

Atchafalaya Measurement, Inc.
 416 East Main Street Artesia, NM 88210 575-746-3481

Inficon Micro GC Fusion F08904 R03RR2

	Sample Information
Sample Name	Cimarex__Hallertau 5 Federal 4H Allocation__GC1-111618-05
Station Number	NCW9728005
Lease Name	Hallertau 5 Federal 4H Allocation
Analysis For	Cimarex Energy
Producer	Cimarex Energy
Field Name	N/A
County/State	N/A
Frequency/Spot Sample	Spot
Sampling Method	Fill Empty
Sample Deg F	77
Atmos Deg F	N/A
Flow Rate	N/A
Line PSIG	72
Date/Time Sampled	10-28-18
Cylinder Number	N/A
Cylinder Clean Date	N/A
Sampled By	Coty B
Analysis By	Pat Silvas
Verified/Calibration Date	11-12-18
Report Date	2018-11-16 07:43:15

Component Results

Component Name	Ret. Time	Peak Area	Norm%	PPMV	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	22.260	9633.8	1.89820	18982.000	0.000
H2S	46.000	0.0	0.00000	0.000	0.000
Methane	23.080	300732.4	76.19254	761925.400	0.000
Carbon Dioxide	26.920	10785.5	1.78069	17806.900	0.000
Ethane	37.140	74773.0	11.32882	113288.200	3.040
Propane	79.200	48174.3	5.43744	54374.400	1.503
i-butane	28.780	49284.7	0.72318	7231.800	0.237
n-Butane	30.380	109021.0	1.54134	15413.400	0.488
i-pentane	35.460	28351.3	0.34004	3400.400	0.125
n-Pentane	37.540	30714.9	0.35858	3585.800	0.130
Hexanes Plus	120.000	34886.0	0.39917	3991.700	0.174
Total:			100.00000	1000000.000	5.697

Results Summary

Result	Dry	Sat. (Base)
Total Raw Mole% (Dry)	99.89403	
Pressure Base (psia)	14.730	
Temperature Base	60.00	
Gross Heating Value (BTU / Ideal cu.ft.)	1231.9	1210.5
Gross Heating Value (BTU / Real cu.ft.)	1236.4	1215.4
Relative Density (G), Ideal	0.7435	0.7414
Relative Density (G), Real	0.7459	0.7441
Compressibility (Z) Factor	0.9964	0.9960

HALLERTAU 5 FED BATTERY FLARE		Digital (gas)							
		16176							
		7/2021	8/7/2021	8/6/2021	8/5/2021	8/4/2021	8/3/2021	8/2/2021	8/1/2021
▶ Static	(PSI)	62	61	62	60	61	62	61	60
Differential	(In H2O)	0	0	0	0	0	0	0	0
Gas Flowed	(MCF)	0.0	35.0	0.0	100.0	0.0	0.0	0.0	74.0

209

2 hours

1 hour

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

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 41877

QUESTIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 41877
	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	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 19.13.29.7 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 occurring at a facility that does not have an Facility ID (##) 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 (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	07/31/2021
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	08/07/2021
Time venting or flaring was terminated	01:00 AM
Total duration of venting or flaring in hours, if venting or flaring has terminated	2
Longest duration of cumulative hours within any 24-hour period during this event	1

Measured or Estimated Volume of Vented or Flared Natural Gas

Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other Pump Natural Gas Flared Spilled: 209 Mcf Recovered: 0 Mcf Lost: 209 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	Not answered.
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	True
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the operator's control.	
Please explain reason for why this event was beyond your operator's control	Started on 7/31/2021 due to compressor issues, then on 8/5/2021 the facility had a short-lived kick of production that caused it to go to flare momentarily. It was resolved quickly before reaching our shutdown threshold.
Steps taken to limit the duration and magnitude of venting or flaring	As noted Cimarex now has a shutdown protocol on the facility. that mitigated the magnitude of flaring.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Shutdown protocol now in effect that initiated shut if flaring is detected. Although flaring still occurred, the volumes would had been a lot higher if it had not been for shutdown.

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CONDITIONS

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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.	8/13/2021