

#### Volumetrics Inc.

3710 East Rio Grande St, Victoria, TX-77901

Phone: 361-827-4024

Company: OXY USA INC Field/Location: NMSW

Station Name: CEDAR CANYON TO ENTERPRISE

Station Number: NA

 Sample Date:
 3/10/22 2:40 PM

 Analysis Date:
 3/17/22 8:30 PM

 Instrument:
 INFICON

 Calibration/Verification Date:
 3/17/2022

Heat Trace used: YES

Work Order: 4000535215
Sampled by: OXY/JE

Sample Type: SPOT-CYLINDER

Sample Temperature (F): NA
Sample Pressure (PSIG): 1237
Flow rate (MCF/Day): NA
Ambient Temperature (F): 50

Sampling method: FILL & EMPTY

Cylinder Number: 27772

# 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	1.4010	1.4329			
Methane	73.2835	74.9537			
Carbon Dioxide	0.1272	0.1301			
Ethane	12.0004	12.2739	3.277	3.295	3.361
Propane	6.1002	6.2392	1.716	1.726	1.760
Isobutane	0.8643	0.8840	0.289	0.290	0.296
N-butane	2.1629	2.2122	0.696	0.700	0.714
Isopentane	0.5139	0.5256	0.192	0.193	0.197
N-Pentane	0.5755	0.5886	0.213	0.214	0.218
Hexanes(C6's)	0.3556	0.3637	0.149	0.150	0.153
Heptanes (C7's)	0.2741	0.2804	0.129	0.130	0.132
Octanes (C8's)	0.1001	0.1024	0.052	0.053	0.054
Nonanes Plus (C9+)	0.0130	0.0133	0.007	0.008	0.008
Total	97.7718	100.0000			

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.721	6.758	6.893
Total GPM Iso-Pentane+	0.743	0.747	0.762
Compressibility (Z)	0.9959	0.9959	0.9958
Specific Gravity ( Air=1) @ 60 °F	0.7713	0.7713	0.7714
Molecular Weight	22.257	22.257	22.257
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft <sup>3</sup> )	1318.1	1325.3	1352.0
Wet, Real (BTU/Ft <sup>3</sup> )	1295.0	1302.1	1328.3
Dry, Ideal (BTU/Ft <sup>3</sup> )	1312.7	1319.9	1346.3
Wet, Ideal (BTU/Ft <sup>3</sup> )	1289.7	1296.8	1322.7

Temperature base 60 °F

Comment: FIELD H2S = 0 PPM

Verified by

Mostaq Ahammad Petroleum Chemist Approved by

Deann Friend Laboratory Manager

#### **UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Cedar Canyon CDP Flare Date: 11/15/2022

**Duration of event:** 1 Hour 10 minutes **MCF Flared:** 1155

Start Time: 08:50 AM End Time: 10:00 AM

**Cause:** Emergency Flare > Downstream Activity > Enterprise > San Mateo > Shut In > High O2

Method of Flared Gas Measurement: Gas Flare Meter

**Comments:** This upset event was not caused by any wells associated with the facility.

# 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 downstream pipeline operator, which impacted Oxy's ability to send gas to a third-party downstream gas pipeline. This interruption, restriction, or complete shut-in of the gas pipeline by a thirdparty 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. In this case, flaring occurred to unexpected shut in by Enterprise caused by high O2 in the sales gas service pipeline. Sales gas had to be flared rather than be compressed when O2 was introduced into the gas system. As a result of Enterprise's pipeline sales valve detecting the high O2 and its valve closing, Enterprise shut in their pipeline until OXY cleared the O2 in the gas stream, for safety reasons.

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

It is OXY's policy to route its stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, flaring occurred to unexpected shut in by Enterprise caused by high O2 in the sales gas service pipeline. Sales gas had to be flared rather than be compressed when O2 was introduced into the gas system. As a result of Enterprise's pipeline sales valve detecting the high O2 and its valve closing, Enterprise shut in their pipeline until OXY cleared the O2 in the gas stream, for safety reasons. Oxy field personnel worked diligently and efficiently to purge the lines of oxygen. Once the lines were cleared of oxygen, Enterprise dispatched a technician to re-open their sales valve and begin taking gas again. Flaring ceased soon after.

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

Oxy is limited in its corrective actions to eliminate the cause and potential reoccurrence of O2 accidently pushed into the sales gas service system pipeline. OXY makes every effort to control and minimize emissions as much as possible. The limited reactive actions that Oxy can do in this circumstance is to immediately purge the O2 from the system as well as continually communicate with Enterprise personnel throughout these types of situations.

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** 

DEFINITIONS

Action 167182

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	167182
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### **DEFINITIONS**

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application:

- this application's operator, hereinafter "this operator";
- · venting and/or flaring, hereinafter "vent or flare";
- any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";
- the statements in (and/or attached to) this, hereinafter "the statements in this";
- and the past tense will be used in lieu of mixed past/present tense questions and statements.

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1220 S. St Francis Dr., Santa Fe, NM 87505

# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 167182

Phone:(505) 476-3470 Fax:(505) 476-3462			
Q	QUESTIONS		
Operator:		OGRID:	
OXY USA INC		16696	
P.O. Box 4294 Houston, TX 772104294		Action Number: 167182	
		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 w	ith the rest of the questions.	
Incident Well	Unavailable.		
Incident Facility	[fAPP2126642450] CEDAF	[fAPP2126642450] CEDAR CANYON ETP CDP	
Determination of Reporting Requirements			
Answer all questions that apply. The Reason(s) statements are calculated based on your answers a	and may provide addional quidanc	e	
Was this vent or flare caused by an emergency or malfunction	Yes	•	
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	No		
Is this considered a submission for a vent or flare event	Yes, major venting and/or	r 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	<u> </u>		
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes	y so a major or minor release arrow restricted the major or	
Did this vent or flare 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 vent or flare within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No		
Equipment Involved			
Primary Equipment Involved	Other (Specify)		
Additional details for Equipment Involved. Please specify	Emergency Flare > Downs	stream Activity > Enterprise > San Mateo > Shut In > High O2	
Payacantative Compositional Analysis of Vented as Flored National Con			
Representative Compositional Analysis of Vented or Flared Natural Gas			
Please provide the mole percent for the percentage questions in this group.  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			
Oxygen (02) percentage, it greater than one percent	0		
If you are venting and/or flaring because of Pipeline Specification, please provide the required spe-	cifications 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.		
Carbon Dioxide (C02) percentage quality requirement	Not answered.		
Oxygen (02) percentage quality requirement	Not answered.		

QUESTIONS, Page 2

Action 167182

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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe. NM 87505

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462	1 c, NW 07 000
QUESTI	ONS (continued)
Operator:	OGRID:
OXY USA INC P.O. Box 4294	16696 Action Number:
Houston, TX 772104294	167182 Action Type:
	[C-129] Venting and/or Flaring (C-129)
QUESTIONS	
Date(s) and Time(s)	
Date vent or flare was discovered or commenced	11/15/2022
Time vent or flare was discovered or commenced	08:50 AM
Time vent or flare was terminated	10:00 AM
Cumulative hours during this event	1
Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
, ,	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 1,155 Mcf   Recovered: 0 Mcf
Natural Gas Flared (Mcf) Details	Lost: 1,155 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Gas 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.
Vanting or Floring Populting from Dougatroom Activity	
Venting or Flaring Resulting from Downstream Activity	
Was this vent or flare a result of downstream activity  Was notification of downstream activity received by this operator	Yes
Downstream OGRID that should have notified this operator	No [713731] Enterprise Crude Pipeline LLC
Date notified of downstream activity requiring this vent or flare	Not answered.
Time notified of downstream activity requiring this vent or flare	Not answered.
Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True
Please explain reason for why this event was beyond this 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 downstream pipeline operator, which impacted Oxy's ability to send gas to a third-party downstream gas pipeline. This interruption, restriction, or complete shut-in of the gas pipeline by a thirdparty 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. In this case, flaring occurred to unexpected shut in by Enterprise caused by high O2 in the sales gas service pipeline. Sales gas had to be flared rather than be compressed when O2 was introduced into the gas system. As a result of Enterprise's pipeline sales valve detecting the high O2 and its valve closing, Enterprise shut in their pipeline until OXY cleared the O2 in the gas stream, for safety reasons.
Steps taken to limit the duration and magnitude of vent or flare	It is OXY's policy to route its stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, flaring occurred to unexpected shut in by Enterprise caused by high O2 in the sales gas service pipeline. Sales gas had to be flared rather than be compressed when O2 was introduced into the gas system. As a result of Enterprise's pipeline sales valve detecting the high O2 and its valve closing, Enterprise shut in their pipeline until OXY cleared the O2 in the gas stream, for safety reasons. Oxy field personnel worked diligently and efficiently to purge the lines of oxygen. Once the lines were cleared of oxygen, Enterprise dispatched a technician to re-open their sales valve and begin taking gas again. Flaring ceased soon after.
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### **ACKNOWLEDGMENTS**

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P.O. Box 4294	Action Number:
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	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### **ACKNOWLEDGMENTS**

V	I acknowledge that I am authorized to submit a Venting and/or Flaring (C-129) report on behalf of this operator and understand that this report can be a complete C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
V	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
V	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
V	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
V	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

Action 167182

# **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	167182
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### CONDITIONS

С	reated By	Condition	Condition Date
r	marialuna2	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.	12/14/2022