Certificate of Analysis

Number: 6030-23020156-001A

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

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

Feb. 16, 2023

Field:	Mesa Verde	Sampled By:	Raul Salazar
Station Name:	Mesa Verde CTB Check 2	Sample Of:	Gas Spot
Station Number:	15500D	Sample Date:	02/08/2023
Station Location:	CTB	Sample Conditions:	100 psig, @ 74.2 °F Ambient: 60 °F
Sample Point:	Meter	Effective Date:	02/08/2023
Formation:	Monthly	Method:	GPA-2261M
County:	Lea, NM	Cylinder No:	1111-007610
Type of Sample: :	Spot-Cylinder	Instrument:	70104251 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	02/14/2023 0:00 AM
Sampling Method: :	Fill and Purge	Analyzed:	02/16/2023 08:35:27 by EBH
Sampling Company: :	SPL		

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Nitrogen	1.055	1.07848	1.318	
Carbon Dioxide	4.247	4.34006	8.330	
Methane	70.693	72.23909	50.544	
Ethane	11.464	11.71486	15.363	3.128
Propane	6.276	6.41282	12.333	1.764
Iso-Butane	0.844	0.86276	2.187	0.282
n-Butane	1.905	1.94686	4.935	0.613
Iso-Pentane	0.425	0.43399	1.366	0.158
n-Pentane	0.434	0.44328	1.395	0.160
Hexanes	0.250	0.25547	0.960	0.105
Heptanes	0.169	0.17270	0.755	0.080
Octanes	0.069	0.07051	0.351	0.036
Nonanes Plus	0.029	0.02912	0.163	0.016
	97.860	100.00000	100.000	6.342

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	22.93	128.26
Compressibility Factor	0.9960	
Relative Density Real Gas	0.7946	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1254.2	6974.4
Water Sat. Gas Base BTU	1232.8	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1249.2	6974.4
Ideal, Gross HV - Wet	1227.3	6852.4

Hydrocarbon Laboratory Manager

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

UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Mesa Verde 18 CTB

Vent Date: 02/06/2025

Duration of Event: 8 Hours

MCF Vented: 57

Start Time: 01:00 AM

End Time: 09:00 AM

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
https://www.emnrd.nm.gov/ocd/contact-us

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

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 434290
	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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QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 434290
	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 with the rest of the questions.	
Incident Well	*Unavailable.*
Incident Facility	**[fAPP2126659618] MESA VERDE 18 CTB**

Determination of Reporting Requirements	
Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide addional guidance.	
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 venting 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 **ANY** 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	Equipment Malfunction > VCU > Faulty Scrubber Dump

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	72
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	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 specifications 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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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 434290
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	02/06/2025
Time vent or flare was discovered or commenced	01:00 AM
Time vent or flare was terminated	09:00 AM
Cumulative hours during this event	8

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: 57 Mcf | Recovered: 0 Mcf | Lost: 57 Mcf.
Other Released Details	*Not answered.*
Additional details for Measured or Estimated Volume(s). Please specify	Allocated Calculation
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	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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 434290
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

☑	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.
☑	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.
☑	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.
☑	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.
☑	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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 434290
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
shelbyschoepf	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.	2/21/2025