

## Gas Composition and Properties

Effective February 1, 2021 08:00 - January 18, 2038 21:14

 Source #: 62459215  
 Name: CAVERN 16 STATE 1

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	0.3935		0.8769
Nitrogen, N2	0.9669		1.3715
Methane, C1	82.9326		67.3654
Ethane, C2	9.8507	2.6420	14.9977
Propane, C3	3.3841	0.9350	7.5557
iso-Butane, iC4	0.5743	0.1885	1.6901
n-Butane, nC4	1.2506	0.3954	3.6804
iso-Pentane, iC5	0.2777	0.1018	1.0145
n-Pentane, nC5	0.2767	0.1006	1.0108
Neo-Pentane, NeoC5			
Hexanes, C6	0.0549	0.0226	0.2395
Heptanes, C7	0.0230	0.0230	0.1167
Octanes, C8	0.0100	0.0051	0.0578
Nonanes Plus, C9+	0.0030	0.0017	0.0195
Water, H2O			
Hydrogen Sulfide, H2S	0.0020		0.0035
Oxygen, O2			
Carbon Monoxide, CO			
Hydrogen, H2			
Helium, He			
Argon, Ar			
Totals	100.0000	4.4170	100.0000

Property	Total Sample	C9 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure		
Cricondentherm		
HV, Dry @ Base P, T	1189.92	
HV, Sat @ Base P, T	1169.66	
HV, Sat @ Sample P, T	0.00	
Relative Density	0.6837	
C9+:		

## Sample

 Date: 02/25/2021 Pressure: 400.0  
 Type: Spot Temperature: 57.0  
 Tech: H2O: lbs/mm  
 H2S: ppm

Remarks:

## Analysis

 Date: 02/25/2021 Instrument:  
 Cylinder:

Tech:

Remarks:

**District I**

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

**District II**

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**District III**

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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 38774

**QUESTIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 38774
	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 19.13.297 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	CAVERN STATE 16 #1H
Facility Type	Flare Stack - (FS)

**Equipment Involved**

Primary Equipment Involved	Gas Compressor Station
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	83
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	20
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	04:30 PM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	07/27/2021
Time venting or flaring was terminated	07:15 PM
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: Equipment Failure   Gas Compressor Station   Natural Gas Flared   Spilled: 56 Mcf   Recovered: 0 Mcf   Lost: 56 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**

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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	Gas Jack compressor keeps going down, sales line is 300+psi so when it goes down we instantly go to flare.
Steps taken to limit the duration and magnitude of venting or flaring	Working with gas marketing team to get a different sales point to reduce instances of high line pressure.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	Working with gas marketing team to get a different sales point to reduce instances of high line pressure.

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CONDITIONS  
  
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Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 38774
	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.	7/30/2021