Certificate of Analysis

Number: 6030-23060082-001A

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

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

June 08, 2023

Field:	PERMIAN_RESOURCES	Sampled By:	JL
Station Name:	Sand Dunes CTB Check	Sample Of:	Gas Spot
Station Number:	17000C	Sample Date:	06/06/2023
Station Location:	OP-L0901-BT002	Sample Conditions:	83 psig, @ 81 °F Ambient: 71 °F
Sample Point:	Meter	Effective Date:	06/06/2023
Formation:	NEW_MEXICO	Method:	GPA-2261M
County:		Cylinder No:	5030-00968
Well Name:	CTB	Instrument:	70104251 (Inficon GC-MicroFusion)
Type of Sample: :	Spot-Cylinder	Last Inst. Cal.:	06/05/2023 0:00 AM
Heat Trace Used:	N/A	Analyzed:	06/08/2023 12:30:39 by EBH
Sampling Method: :	Fill and Purge	Flow Rate mcf/d:	
Sampling Company: :	SPL - OXY		

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	0.0000	0.0000	0.0000	
Nitrogen	1.1067	1.1123	1.3986	
Carbon Dioxide	1.1627	1.1686	2.3085	
Methane	74.5771	74.9559	53.9743	
Ethane	11.9351	11.9957	16.1903	3.203
Propane	6.0987	6.1297	12.1323	1.686
Iso-Butane	0.8248	0.8290	2.1628	0.271
n-Butane	2.0711	2.0816	5.4306	0.655
Iso-Pentane	0.4765	0.4789	1.5509	0.175
n-Pentane	0.5143	0.5169	1.6740	0.187
Hexanes	0.3310	0.3327	1.2869	0.137
Heptanes	0.2660	0.2674	1.2027	0.123
Octanes	0.1072	0.1077	0.5522	0.055
Nonanes Plus	0.0235	0.0236	0.1359	0.013
	99.4947	100.0000	100.0000	6.505

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	22.28	128.26
Compressibility Factor	0.9960	
Relative Density Real Gas	0.7720	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1298.4	6974.4
Water Sat. Gas Base BTU	1276.2	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1293.2	6974.4
Ideal, Gross HV - Wet	1270.5	6852.4

Comments: H2S Field Content 0 ppm

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 CTB **Flare Date:** 01/25/2024

Duration of Event: 4 Hours 18 Minutes **MCF Flared:** 1730

Start Time: 12:39 PM **End Time:** 04:57 PM

Cause: Emergency Flare > Third Party > USA Compression > Gas Flow Restriction > Third Party Downstream Activity > MPLX

Method of Flared Gas Measurement: Gas Flare Meter

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

The emissions were caused by the sudden, unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and maintenance practices. Internal Oxy procedures ensure that upon a sudden and unexpected flaring event, production techs are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. In this case, the automation team who was servicing the PLC, inadvertently caused a malfunction to the control valves on the gas sales manifold, which in turn caused the facility to overpressure trigging a flaring event to occur. This event is out of OXY's control. 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, the automation team who was servicing the PLC, inadvertently caused a malfunction to the control valves on the gas sales manifold, which in turn caused the facility to overpressure trigging a flaring event to occur. In this case, the automation team who was servicing the PLC, inadvertently caused a malfunction to the control valves on the gas sales manifold, which in turn caused the facility to overpressure trigging a flaring event to occur. As soon as flaring occurred, the facility's well optimizer adjusted injection rates and field personnel manually shut-in wells to mitigate and subsequently cease flaring. 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:

The corrective actions taken to potentially eliminate this type of cause and reoccurrence of flaring is for Oxy's automation team to make arrangements to retrain its field personnel and/or third-party contractors on processes and protocols when replacing equipment batteries and to ensure they take note of failure possibilities when replacing batteries in the battery backup so they will know what actions to take should another situation occur like this.

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District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
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: 313209
	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 313209

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 313209
	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, major 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 > Third Party > USA Compression > Gas Flow Restriction > Third Party Downstream Activity > MPLX

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	75
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: 313209
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	01/25/2024
Time vent or flare was discovered or commenced	12:39 PM
Time vent or flare was terminated	04:57 PM
Cumulative hours during this event	4

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: 1,730 Mcf | Recovered: 0 Mcf | Lost: 1,730 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	Yes
Was notification of downstream activity received by this operator	No
Downstream OGRID that should have notified this operator	[258315] MARKWEST ENERGY OPERATING CO LLC
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	The emissions were caused by the sudden, unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and maintenance practices. Internal Oxy procedures ensure that upon a sudden and unexpected flaring event, production techs are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. In this case, the automation team who was servicing the PLC, inadvertently caused a malfunction to the control valves on the gas sales manifold, which in turn caused the facility to overpressure trigging a flaring event to occur. This event is out of OXY's control. OXY made every effort to control and minimize emissions as much as possible.
Steps taken to limit the duration and magnitude of vent or flare	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, the automation team who was servicing the PLC, inadvertently caused a malfunction to the control valves on the gas sales manifold, which in turn caused the facility to overpressure trigging a flaring event to occur. In this case, the automation team who was servicing the PLC, inadvertently caused a malfunction to the control valves on the gas sales manifold, which in turn caused the facility to overpressure trigging a flaring event to occur. As soon as flaring occurred, the facility's well optimizer

	adjusted injection rates and field personnel manually shut-in wells to mitigate and subsequently cease flaring. 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	The corrective actions taken to potentially eliminate this type of cause and reoccurrence of flaring is for Oxy's automation team to make arrangements to retrain its field personnel and/or third-party contractors on processes and protocols when replacing equipment batteries and to ensure they take note of failure possibilities when replacing batteries in the battery backup so they will know what actions to take should another situation occur like this.

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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 313209
	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: 313209
	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.	2/9/2024