

#### Volumetrics Inc.

3710 East Rio Grande St, Victoria, TX-77901

Phone: 361-827-4024

Company: OXY USA INC Field/Location:  $\mathsf{NMSW}$ 

Station Name: CEDAR CANYON 22 SATELLITE PRODUCTION 2 (FMP)

Station Number : 14969PB Sample Date: 12/10/21 1:55 PM Analysis Date: 12/13/21 7:20 AM Instrument: INFICON Calibration/Verification Date: 12/13/2021

Heat Trace used: YES Work Order: 4000392873 Sampled by: VOLUMETRICS/CR Sample Type: SPOT-CYLINDER

Sample Temperature (F): 74.98 Sample Pressure (PSIG): 113.74 Flow rate (MCF/Day): 2673.5 Ambient Temperature (F): 76

Sampling method: FILL & EMPTY

Cylinder Number: 1575

NATURAL GAS ANALYSIS: GPA 2261					
Components	Un-Normalized Mol%	Normalized Mol%	GPM 14.650	GPM 14.730	GPM 15.025
Hydrogen Sulfide	0.0000	0.0000			
Nitrogen	1.3803	1.4094			
Methane	74.3214	75.8863			
Carbon Dioxide	0.1892	0.1932			
Ethane	12.0352	12.2886	3.281	3.298	3.365
Propane	5.8964	6.0206	1.656	1.665	1.698
Isobutane	0.7918	0.8085	0.264	0.266	0.271
N-butane	1.9260	1.9665	0.619	0.622	0.635
Isopentane	0.4152	0.4240	0.155	0.156	0.159
N-Pentane	0.4481	0.4575	0.166	0.166	0.170
Hexanes(C6's)	0.2492	0.2544	0.104	0.105	0.107
Heptanes (C7's)	0.1924	0.1964	0.090	0.091	0.093
Octanes (C8's)	0.0780	0.0796	0.041	0.041	0.042
Nonanes Plus (C9+)	0.0147	0.0150	0.008	0.008	0.009
Total	97.9380	100.0000			

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.385	6.418	6.548
Total GPM Iso-Pentane+	0.565	0.567	0.579
Compressibility (Z)	0.9961	0.9961	0.9961
Specific Gravity (Air=1) @ 60 °F	0.7546	0.7546	0.7546
Molecular Weight	21.779	21.779	21.779
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft <sup>3</sup> )	1291.1	1298.1	1324.1
Wet, Real (BTU/Ft <sup>3</sup> )	1268.5	1275.4	1301.0
Dry, Ideal (BTU/Ft <sup>3</sup> )	1286.0	1293.1	1319.0
Wet, Ideal (BTU/Ft <sup>3</sup> )	1263.5	1270.4	1295.9

Temperature base 60 °F

FIELD H2S =0 PPM Comment:

Verified by

Mostaq Ahammad Petroleum Chemist

Approved by Deann Friend

Deann Friend Laboratory Manager

## **UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Cedar Canyon 28-4 CTB Venting Date: 01/25/2023

**Duration of event:** 22 Hours 19 Minutes **MCF Vented:** 58

Start Time: 01:40 AM End Time: 11:59 PM

**Cause:** Venting > VRU > Malfunctions > Scrubber > High Liquid Levels

Method of Gas Measurement: Estimated Vent Calculations

Comments: N/A

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

This event was caused by the sudden, unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and maintenance practices. In this case, the VRU unit had issues with high suction scrubber liquid levels, which caused the unit to unexpectedly malfunction and venting to occur. The VCU on location was running to help with venting but could not keep up with the venting volume from time to time, consequential from the VRU being down. All facility operations and equipment were working as designed prior to the sudden and without warning malfunction of the VRU. This event was out Oxy's control, yet every effort was made to minimize the emissions.

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

In this case, the VRU unit had issues with high suction scrubber liquid levels, which caused the unit to unexpectedly malfunction and venting to occur. The VCU on location was running to help with venting but could not keep up with the venting volume from time to time, consequential from the VRU being down at intermittent occasions. All facility operations and equipment were working as designed prior to the sudden and without warning malfunction of the VRU. This event was out Oxy's control, yet every effort was made to minimize the emissions. Once the Oxy production technician received the on-call notice and arrived at the facility, he quickly inspected the VRU unit and thawed out the drain line. The Oxy production tech remained in the area to manually drain the scrubber throughout the day, if necessary, and inspected the pumps to ensure that scrubber is draining automatically. All facility operations and equipment were working as designed prior to the sudden and without warning shutdown of the VRU. This event was out Oxy's control, yet every effort was made to minimize the emissions.

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

Oxy is limited in the corrective actions to eliminate the cause and potential reoccurrence of a VRU malfunction and shutdown. Notwithstanding proper VRU design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause VRU unit malfunctions to occur without warning or advance notice, even during extreme weather conditions and temperatures. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its VRU equipment preventative maintenance program for this 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

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 186016

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	186016
	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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## **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 186016

Phone: (505) 476-3470 Fax: (505) 476-3462		
Q	UESTIONS	
Operator:		OGRID:
OXY USA INC P.O. Box 4294		16696
Houston, TX 772104294		Action Number: 186016
		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 wi	th the rest of the questions.
Incident Well	Unavailable.	
Incident Facility	[fAB1901048503] CEDAR (	CANYON 28-4 CTB
Determination of Reporting Requirements		
Answer all questions that apply. The Reason(s) statements are calculated based on your answers at		!
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	Yes	
Is this considered a submission for a vent or flare event	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	renting and/or flaring that is or may	be a major or minor release under 19.15.29.7 NMAC.
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes	
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	Yes	
For the count have been		
Equipment Involved	T	
Primary Equipment Involved	Other (Specify)	
Additional details for Equipment Involved. Please specify	Venting > VRU > Malfunction	ons > Scrubber > High Liquid Levels
Representative Compositional Analysis of Vented or Flared Natural Gas		
Please provide the mole percent for the percentage questions in this group.	70	
Methane (CH4) percentage	76	
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.	
Carbon Dioxide (C02) percentage quality requirement	Not answered.	
Oxygen (02) percentage quality requirement	Not answered	

QUESTIONS, Page 2

Action 186016

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District III

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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 (continued)

QUE	o i lo i to (continuca)		
Operator: OXY USA INC		OGRID: 16696	
P.O. Box 4294		Action Number:	
Houston, TX 772104294		186016	
		Action Type: [C-129] Venting and/or Flaring (C-129)	
QUESTIONS			
Date(s) and Time(s)			
Date vent or flare was discovered or commenced	01/25/2023		
Time vent or flare was discovered or commenced	01:40 AM		
Time vent or flare was terminated	11:59 PM		
Cumulative hours during this event	22		
Measured or Estimated Volume of Vented or Flared Natural Gas			
Natural Gas Vented (Mcf) Details	Cause: Other   Other (Spec Lost: 58 Mcf.	ify)   Natural Gas Vented   Released: 58 Mcf   Recovered: 0 Mcf	
Natural Gas Flared (Mcf) Details	Not answered.		
Other Released Details	Not answered.		
Additional details for Measured or Estimated Volume(s). Please specify	Estimated Vent Calculation	ns	
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied	d volumes this appears to be a "gas only" report.	
Venting or Flaring Resulting from Downstream Activity			

Venting or Flaring Resulting from Downstream Activity		
Was this vent or flare a result of downstream activity	No	
Was notification of downstream activity received by this operator	Not answered.	
Downstream OGRID that should have notified this operator	Not answered.	
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	This event was caused by the sudden, unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and maintenance practices. In this case, the VRU unit had issues with high suction scrubber liquid levels, which caused the unit to unexpectedly malfunction and venting to occur. The VCU on location was running to help with venting but could not keep up with the venting volume from time to time, consequential from the VRU being down. All facility operations and equipment were working as designed prior to the sudden and without warning malfunction of the VRU. This event was out Oxy's control, yet every effort was made to minimize the emissions.	
Steps taken to limit the duration and magnitude of vent or flare	In this case, the VRU unit had issues with high suction scrubber liquid levels, which caused the unit to unexpectedly malfunction and venting to occur. The VCU on location was running to help with venting but could not keep up with the venting volume from time to time, consequential from the VRU being down at intermittent occasions. All facility operations and equipment were working as designed prior to the sudden and without warning malfunction of the VRU. This event was out Oxy's control, yet every effort was made to minimize the emissions. Once the Oxy production technician received the on-call notice and arrived at the facility, he quickly inspected the VRU unit and thawed out the drain line. The Oxy production tech remained in the area to manually drain the scrubber throughout the day, if necessary, and inspected the pumps to ensure that scrubber is draining automatically. All facility operations and equipment were working as designed prior to the sudden and without warning shutdown of the VRU. This event was out Oxy's control, yet every effort was made to minimize the emissions.	
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in the corrective actions to eliminate the cause and potential reoccurrence of a VRU malfunction and shutdown. Notwithstanding proper VRU design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause VRU unit malfunctions to occur without warning or advance notice, even during extreme weather conditions and temperatures. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its VRU equipment preventative maintenance program for this facility.	

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ACKNOWLEDGMENTS

Action 186016

### **ACKNOWLEDGMENTS**

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OXY USA INC	16696
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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 186016

## **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	186016
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

### CONDITIONS

Created By	Condition	Condition Date
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.	2/14/2023