Certificate of Analysis

Number: 6030-23030373-001A

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

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

Mar. 31, 2023

Field:	PERMIAN_RESOURCES	Sampled By:	Raul Salazar
Station Name:	Precious CTB Train 2 Check (FMP)	Sample Of:	Gas Spot
Station Number:	17622C	Sample Date:	03/23/2023
Station Location:	OP-DELSE-BT001	Sample Conditions:	120 psig, @ 102.4 °F Ambient: 75 °F
Sample Point:	Meter	Effective Date:	03/23/2023
Formation:	NEW_MEXICO	Method:	GPA-2261M
County:		Cylinder No:	1111-007922
Type of Sample: :	Spot-Cylinder	Instrument:	70104251 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	03/27/2023 0:00 AM
Sampling Method: :	Fill and Purge	Analyzed:	03/30/2023 14:16:51 by EBH
Sampling Company: :	SPL		

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Nitrogen	0.934	0.94910	1.124	
Carbon Dioxide	0.139	0.14102	0.262	
Methane	69.687	70.85133	48.039	
Ethane	13.882	14.11402	17.937	3.771
Propane	7.677	7.80521	14.546	2.148
Iso-Butane	1.009	1.02627	2.521	0.336
n-Butane	2.519	2.56141	6.292	0.807
Iso-Pentane	0.579	0.58908	1.796	0.215
n-Pentane	0.666	0.67672	2.064	0.245
Hexanes	0.466	0.47389	1.726	0.195
Heptanes	0.454	0.46179	1.956	0.213
Octanes	0.267	0.27177	1.312	0.139
Nonanes Plus	0.077	0.07839	0.425	0.044
	98.356	100.00000	100.000	8.113

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	23.66	128.26
Compressibility Factor	0.9953	
Relative Density Real Gas	0.8205	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1402.1	6974.4
Water Sat. Gas Base BTU	1378.1	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1395.4	6974.4
Ideal, Gross HV - Wet	1371.0	6852.4

Comments: Lease# NMWM021640

Hydrocarbon Laboratory Manager

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

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Precious NC 31 CTB **Flare Date:** 10/23/2024

Duration of Event: 2 Hours 33 Minutes **MCF Flared:** 99

Start Time: 01:50 PM **End Time:** 04:23 PM

Cause: Emergency Flare > Scheduled Maintenance > Multiple Compression Equipment Issues

Method of Flared Gas Measurement: Gas Flare Meter

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

In this case, while mechanics performed preventative maintenance on gas compressor unit 1, several other compressor units, #2 and # 3, repeatedly kept malfunctioning on high discharge temperature alarms. Compression mechanics had to finish their preventative maintenance work on unit #1, before they could perform work on compressor units #2 & #3. While work was being performed, the compression equipment and the backup compression equipment, were locked out of service. The facility's compression equipment kept malfunctioning suddenly and unexpectedly several times, during this preventative maintenance work, which in turn triggered brief flaring events to occur. The occurrence of this event was beyond OXY's control. OXY took all possible measures to manage and reduce emissions to the greatest extent. This event is out of OXY's control yet OXY made every effort to control and minimize emissions as much as possible.

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, while mechanics performed preventative maintenance on gas compressor unit 1, several other compressor units, #2 and # 3, repeatedly kept malfunctioning on high discharge temperature alarms. Compression mechanics had to finish their preventative maintenance work on unit #1, before they could perform work on compressor units #2 & #3. While work was being performed, the compression equipment and the backup compression equipment, were locked out of service. The facility's compression equipment kept malfunctioning suddenly and unexpectedly several times, during this preventative maintenance work, which in turn triggered brief flaring events to occur. During each occurrence of intermittent flaring, the facility's well optimizer modified injection rates and field staff manually shut-in wells to reduce and eventually stop the flaring. Despite optimal design and operation of gas compressors, unforeseen mechanical or technical problems can arise unexpectedly, leading to compressor unit failures. These issues can occur without warning, even during routine preventative maintenance activities. Compressor engines are designed to operate in a precise manner and when malfunctions occur, it disrupts the compression unit's operating manner and robs the compression engine of power, thus, causing an automatic shutdown of the unit. 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 limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding compressor engine design and operation, compressors are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable and unexpected which can cause compression malfunctions to occur, thereby, triggering the unit's sensors to automatically shut down the unit to avoid catastrophic damage to the internal engine components. 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. Oxy has a strong and positive equipment preventative maintenance program in place.

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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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400214
	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 400214

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400214
	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	**[fAPP2126657195] PRECIOUS 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	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 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	*Not answered.*
Additional details for Equipment Involved. Please specify	Emergency Flare > Scheduled Maintenance > Multiple Compression Equipment Issues

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	71
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 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: 400214
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	10/23/2024
Time vent or flare was discovered or commenced	01:50 PM
Time vent or flare was terminated	04:23 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: 99 Mcf | Recovered: 0 Mcf | Lost: 99 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	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	In this case, while mechanics performed preventative maintenance on gas compressor unit 1, several other compressor units, #2 and # 3, repeatedly kept malfunctioning on high discharge temperature alarms. Compression mechanics had to finish their preventative maintenance work on unit #1, before they could perform work on compressor units #2 & #3. While work was being performed, the compression equipment and the backup compression equipment, were locked out of service. The facility's compression equipment kept malfunctioning suddenly and unexpectedly several times, during this preventative maintenance work, which in turn triggered brief flaring events to occur. The occurrence of this event was beyond OXY's control. OXY took all possible measures to manage and reduce emissions to the greatest extent. This event is out of OXY's control yet OXY made every effort to control and minimize emissions as much as possible.
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Steps taken to limit the duration and magnitude of vent or flare	compression equipment and the backup compression equipment, were locked out of service. The facility's compression equipment kept malfunctioning suddenly and unexpectedly several times, during this preventative maintenance work, which in turn triggered brief flaring events to occur. During each occurrence of intermittent flaring, the facility's well optimizer modified injection rates and field staff manually shut-in wells to reduce and eventually stop the flaring. Despite optimal design and operation of gas compressors, unforeseen mechanical or technical problems can arise unexpectedly, leading to compressor unit failures. These issues can occur without warning, even during routine preventative maintenance activities. Compressor engines are designed to operate in a precise manner and when malfunctions occur, it disrupts the compression unit's operating manner and robs the compression engine of power, thus, causing an automatic shutdown of the unit. 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 limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding compressor engine design and operation, compressors are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable and unexpected which can cause compression malfunctions to occur, thereby, triggering the unit's sensors to automatically shut down the unit to avoid catastrophic damage to the internal engine components. 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. Oxy has a strong and positive equipment preventative maintenance program in place.

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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400214
	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

Action 400214

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 400214
	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.	11/6/2024