



LABORATORY SERVICES
Natural Gas Analysis

www.permianls.com

575.397.3713 2609 W Marland Hobbs NM 88240

For: Cimarex Energy
Attention: Chris Prater
600 N. Marienfeld, Suite 600
Midland, Texas 79701

Sample: Sta# NCP1471289
Identification: West Grama Ridge 8-5 CDP
Company: Cimarex Energy
Lease:
Plant:

Sample Data: Sample Date: 1/11/2018
Analysis Date: 1/12/2018
Sample Temp: 76 F
Sample Press.: 72 PSIA

Sampled by: B. Eicher
Analysis by: V. McDaniel
Atmos Temp: 42 F
Sample Time: 9:00 AM

H2S = 0.2 PPM

Press. Base: 14.73

Component Analysis

		Mol Percent	GPM Real	GPM Ideal
Hydrogen Sulfide	H2S			
Nitrogen	N2	1.754		
Methane	C1	62.336		
Carbon Dioxide	CO2	0.373		
Ethane	C2	14.511	3.880	3.871
Propane	C3	8.990	2.476	2.470
I-Butane	IC4	1.277	0.418	0.417
N-Butane	NC4	3.574	1.126	1.124
I-Pentane	IC5	1.123	0.407	0.410
N-Pentane	NC5	1.380	0.599	0.499
Hexanes Plus	C6+	<u>4.682</u>	<u>2.031</u>	<u>2.026</u>
		100.000	10.937	10.817

REAL BTU/CU.FT.

At 14.65 1611.7 Dry
1585.1 Wet

At 14.696 1616.8 Dry
1590.1 Wet

At 14.73 1620.5 Dry
1593.8 Wet

Specific Gravity:

Calculated $\frac{(\text{Real})}{(\text{Ideal})} = \frac{0.973}{0.967}$

Remarks:

WEST GRAMA RIDGE 8-5 FED CDP FLARE															Digital (gas)		16556	
		7/20/21	8/8/2021	8/7/2021	8/6/2021	8/5/2021	8/4/2021	8/3/2021	8/2/2021	8/1/2021	7/31/2021	7/30/2021	7/29/2021	7/28/2021	7/27/2021			
▶ Static	(PSI)	66	21	13	13	13	79	82	71	106	72	77	77	78	106			
	Differential (in H2O)	0	0	0	0	0	0	0	0	15	0	0	0	0	16			
	Gas Flowed (MCF)	34.0	0.0	0.0	0.0	0.0	323.0	0.0	352.0	43.0	238.0	0.0	0.0	545.0	208.0			

22.46

10.32

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 41358

QUESTIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 41358
	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	Yes
Is this considered a submission for a notification of a major venting or flaring	Yes, major 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	WEST GRAMA RIDGE 8-5 FED CDP 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	62
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	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 or flaring was discovered or commenced	07/27/2021
Time venting or flaring was discovered or commenced	01:00 AM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	08/04/2021
Time venting or flaring was terminated	01:00 AM
Total duration of venting or flaring in hours, if venting or flaring has terminated	22
Longest duration of cumulative hours within any 24-hour period during this event	10

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: 1,709 Mcf Recovered: 0 Mcf Lost: 1,709 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	Event was due to High line pressure from third party gas gatherer Targa.
Steps taken to limit the duration and magnitude of venting or flaring	One of the wells West Grama 2H within the facility was shut in to mitigate flaring. Cimarex's field team was in communication with Targa.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Cimarex will continue to take proactive measures to prevent flaring by being in communication with its gas takeaway partner. It also SI if needed to prevent additional flaring at the facility.

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 41358

CONDITIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 41358
	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.	8/11/2021