

## Certificate of Analysis

Number: 6030-24040534-001A

**Artesia Laboratory** 200 E Main St. Artesia, NM 88210 Phone 575-746-3481

**Chandler Montgomery** Occidental Petroleum 1502 W Commerce Dr. Carlsbad, NM 88220

PERMIAN RESOURCES Station Name: Mesa Verde CTB Check 2 (FMP)

Station Number: 15500D

Station Location: OP-L2109-BT001

Sample Point: Meter

FMP/LSE NMNM055953 Property ID:

Formation: **NEW\_MEXICO** 

County:

Field:

Well Name: CTB

Type of Sample: : Spot-Cylinder

Heat Trace Used: N/A

Sampling Method: : Fill and Purge

Sampled By: JΕ

Sample Of: FS Separator Gas Spot

Sample Date: 04/18/2024 10:20

Sample Conditions: 84 psig, @ 76 °F Ambient: 75 °F

Apr. 29, 2024

04/18/2024 10:20 Effective Date: Flow Rate: 46210 MSCFD Method: GPA-2261M

Cylinder No: 9999-005157

Instrument: 70104251 (Inficon GC-MicroFusion)

Last Inst. Cal.: 04/22/2024 0:00 AM

Analyzed: 04/25/2024 07:17:05 by EBH

Sampling Company: : OXY

## **Analytical Data**

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia	
Hydrogen Sulfide	0.0000	0.0000	0.0000		
Nitrogen	1.6661	1.6670	2.0766		
Carbon Dioxide	3.8369	3.8389	7.5130		
Methane	73.8729	73.9124	52.7288		
Ethane	10.8777	10.8835	14.5528	2.905	
Propane	5.6687	5.6717	11.1216	1.560	
Iso-Butane	0.7402	0.7406	1.9142	0.242	
n-Butane	1.7965	1.7975	4.6459	0.566	
Iso-Pentane	0.4287	0.4289	1.3761	0.157	
n-Pentane	0.4689	0.4692	1.5054	0.170	
Hexanes	0.2789	0.2790	1.0692	0.115	
Heptanes	0.1860	0.1861	0.8292	0.086	
Octanes	0.0752	0.0752	0.3820	0.038	
Nonanes Plus	0.0500	0.0500	0.2852	0.028	
	99.9467	100.0000	100.0000	5.867	
Calculated Physical	Properties	Tot	al	C9+	
Calculated Molecular \	Neight	22.4	19	128.26	
Compressibility Factor		0.996	62		
Relative Density Real		0.779	91	4.4283	
GPA 2172 Calculation					
Calculated Gross BT	U per ft³ @ 14.65 ps	sia & 60°F			
Real Gas Dry BTU		1233		6974.4	
Water Sat. Gas Base I	_	1212	-	6852.4	
Ideal, Gross HV - Dry	at 14.65 psia	1228		6974.4	
Ideal, Gross HV - Wet		1206	.9	6852.4	
Comments: H2S Fie	ld Content 0 ppm				

Hydrocarbon Laboratory Manager

The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

Quality Assurance:

WO# N/A

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

Facility: Mesa Verde 18 CTB Vent Date: 02/24/2025

**Duration of Event:** 1 Hour 49 Minutes **MCF Vented:** 151

Start Time: 09:47 PM End Time: 11:36 PM

**Cause:** Equipment Malfunction > VCU > Faulty Scrubber Dump

Method of Gas Measurement: Allocated Calculation

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

This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control an\d did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. In this instance, the VCU scrubber automatically shut down due to an abrupt and unforeseen malfunction of a significant level. Consequently, this led to the VCU becoming inoperative and the water tanks commencing to vent. Prior to the venting occurring, all equipment were working as designed and operated normally prior to the sudden and without warning malfunction. This venting event is out of OXY's control to prevent from happening yet OXY made every effort to control and minimize emissions as much as possible during this event by working safely and diligently.

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

This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control an\d did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. In this instance, the VCU scrubber automatically shut down due to an abrupt and unforeseen malfunction of a significant level. Consequently, this led to the VCU becoming inoperative and the water tanks commencing to vent. Prior to the venting occurring, all equipment were working as designed and operated normally prior to the sudden and without warning malfunction. As soon as venting was recognized as occurring, a VCU technician was requested to be dispatched from a third-party vendor, to troubleshoot the issue regarding the faulty scrubber dump. The venting was stopped once the issue was resolved. While venting is not Oxy's preferred method of handling excess gas, it is a necessary step under these exceptional circumstances to maintain the integrity and safety of our operations. 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 has limited options for corrective actions to address the causes and potential recurrence of equipment malfunctions. This is due to the dynamic nature of various equipment designs and operations. Facility equipment, regardless of type, can experience sudden and unforeseeable alarms, whether false or true, which may lead to unexpected malfunctions and subsequently trigger venting events. Oxy continually strives to maintain and operate all its equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events.

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory <a href="https://www.emnrd.nm.gov/ocd/contact-us">https://www.emnrd.nm.gov/ocd/contact-us</a>

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

DEFINITIONS

Action 441490

### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	441490
	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 441490

Ql	JESTIONS		
Operator:		OGRID:	
OXY USA INC P.O. Box 4294		16696 Action Number:	
Houston, TX 772104294		441490	
		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 t	hese issues before continuing wit	h the rest of the questions.	
Incident Well	Unavailable.		
Incident Facility	[fAPP2126659618] MESA V	[fAPP2126659618] MESA VERDE 18 CTB	
Determination of Reporting Requirements			
Answer all questions that apply. The Reason(s) statements are calculated based on your answers an	nd may provide addional quidance		
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/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 very was there at least 50 MCF of natural gas vented and/or flared during this event	Yes	be a major or minor release under 19.15.29.7 NMAC.	
Did this vent or flare result in the release of <b>ANY</b> liquids (not fully and/or completely	165		
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	Equipment Malfunction > V	CU > Faulty Scrubber Dump	
Representative Compositional Analysis of Vented or Flared Natural Gas			
Please provide the mole percent for the percentage questions in this group.	74		
Methane (CH4) percentage  Nitrogen (N2) percentage, if greater than one percent	2		
Hydrogen Sulfide (H2S) PPM, rounded up	0		
Carbon Dioxide (C02) percentage, if greater than one percent	4		
Oxygen (02) percentage, if greater than one percent	0		
If you are venting and/or flaring because of Pipeline Specification, please provide the required speci	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.		

Not answered.

Oxygen (02) percentage quality requirement

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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 441490

QUEST	IONS (continued)
Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294 Houston, TX 772104294	Action Number: 441490
	Action Type:  [C-129] Venting and/or Flaring (C-129)
QUESTIONS	
Date(s) and Time(s)	
Date vent or flare was discovered or commenced	02/24/2025
Time vent or flare was discovered or commenced	09:47 PM
Time vent or flare was terminated	11:36 PM
Cumulative hours during this event	2
Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Vented   Released: 151 Mcf   Recovered: 0 Mcf   Lost: 151 Mcf.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	allocated calculations
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	1
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 emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control an\d did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. In this instance, the VCU scrubber automatically shut down due to an abrupt and unforeseen malfunction of a significant level. Consequently, this led to the VCU becoming inoperative and the water tanks commencing to vent. Prior to the venting occurring, all equipment were working as designed and operated normally prior to the sudden and without warning malfunction. This venting event is out of OXY's control to prevent from happening yet OXY made every effort to control and minimize emissions as much as possible during this event by working safely and diligently.

This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control an\d did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. In this instance, the VCU scrubber automatically shut down due to an abrupt and unforeseen malfunction of a significant level.

Steps taken to limit the duration and magnitude of vent or flare	Consequently, this led to the VCU becoming inoperative and the water tanks commencing to vent. Prior to the venting occurring, all equipment were working as designed and operated normally prior to the sudden and without warning malfunction. As soon as venting was recognized as occurring, a VCU technician was requested to be dispatched from a third-party vendor, to troubleshoot the issue regarding the faulty scrubber dump. The venting was stopped once the issue was resolved. While venting is not Oxy's preferred method of handling excess gas, it is a necessary step under these exceptional circumstances to maintain the integrity and safety of our operations. 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 has limited options for corrective actions to address the causes and potential recurrence of equipment malfunctions. This is due to the dynamic nature of various equipment designs and operations. Facility equipment, regardless of type, can experience sudden and unforeseeable alarms, whether false or true, which may lead to unexpected malfunctions and subsequently trigger venting events. Oxy continually strives to maintain and operate all its equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events.

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ACKNOWLEDGMENTS

Action 441490

## **ACKNOWLEDGMENTS**

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OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	441490
	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.

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CONDITIONS

Action 441490

### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	441490
	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.	3/11/2025