Certificate of Analysis

Number: 6030-23120311-001A

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

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

Jan. 11, 2024

Field:	PERMIAN_RESOURCES	Sampled By:	JE
Station Name:	Sand Dunes CTB Check	Sample Of:	Gas Spot
Station Number:	17000C	Sample Date:	12/28/2023 09:20
Station Location:	OP-L0901-BT002	Sample Conditions:	88 psig, @ 68 °F Ambient: 31 °F
Sample Point:	Meter	Effective Date:	12/28/2023 09:20
Formation:	NEW_MEXICO	Flow Rate:	17996 MSCFD
County:		Method:	GPA-2261M
Well Name:	CTB	Cylinder No:	5030-01063
Type of Sample: :	Spot-Cylinder	Instrument:	70104251 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	01/09/2024 0:00 AM
Sampling Method: :	Fill and Purge	Analyzed:	01/09/2024 08:30:50 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	1.2725	1.3037	1.5990	
Carbon Dioxide	0.5710	0.5850	1.1272	
Methane	70.6744	72.4044	50.8552	
Ethane	12.9937	13.3118	17.5248	3.555
Propane	7.3509	7.5308	14.5390	2.072
Iso-Butane	0.8677	0.8889	2.2620	0.290
n-Butane	2.1166	2.1684	5.5180	0.683
Iso-Pentane	0.4679	0.4794	1.5143	0.175
n-Pentane	0.5187	0.5314	1.6786	0.192
Hexanes	0.3367	0.3449	1.3013	0.142
Heptanes	0.2976	0.3049	1.3376	0.140
Octanes	0.1258	0.1289	0.6447	0.066
Nonanes Plus	0.0170	0.0175	0.0983	0.010
	97.6105	100.0000	100.0000	7.325

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	22.84	128.26
Compressibility Factor	0.9957	
Relative Density Real Gas	0.7917	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1340.5	6974.4
Water Sat. Gas Base BTU	1317.6	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1334.7	6974.4
Ideal, Gross HV - Wet	1311.4	6852.4

Comments: H2S Field Content 0 ppm
FMP/LSE NM40659

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: Sand Dunes South Corridor **Flare Date:** 11/12/2024

Duration of Event: 7 Hours 2 Minutes **MCF Flared:** 125

Start Time: 10:24 AM **End Time:** 05:26 PM

Cause: Emergency Flare > Scheduled Modification to VRU Suction Line > VRU's > VRT's

Method of Flared Gas Measurement: Gas Flare Meter

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

In this instance, this was a planned flare, as this event was a scheduled modification to the suction line for the VRUs servicing the production VRTs resulted in brief instances of overpressure at the facility, which triggered intermittent flaring events. This modification to the suction line for the VRU's was necessary to improve the efficiency of the VRU operations. Flow from the heaters was diverted to the oil production tanks while inlet piping was changed for the low pressure VRU unit #1 and low pressure VRU unit #2. OXY made every effort to control and minimize emissions as much as possible during this planned modification to VRU equipment. To mitigate the risks associated with overpressure of the facility during this process and to ensure the safety of our operations, we have had to resort to controlled and safety flaring. This process allows us to safely burn off the excess gas, thereby preventing potential hazards such as equipment damage, leaks, or even explosions. While flaring 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. 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 a planned, or 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. In this instance, this was a planned flare, as this event was a scheduled modification to the suction line for the VRUs servicing the production VRTs resulted in brief instances of overpressure at the facility, which triggered intermittent flaring events. This modification to the suction line for the VRU's was necessary to improve the efficiency of the VRU operations. Flow from the heaters was diverted to the oil production tanks while inlet piping was changed for the low pressure VRU unit #1 and low pressure VRU unit #2. VRU mechanics were on-site to assist during this planned procedure and to ensure that the VRU's were restarted, and no issues occurred. While flaring 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. 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:

In this instance, this was a planned flare, as this event was a scheduled modification to the suction line for the VRUs servicing the production VRTs resulted in brief instances of overpressure at the facility, which triggered intermittent flaring events. This modification to the suction line for the VRU's was necessary to improve the efficiency of the VRU operations. While flaring 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. OXY made every effort to control and minimize emissions as much as possible.

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: 407191
	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: 407191
	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	**[fAPP2127048458] Sand Dunes South Corridor 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	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > Scheduled Modification to VRU Suction Line > VRU's > VRT's

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	1
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: 407191
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	11/12/2024
Time vent or flare was discovered or commenced	10:24 AM
Time vent or flare was terminated	05:26 PM
Cumulative hours during this event	7

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: 125 Mcf | Recovered: 0 Mcf | Lost: 125 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 instance, this was a planned flare, as this event was a scheduled modification to the suction line for the VRUs servicing the production VRTs resulted in brief instances of overpressure at the facility, which triggered intermittent flaring events. This modification to the suction line for the VRU's was necessary to improve the efficiency of the VRU operations. Flow from the heaters was diverted to the oil production tanks while inlet piping was changed for the low pressure VRU unit #1 and low pressure VRU unit #2. OXY made every effort to control and minimize emissions as much as possible during this planned modification to VRU equipment. To mitigate the risks associated with overpressure of the facility during this process and to ensure the safety of our operations, we have had to resort to controlled and safety flaring. This process allows us to safely burn off the excess gas, thereby preventing potential hazards such as equipment damage, leaks, or even explosions. While flaring 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. OXY made every effort to control and minimize emissions as much as possible.
	It is OXY's policy to route its stranded gas to a flare during a planned, or 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. In this instance, this was a planned flare, as this event was a scheduled modification to the suction line for the VRUs servicing the production VRTs resulted in brief instances of overpressure at the facility, which triggered intermittent

Steps taken to limit the duration and magnitude of vent or flare	flaring events. This modification to the suction line for the VRU's was necessary to improve the efficiency of the VRU operations. Flow from the heaters was diverted to the oil production tanks while inlet piping was changed for the low pressure VRU unit #1 and low pressure VRU unit #2. VRU mechanics were on-site to assist during this planned procedure and to ensure that the VRU's were restarted, and no issues occurred. While flaring 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. 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	In this instance, this was a planned flare, as this event was a scheduled modification to the suction line for the VRUs servicing the production VRTs resulted in brief instances of overpressure at the facility, which triggered intermittent flaring events. This modification to the suction line for the VRU's was necessary to improve the efficiency of the VRU operations. While flaring 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. OXY made every effort to control and minimize emissions as much as possible.

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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 407191
	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: 407191
	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.	11/27/2024