

#### 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 28 COMP STA FUEL INLET

Station Number: NA

 Sample Date:
 5/6/22 12:20 PM

 Analysis Date:
 5/9/22 1:00 PM

 Instrument:
 INFICON

 Calibration/Verification Date:
 5/9/2022

 Heat Trace used:
 YES

Work Order: 4000595140
Sampled by: OXY/JE

Sample Type : SPOT-CYLINDER

Sample Temperature (F): NA
Sample Pressure (PSIG): 65
Flow rate (MCF/Day): NA
Ambient Temperature (F): 92

Sampling method: FILL & EMPTY

Cylinder Number: 27765

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	1.3966	1.4225			
Methane	73.8165	75.1904			
Carbon Dioxide	0.2787	0.2839			
Ethane	11.7436	11.9622	3.194	3.212	3.276
Propane	5.8394	5.9481	1.636	1.645	1.678
Isobutane	0.7746	0.7890	0.258	0.259	0.264
N-butane	1.9443	1.9804	0.623	0.627	0.639
Isopentane	0.4841	0.4931	0.180	0.181	0.185
N-Pentane	0.5569	0.5672	0.205	0.206	0.211
Hexanes(C6's)	0.3958	0.4031	0.166	0.166	0.170
Heptanes (C7's)	0.4035	0.4110	0.189	0.190	0.194
Octanes (C8's)	0.3339	0.3401	0.174	0.175	0.178
Nonanes Plus (C9+)	0.2052	0.2090	0.117	0.118	0.120
Total	98.1730	100.0000			

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.742	6.780	6.916
Total GPM Iso-Pentane+	1.031	1.037	1.059
Compressibility (Z)	0.9958	0.9957	0.9956
Specific Gravity ( Air=1) @ 60 °F	0.7832	0.7832	0.7833
Molecular Weight	22.596	22.596	22.596
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft <sup>3</sup> )	1332.6	1340.0	1367.0
Wet, Real (BTU/Ft <sup>3</sup> )	1309.3	1316.6	1343.1
Dry, Ideal (BTU/Ft <sup>3</sup> )	1327.0	1334.2	1361.0
Wet, Ideal (BTU/Ft <sup>3</sup> )	1303.8	1310.9	1337.2

Temperature base 60 °F

Comment: FIELD H2S = 0 PPM

Verified by

Mostaq Ahammad Petroleum Chemist Approved by

Deann Friend

Deann Friend Laboratory Manager

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

Facility: Cedar Canyon 28-4 CTB Flare Date: 07/15/2023

**Duration of event:** 2 Hours 30 Minutes **MCF Flared:** 202

Start Time: 10:00 AM End Time: 12:30 PM

Cause: Emergency Flare > Third Party Downstream Activity > San Mateo Gas Plant > Weather-Related Power

Outage > Equipment Issues

Method of Flared Gas Measurement: Gas 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 compressor station operator, which impacted Oxy's ability to send gas to them. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline compression station operator is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, 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, San Mateo Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to severe weather affecting the area and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning.

# 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, that is beyond Oxy's control to avoid, prevent or foresee, to minimize emissions as much as possible as part of the overall steps taken to limit duration and magnitude of flaring. The flare at this facility has a 98% combustion efficiency to lessen emissions as much as possible. In this case, San Mateo Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to severe weather affecting the area and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assist with ensuring field area's mitigation optimizers cut injection rates to wells in the field to reduce injection and sales gas across the area. In addition, as soon as flaring alarms were received by field personnel, they began to shut-in several wells across the area to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the gas gathering system to cease flaring, which took some time to do. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.

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

Oxy is unable to take any corrective actions to eliminate the cause and potential reoccurrence of a downstream third-party owned and operated gas plant's issues, as this is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. San Mateo's gas plant will have issues which may reoccur from time to time and may trigger a spike in the gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When San Mateo's gas plant has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, San Mateo then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the San Mateo gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to continually communicate with San Mateo personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.

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 245849

### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	245849
	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 245849

Phone: (505) 476-3470 Fax: (505) 476-3462		
C	QUESTIONS	
Operator:		OGRID:
OXY USA INC P.O. Box 4294 Houston, TX 772104294		16696
		Action Number: 245849
		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	[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 a	and may provide addional quidanc	Δ
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, minor venting and/o	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		
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 > Third Related Power Outage >	Party Downstream Activity > San Mateo Gas Plant > Weather- Equipment Issues
Representative Compositional Analysis of Vented or Flared Natural Gas		
Please provide the mole percent for the percentage questions in this group.  Methods (CHA) percentage	75	
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		
Oxygen (02) percentage, if 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.		

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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, Page 2

Action 245849

QUESTIONS (co	ontinued)
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Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	245849
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	07/15/2023
Time vent or flare was discovered or commenced	10:00 AM
Time vent or flare was terminated	12:30 PM
Cumulative hours 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: Other   Other (Specify)   Natural Gas Flared   Released: 202 Mcf   Recovered: 0 Mcf   Lost: 202 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.

Venting or Flaring Resulting from Downstream Activity		
Was this vent or flare a result of downstream activity	Yes	
Was notification of downstream activity received by this operator	No	
Downstream OGRID that should have notified this operator	[328710] San Mateo Black River Oil Pipeline II, 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 pipeline compressor station operator, which impacted Oxy's ability to send gas to them. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline compression station operator is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, 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, San Mateo Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to severe weather affecting the area and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning.
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Steps taken to limit the duration and magnitude of vent or flare	and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assist with ensuring field area's mitigation optimizers cut injection rates to wells in the field to reduce injection and sales gas across the area. In addition, as soon as flaring alarms were received by field personnel, they began to shut-in several wells across the area to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the gas gathering system to cease flaring, which took some time to do. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is unable to take any corrective actions to eliminate the cause and potential reoccurrence of a downstream third-party owned and operated gas plant's issues, as this is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. San Mateo's gas plant will have issues which may reoccur from time to time and may trigger a spike in the gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When San Mateo's gas plant has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, San Mateo then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the San Mateo gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to continually communicate with San Mateo personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.

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ACKNOWLEDGMENTS

Action 245849

## **ACKNOWLEDGMENTS**

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OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	245849
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

## **ACKNOWLEDGMENTS**

V	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be <b>a complete</b> 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.

District II

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CONDITIONS

Action 245849

# **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	245849
	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.	7/31/2023