulative hours during this event	3

<b>Measured or Estimated Volume of Vented or Flared Natural Gas</b>
---

Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: High Line Pressure   Gas Compressor Station   Natural Gas Flared   Released: 197 Mcf   Recovered: 0 Mcf   Lost: 197 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.

<b>Venting or Flaring Resulting from Downstream Activity</b>	
Was or is this venting and/or flaring a result of downstream activity	Yes
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.

<b>Steps and Actions to Prevent Waste</b>	
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	Third Party gas gatherer had a fire at a compressor station. The line pressure was high and the facility went to flare.
Steps taken to limit the duration and magnitude of venting and/or flaring	Cimarex shut in nearby facilities to lower the line pressure on the loop and stop the flare. The issue stopped as the nearby facility remain shut in until the compressor was repaired.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	The compressor was repaired after the fire. Cimarex took proactive steps to shut in nearby facilities on the loop to contain the high line pressure attributed to this event.

**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**

CONDITIONS  
  
Action 37413

CONDITIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 37413
	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.	7/22/2021