Certificate of Analysis

Number: 6030-22030260-001A

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. 17, 2022

Field:	Pue Gold	Sampled By:	Scott Beasley
Station Name:	Gold CTB Check Meter	Sample Of:	Gas Spot
Station Number:	17200c	Sample Date:	03/15/2022 09:00
Sample Point:	Meter	Sample Conditions:	78.3 psig, @ 53.2 °F Ambient: 42 °F
Meter Number:	4000524218	Effective Date:	03/15/2022 09:00
County:	Eddy	Method:	GPA-2261M
Type of Sample:	Spot-Cylinder	Cylinder No:	1111-002654
Heat Trace Used:	No	Instrument:	70142339 (Inficon GC-MicroFusion)
Sampling Method:	Fill and Purge	Last Inst. Cal.:	03/07/2022 0:00 AM
Sampling Company:	OXY	Analyzed:	03/17/2022 09:15:18 by ERG

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	NIL	NIL	NIL	
Nitrogen	2.356	2.37352	2.988	
Carbon Dioxide	2.378	2.39487	4.736	
Methane	73.277	73.81252	53.210	
Ethane	11.392	11.47495	15.505	3.063
Propane	5.864	5.90635	11.703	1.624
Iso-Butane	0.769	0.77462	2.023	0.253
n-Butane	1.921	1.93544	5.055	0.609
Iso-Pentane	0.429	0.43214	1.401	0.158
n-Pentane	0.448	0.45117	1.463	0.163
Hexanes	0.219	0.22080	0.855	0.091
Heptanes	0.150	0.15059	0.678	0.069
Octanes	0.058	0.05873	0.301	0.030
Nonanes Plus	0.014	0.01430	0.082	0.008
	99.275	100.00000	100.000	6.068

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	22.25	128.26
Compressibility Factor	0.9962	
Relative Density Real Gas	0.7710	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1245.2	6974.4
Water Sat. Gas Base BTU	1223.9	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1240.5	6974.4
Ideal, Gross HV - Wet	1218.7	6852.4

Comments: H2S Field Content 0 ppm
Mcf/day 33915

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: Gold NC 29 CTB

Flare Date: 04/30/2022

Duration of event: 13 Hours 19 Minutes

MCF Flared: 770.00

Start Time: 07:30 AM

End Time: 08:49 PM

Cause: Facility Equipment Malfunction > LP gas lines > HP VRU's

Method of Flared Gas Measurement: Gas Flare Meter

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 and 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 case, this was a sudden and unexpected malfunction of the facility's oil processing equipment which caused oil to foam in the low-pressure gas lines which routes to the high pressure VRU's, prompting them to shut down as they began to overfill with foaming liquid. Once the high pressure VRU's shutdown , this prompted additional equipment to reduce its operation, which then triggered an unexpected flaring event. An Oxy production tech was on-site when the flaring event occurred, and as soon as he noticed it happening, he quickly began inspecting the facility equipment. Upon noticing that the VRU's were shut down and overfilling with oil, the Oxy production tech quickly called Hybon to send out a mechanic to troubleshoot the VRU's and clean up the units so that they could be brought back online. Hybon indicated that there was a delay in sending a mechanic, but every effort would be made to have the issue resolved as soon as possible. With the VRU's shut down, as well as other facility equipment, Oxy routed its stranded gas to flare as a safety precaution to protect equipment, environment, and personnel. 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 in order to lessen emissions as much as possible. In this case, this was a sudden and unexpected malfunction of the facility's oil processing equipment which caused oil to foam in the low-pressure gas lines which routes to the high pressure VRU's, prompting them to shut down as they began to overfill with foaming liquid. Once the high pressure VRU's shutdown , this prompted additional equipment to reduce its operation, which then triggered an unexpected flaring event. An Oxy production tech was on-site when the flaring event occurred, and as soon as he noticed it happening, he quickly began inspecting the facility equipment. Upon noticing that the VRU's were shut down and overfilling with oil, the Oxy production tech quickly called Hybon to send out a mechanic to troubleshoot the VRU's and clean up the units so that they could be brought back online. Hybon indicated that there was a delay in sending a mechanic, but every effort would be made to have the issue resolved as soon as possible. While the Oxy production tech, waited

for Hybon's mechanic, additional Oxy field personnel arrived at the facility to assist with correcting the oil processing in an effort to reduce foaming, to purge the gas lines of liquid, implemented heat equipment temperature reductions and modify the oil process flow as a preventative measure to avoid foaming. After a few hours, a mechanic dispatched by Hybon was able to arrive at the facility and begin troubleshooting the VRU's and cleaning them up. The VRU's were restarted once Hybon's mechanic completed their service work, and flaring ceased soon after. Field personnel and Hybon's mechanic remained on-site until they were assured that no further issues would occur.

3. Corrective Actions taken to eliminate the cause and reoccurrence 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 and 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.

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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: 106399
	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 106399

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 106399
	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	*Not answered.*
Incident Facility	**[fAB1903642598] NORTH CORRIDOR 29 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, 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 > Facility Equipment Malfunction > LP gas lines > HP VRU'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	74
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	2
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: 106399
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	04/30/2022
Time vent or flare was discovered or commenced	07:30 AM
Time vent or flare was terminated	08:49 PM
Cumulative hours during this event	13

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: 770 Mcf | Recovered: 0 Mcf | Lost: 770 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	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 and 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 case, this was a sudden and unexpected malfunction of the facility's oil processing equipment which caused oil to foam in the low-pressure gas lines which routes to the high pressure VRU's, prompting them to shut down as they began to overfill with foaming liquid. Once the high pressure VRU's shutdown , this prompted additional equipment to reduce its operation, which then triggered an unexpected flaring event. An Oxy production tech was on-site when the flaring event occurred, and as soon as he noticed it happening, he quickly began inspecting the facility equipment. Upon noticing that the VRU's were shut down and overfilling with oil, the Oxy production tech quickly called Hybon to send out a mechanic to troubleshoot the VRU's and clean up the units so that they could be brought back online. Hybon indicated that there was a delay in sending a mechanic, but every effort would be made to have the issue resolved as soon as possible. With the VRU's shut down, as well as other facility equipment, Oxy routed its stranded gas to flare as a safety precaution to protect equipment, environment, and personnel. This event is out of OXY's control yet, 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 in order to lessen emissions as much as possible. In this case, this was a sudden and unexpected malfunction of the facility's oil processing equipment which caused oil to foam in the low-pressure gas lines which routes to the high pressure VRU's, prompting them to shut down as they began to overfill with foaming liquid. Once the high pressure VRU's shutdown , this prompted additional equipment to reduce its operation, which then triggered an unexpected flaring event. An Oxy production tech was on-site when the flaring event occurred, and as soon as he noticed it happening, he quickly began inspecting the facility equipment. Upon noticing that the VRU's were shut down and overfilling with oil, the Oxy production tech quickly called Hybon to send out a mechanic to troubleshoot the VRU's and clean up the units so that they could be brought back online. Hybon indicated that there was a delay in sending a mechanic, but every effort would be made to have the issue resolved as soon as possible. While the Oxy production tech, waited for Hybon's mechanic, additional Oxy field personnel arrived at the facility to assist with correcting the oil processing in an effort to reduce foaming, to purge the gas lines of liquid, implemented heat equipment temperature reductions and modify the oil process flow as a preventative measure to avoid foaming. After a few hours, a mechanic dispatched by Hybon was able to arrive at the facility and begin troubleshooting the VRU's and cleaning them up. The VRU's were restarted once Hybon's mechanic completed their service work, and flaring ceased soon after.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	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 and 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.

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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 106399
	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 106399

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 106399
	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.	5/12/2022