



Certificate of Analysis

Number: 6030-23110129-001A

Artesia Laboratory

200 E Main St.
Artesia, NM 88210
Phone 575-746-3481Chandler Montgomery
Occidental Petroleum
1502 W Commerce Dr.
Carlsbad, NM 88220

Nov. 14, 2023

Field: PERMIAN_RESOURCES
 Station Name: Falcon Ridge CPF Production #2
 Station Number: 16840p
 Station Location: OP-L3821-BT001
 Sample Point: Meter run
 Formation: NEW_MEXICO
 County: Lea, NM
 Well Name:
 Type of Sample: : Spot-Cylinder
 Heat Trace Used: N/A
 Sampling Method: : Fill and Purge
 Sampling Company: :SPL - OXY

Sampled By: Raul Salazar
 Sample Of: Gas Spot
 Sample Date: 11/13/2023 08:48
 Sample Conditions: 109 psig, @ 93.8 °F Ambient: 51 °F
 Effective Date: 11/13/2023 08:48
 Method: GPA-2261M
 Cylinder No: 4030-004290
 Instrument: 70104251 (Inficon GC-MicroFusion)
 Last Inst. Cal.: 11/06/2023 0:00 AM
 Analyzed: 11/14/2023 08:47:52 by EBH
 Flow Rate mcf/d:

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	0.0000	0.0010	0.0015	
Nitrogen	1.4421	1.4865	1.8527	
Carbon Dioxide	0.3635	0.3747	0.7337	
Methane	71.8252	74.0368	52.8427	
Ethane	12.0641	12.4356	16.6361	3.321
Propane	6.7642	6.9725	13.6788	1.918
Iso-Butane	0.7457	0.7687	1.9878	0.251
n-Butane	1.9680	2.0286	5.2457	0.639
Iso-Pentane	0.5003	0.5157	1.6554	0.188
n-Pentane	0.5069	0.5225	1.6772	0.189
Hexanes	0.3635	0.3747	1.4366	0.154
Heptanes	0.3195	0.3293	1.4680	0.152
Octanes	0.1422	0.1466	0.7450	0.075
Nonanes Plus	0.0066	0.0068	0.0388	0.004
	97.0118	100.0000	100.0000	6.891

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	22.48	128.26
Compressibility Factor	0.9959	
Relative Density Real Gas	0.7790	4.4283

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1322.9	6974.4
Water Sat. Gas Base BTU	1300.3	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1317.5	6974.4
Ideal, Gross HV - Wet	1294.4	6852.4

Comments: H2S Field Content 10 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:** Falcon Ridge Tankless CPF**Flare Date:** 11/13/2023**Duration of Event:** 16 Hours**MCF Flared:** 120**Start Time:** 12:00 AM**End Time:** 04:00 PM**Cause:** Emergency Flare > Equipment Malfunctions > VRU's**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, gas had to be flared rather than be compressed when the facility's VRU's suddenly and unexpectedly shut down due to filter replacement and oil change malfunction alarms. Oil slugged the VRU units due to high oil level in the VRT. Minimal amount of gas from the facility's VRT was sent to the flare out of necessity to protect personnel and equipment as a safeguard until the VRU's could be restarted and returned to normal maximized operation.

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

It is OXY's policy to route all 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, gas had to be flared rather than be compressed when the facility's VRU's suddenly and unexpectedly shut down due to filter replacement and oil change malfunction alarms. Oil slugged the VRU units due to high oil level in the VRT. Oxy production techs, already on-site, were unable to clear the malfunctions and restart the VRU's, which in turn prompted a request to HYBON, a third party VRU equipment vendor, to dispatch a mechanic to resolve the issues. Until the VRU mechanic could arrive, a minimal amount of gas from the facility's VRT was sent to the flare out of necessity to protect personnel and equipment as a safeguard until the VRU's could be restarted and returned to normal maximized operation. In addition, several wells flowing to the facility were choked back to reduce field pressure in an effort to minimize flaring. HYBON'S mechanic was not able to arrive in a timely manner to resolve the VRU's malfunctions due to an already heavy workload within the area. Once HYBON'S mechanic arrived at the facility, several hours later, the VRU's were inspected, repaired, and restarted. Once the VRU's reached optimized operation, did flaring cease.

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

Oxy is limited in its corrective actions to eliminate the cause and potential reoccurrence of a malfunctioning VRU, as notwithstanding proper VRU, design and operation, whether low- or high-pressure, various forms of mechanical

or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause equipment malfunctions to occur without warning or advance notice. OXY makes every effort to control and minimize emissions as much as possible during these circumstances. The limited actions that Oxy can do in this circumstance is to resolve the issue on-site, immediately call for a VRU mechanic to be dispatched, submit a work order for repair, and/or work with its equipment maintenance team to have the issue resolved in a timely manner and continue monitoring the equipment until its repair and restoration to normal operations is complete.

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District IV
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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

Action 289109

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 289109
	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 289109

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:	16696
	Action Number:	289109
	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	[fAPP2331575145] Falcon Ridge Tankless CPF

Determination of Reporting Requirements Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional 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, 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 > Equipment Malfunctions > 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	1
Hydrogen Sulfide (H2S) PPM, rounded up	10
Carbon Dioxide (C02) percentage, if greater than one percent	0
Oxygen (O2) 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 (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 289109

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	11/13/2023
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	04:00 PM
Cumulative hours during this event	16

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: 120 Mcf Recovered: 0 Mcf Lost: 120 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	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, gas had to be flared rather than be compressed when the facility's VRU's suddenly and unexpectedly shut down VRU's due to a filter replacement and oil change malfunction alarm again. Oil slugged the VRU units due to hihi oil level in the VRT. Gas from the facility's VRT was sent to the flare out of necessity to protect personnel and equipment as a safeguard until the VRU's could be restarted and returned to normal maximized operation.
Steps taken to limit the duration and magnitude of vent or flare	It is OXY's policy to route all 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, gas had to be flared rather than be compressed when the facility's VRU's suddenly and unexpectedly shut down VRU's due to a filter replacement and oil change malfunction alarm. Oil slugged the VRU units due to hihi oil level in the VRT. Oxy production techs, already on-site, were able to clear the malfunctions

	and restart the VRU's. Gas from the facility's VRT was sent to the flare out of necessity to protect personnel and equipment as a safeguard until the VRU's could be restarted and returned to normal maximized operation.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in its corrective actions to eliminate the cause and potential reoccurrence of a malfunctioning VRU, as notwithstanding proper VRU, design and operation, whether low- or high-pressure, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause equipment malfunctions to occur without warning or advance notice. OXY makes every effort to control and minimize emissions as much as possible during these circumstances. The limited actions that Oxy can do in this circumstance is to resolve the issue on-site, immediately call for a VRU mechanic, submit a work order for repair, and/or work with its equipment maintenance team to have the issue resolved in a timely manner and continue monitoring the equipment until its repair and restoration to normal operations is complete.

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ACKNOWLEDGMENTS

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ACKNOWLEDGMENTS

☒	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 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 289109

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	Action Number: 289109
	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.	11/28/2023