

**Volumetrics US Inc.** 

3001 N Cameron St, Victoria, TX-77901 Phone: 361-827-4024

4000248463

VOLUMETRICS/JA

SPOT-CYLINDER

Company: OXY USA INC Field/Location: NMSW

Station Name: CEDAR CANYON 22 NO. 001H

 Station Number :
 14915X

 Sample Date:
 3/24/21 9:10 AM

 Analysis Date:
 4/5/21 4:18 PM

 Instrument:
 ABB NGC 8206

 Calibration/Verification Date:
 4/5/2021

Calibration/Verification Date: 4/5/2024
Heat Trace used: YES

ANYON 22 NO. 001H Sample Type :
Sample Temperature (F):

Sample Pressure (PSIG): 95.2
Flow rate (MCF/Day): 164.88
Ambient Temperature (F): 58

**Work Order** 

Sampled by:

Sampling method: FILL & EMPTY

Cylinder Number: 1318

**NATURAL GAS ANALYSIS: GPA 2261** 

	<b>Un-Normalized</b>	Normalized	GPM	GPM	GPM
Components	Mol%	Mol%	14.650	14.730	15.025
Hydrogen Sulfide	0.0000	0.0000			
Nitrogen	1.4004	1.4102			
Methane	74.1036	74.6225			
Carbon Dioxide	0.3656	0.3682			
Ethane	12.2742	12.3601	3.300	3.318	3.384
Propane	6.5589	6.6049	1.817	1.827	1.863
Isobutane	0.8947	0.9010	0.294	0.296	0.302
N-butane	2.2165	2.2320	0.702	0.706	0.720
Isopentane	0.4538	0.4570	0.167	0.168	0.171
N-Pentane	0.4992	0.5027	0.182	0.183	0.187
Hexanes Plus	0.5376	0.5414	0.236	0.237	0.242
Total	99.3044	100.0000			

Hexanes plus split (60%-30%-10%)

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.698	6.735	6.869
Total GPM Iso-Pentane+	0.585	0.588	0.600
Compressibility (Z)	0.9960	0.9960	0.9959
Specific Gravity (Air=1) @ 60 °F	0.7684	0.7684	0.7685
Molecular Weight	22.175	22.175	22.175
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft <sup>3</sup> )	1308.1	1315.2	1341.7
Wet, Real (BTU/Ft <sup>3</sup> )	1285.3	1292.3	1318.3
Dry, Ideal (BTU/Ft <sup>3</sup> )	1302.8	1310.0	1336.2
Wet, Ideal (BTU/Ft <sup>3</sup> )	1280.2	1287.2	1312.9

Temperature base 60 °F

**Comment:** FIELD H2S = 0 PPM

Verified by

Mostaq Ahammad Petroleum Chemist Approved by

Deann Friend

Deann Friend Laboratory Manager

### **EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Cedar Canyon Gas Gather Flare

**Start Date:** 06/01/2021 **End Date:** 06/01/2021

**Cause:** Third Party Malfunction

**Duration of event:** 3.6 hours **MCF Volume Flared:** 317

Method of Flared Gas Measurement: Flare Meter

## 1. Reason why this event was beyond Operator's control:

The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction or complete shut-in of a gas pipeline by a third-party pipeline operator, which impacted Oxy's ability to send gas to a third-party gas pipeline. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is Oxy's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements.

In this case, this sudden and unexpected flaring event occurred due to third party pipeline operator, Enterprise, whose compressor station went down on ESD due to automation issues. These downstream facility issues caused a spike in line pressure to the third-party gas gathering system, impacting Oxy's ability to send sales gas into the system from Oxy's Cedar Canyon 22 CTB. During this sudden and unexpected flaring event, OXY personnel continually monitored the Enterprise line pressure in and once the line pressure was stabilized, Oxy was able to resume gas sales to the third-party gas gathering system.

## 2. Steps Taken to limit duration and magnitude of venting or flaring:

Until Enterprises facility equipment was able to handle the volume of gas sent to them, the spike in line pressure forced Oxy's upstream facility to route stranded gas to a flare. During this sudden and unexpected flaring event, OXY personnel continually monitored the Enterprise line pressure in order to make necessary adjustments to its own equipment, when warranted, until the third party sales line pressure was back to normal.

### 3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:

During this sudden and unexpected flaring event, OXY personnel continually monitored the Enterprise line pressure in order to make necessary adjustments to its own compression equipment, when warranted, until third party sales line pressure was back to normal. In addition, an effort was made to reduce the volume of gas to be flared by choking back wells with pressure control valves on the flowlines. Since this event was caused by a third-party high sales gas line pressure, Oxy is unable to eliminate the root cause of the issue. However, Oxy always takes steps to minimize the volume of gas flared by chocking back well production and maintaining contact with third party line operator to ensure that gas is safely directed back to sales as soon as the third-party line pressure returns to normal.

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

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 42798

### **QUESTIONS**

Operator: OXY USA INC		OGRID: 16696
P.O. Box 4294		Action Number:
Houston, TX 772104294		42798
		Action Type:
		[C-129] Venting and/or Flaring (C-129)
QUESTIONS		
Prerequisites		
Any messages presented in this section, will prevent submission of this application. Please resolve	these issues before continuing wit	h the rest of the questions.
Incident Well	[30-015-40668] CEDAR CA	NYON 22 #001H
Incident Facility	Not answered.	
Determination of Reporting Requirements		
Answer all questions that apply. The Reason(s) statements are calculated based on your answers a	nd may provide addional guidance.	
Was or is this venting and/or flaring caused by an emergency or malfunction	Yes	
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 v	venting and/or flaring that is or may	the 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	thang and or haring that is or may	De a major el minor release unaer 15.16.25.7 Minre.
during this event	Yes	
Did this venting and/or flaring result in the release of <b>ANY</b> 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 withing 300 feet from an occupied permanent residence, school, hospital,	No	
institution or church in existence		
Equipment Involved		
Primary Equipment Involved	Other (Specify)	
Additional details for Equipment Involved. Please specify	emergency flare due to third	d party malfunction
Representative Compositional Analysis of Vented or Flared Natural Gas		
Please provide the mole percent for the percentage questions in this group.	1	
Methane (CH4) percentage	75	
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 spec	ifications 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.	

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	06/01/2021
Time venting and/or flaring was discovered or commenced	12:00 AM
Time venting and/or flaring was terminated	03:40 AM
Cumulative hours during this event	4

Not answered.

Not answered.

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.

Carbon Dioxide (C02) percentage quality requirement

Oxygen (02) percentage quality requirement

Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 317 Mcf   Recovered: 0 Mcf   Lost: 317 Mcf ]
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	flare meter
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.

Venting or Flaring Resulting from Downstream Activity	
Was or is this venting and/or flaring a result of downstream activity	Not answered.
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.

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	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction or complete shut-in of a gas pipeline by a third-party pipeline operator, which impacted Oxy's ability to send gas to a third-party gas pipeline. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is Oxy's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements. In this case, this sudden and unexpected flaring event occurred due to third party pipeline operator, Enterprise, whose compressor station went down on ESD due to automation issues. These downstream facility issues caused a spike in line pressure to the third-party gas gathering system, impacting Oxy's ability to send sales gas into the system from Oxy's Cedar Canyon 22 CTB. During this sudden and unexpected flaring event, OXY personnel continually monitored the Enterprise line pressure in and once the line pressure was stabilized, Oxy was able to resume gas sales to the third-party gas gathering system.
Steps taken to limit the duration and magnitude of venting and/or flaring	Until Enterprises facility equipment was able to handle the volume of gas sent to them, the spike in line pressure forced Oxy's upstream facility to route stranded gas to a flare. During this sudden and unexpected flaring event, OXY personnel continually monitored the Enterprise line pressure in order to make necessary adjustments to its own equipment, when warranted, until the third party sales line pressure was back to normal.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	During this sudden and unexpected flaring event, OXY personnel continually monitored the Enterprise line pressure in order to make necessary adjustments to its own compression equipment, when warranted, until third party sales line pressure was back to normal. In addition, an effort was made to reduce the volume of gas to be flared by choking back wells with pressure control valves on the flowlines. Since this event was caused by a third-party high sales gas line pressure, Oxy is unable to eliminate the root cause of the issue. However, Oxy always takes steps to minimize the volume of gas flared by chocking back well production and maintaining contact with third party line operator to ensure that gas is safely directed back to sales as soon as the third-party line pressure returns to normal.

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CONDITIONS

Action 42798

## **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	42798
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### CONDITIONS

Created By	Condition	Condition Date
shelbyschoep	of If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	8/17/2021