



# 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

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C9+</b>
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.

## VCU FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

**Facility:** Mesa Verde 18 CTB

**Date:** 10/16/2023

**Duration of event:** >8 hours/day

**MCF Flared:** 66

**Start Time:** 12:00 AM

**End Time:** 11:59 PM

**Cause:** Routine Combustion of storage tank vapors using an enclosed combustion device (VCU)

**Method of Flared Gas Measurement:** VCU Meter F6002 tracking combusted gas

**Well API Associated with Facility:** 30-015-44551 Mesa Verde Bone Spring Unit #016H

**Comments:** No wells were involved with this flaring event as this event is due to combustion of storage tank vapors by an enclosed combustion device which is used routinely at this facility, pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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

On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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

On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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

On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

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**District II**  
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**District III**  
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**District IV**  
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 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 280610

**DEFINITIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 280610
	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

Action 280610

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 280610
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b>	
<i>Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.</i>	
Incident Well	Unavailable.
Incident Facility	[fAPP2126659618] MESA VERDE 18 CTB

<b>Determination of Reporting Requirements</b>	
<i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i>	
Was this vent or flare caused by an emergency or malfunction	No
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.
<i>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.</i>	
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 within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

<b>Equipment Involved</b>	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	VCU Meter F6002 tracking combusted gas - No wells were involved with this flaring event as this event is due to combustion of storage tank vapors by an enclosed combustion device which is used routinely at this facility, pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>	
<i>Please provide the mole percent for the percentage questions in this group.</i>	
Methane (CH4) percentage	72
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	4
Oxygen (O2) percentage, if greater than one percent	0
<i>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</i>	
Methane (CH4) percentage quality requirement	Not answered.
Nitrogen (N2) percentage quality requirement	Not answered.
Hydrogen Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 280610

**QUESTIONS (continued)**

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**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	10/16/2023
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	24

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: 66 Mcf   Recovered: 0 Mcf   Lost: 66 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	VCU Meter F6002 tracking combusted gas
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	On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.
Steps taken to limit the duration and magnitude of vent or flare	On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to Federal US EPA NSPS OOOO/OOOOa regulations and state air permitting requirements that require the use of such a device to reduce storage tank emissions by 95%.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	On May 17, 2021, NMOCD issued a notice entitled, "Frequently Asked Questions Regarding the Natural Gas Waste Rules," and states that "... pursuant to 19.15.27.8(G) NMAC, an operator who vents or flares for any reason and that lasts more than 8 hours cumulatively during any 24-hour period must report that event on Form C-129." Combustion of storage tank vapors by this enclosed combustion device is used routinely at this facility pursuant to

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ACKNOWLEDGMENTS

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**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	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 a <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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 280610

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Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 280610
	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.	10/29/2023