



Certificate of Analysis

Number: 6030-24010172-001A

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. 17, 2024

Field: PERMIAN_RESOURCES
Station Name: Falcon Ridge CPF Flare Fuel
Station Number: N/A
Station Location: Fuel Gas
Sample Point: Inlet
Formation: NEW_MEXICO
County: Lea
Well Name: N/A
Type of Sample: : Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: : Fill and Purge
Sampling Company: :SPL

Sampled By: Mike Armijo
Sample Of: Gas Composite
Sample Date: 01/15/2024 11:45
Sample Conditions: 123 psig Ambient: 78 °F
Effective Date: 01/15/2024 11:45
Flow Rate: N/A
Method: GPA-2261M
Cylinder No: 1111-008297
Instrument: 70104251 (Inficon GC-MicroFusion)
Last Inst. Cal.: 01/15/2024 0:00 AM
Analyzed: 01/16/2024 13:57:29 by EBH

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	0.0000	0.0005	0.0008	
Nitrogen	1.3597	1.3866	1.7817	
Carbon Dioxide	1.0467	1.0674	2.1548	
Methane	73.3808	74.8346	55.0684	
Ethane	12.2177	12.4597	17.1853	3.326
Propane	6.6220	6.7532	13.6595	1.857
Iso-Butane	0.7649	0.7801	2.0798	0.255
n-Butane	1.6468	1.6794	4.4774	0.528
Iso-Pentane	0.4382	0.4469	1.4790	0.163
n-Pentane	0.4004	0.4083	1.3513	0.148
Hexanes	0.1293	0.1319	0.5214	0.054
Heptanes	0.0450	0.0459	0.2110	0.021
Octanes	0.0043	0.0044	0.0231	0.002
Nonanes Plus	0.0011	0.0011	0.0065	0.001
	98.0569	100.0000	100.0000	6.355

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	21.80	128.26
Compressibility Factor	0.9962	
Relative Density Real Gas	0.7553	4.4283

GPA 2172 Calculation:

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

Real Gas Dry BTU	1270.6	6974.4
Water Sat. Gas Base BTU	1248.9	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1265.8	6974.4
Ideal, Gross HV - Wet	1243.7	6852.4

Comments: H2S Field Content 4.5 ppm
FMP/LSE N/A,

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 CGL**Flare Date:** 01/03/2024**Duration of Event:** 8 Hours 40 Minutes**MCF Flared:** 112**Start Time:** 12:30 AM**End Time:** 09:10 AM**Cause:** Emergency Flare > Compression Equipment Malfunctions**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, because of the extreme cold and freezing weather conditions in the area, throughout the day, multitude of equipment malfunctions occurred with the compression equipment, due to recurrent freezing issues affecting the equipment. The facility was having extreme difficulty operating in its normal manner as result which caused OXY to intermittently flare several times within a 24-Hour period. Notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues, resulting from extreme weather conditions, can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Compressor engines are designed to operate in a precise manner, such as certain maximum speeds, temperatures, and/or pressure capacity, etc., and when malfunctions occur, it disrupts the gas compressor's operating manner and cuts off engine power, which in turn, prompts an automatic shutdown of the unit to avoid both catastrophic and long-term damage to the compressor units. Compression malfunctions occur without warning and therefore, Oxy is unable to predict, avoid or prevent this type of equipment malfunction from occurring. This malfunctioning 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, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, because of the extreme cold and freezing weather conditions in the area, throughout the day, multitude of equipment malfunctions occurred with the compression equipment, due to recurrent freezing issues affecting

the equipment. The facility was having extreme difficulty operating in its normal manner as result which caused OXY to intermittently flare several times within a 24-Hour period. Oxy production techs immediately inspected the compressor units when they malfunctioned and restarted them as soon as possible. Several compressor units were restarted numerous times until they stayed running, and a third-party compression mechanic was requested to be dispatched to assist in keeping the units operational. Oxy field personnel are not authorized to troubleshoot or resolve issues with the compression equipment, although they can clear alarm panels and restart gas compression units, when possible. A third-party compression mechanic was in the area and quickly arrived to assist in resolving the issues. OXY made every effort to control and minimize emissions as much as possible during this event.

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

Oxy is limited in the corrective actions to eliminate this type of cause and potential reoccurrence of flaring as notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate all its facility locations equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive compression equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to continue with its compression equipment preventative maintenance program for all its facilities and continually work with its compression rental owners to resolve those issues in a timely manner, should they continue to occur suddenly and without warning.

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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

Action 305287

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 305287
	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 305287

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:	16696
	Action Number:	305287
	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	[fAPP2333082512] Falcon Ridge CGL CS

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 > Compression Equipment Malfunctions

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	5
Carbon Dioxide (C02) percentage, if greater than one percent	1
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 305287

QUESTIONS (continued)

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	Action Number: 305287
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	01/03/2023
Time vent or flare was discovered or commenced	12:30 AM
Time vent or flare was terminated	09:10 AM
Cumulative hours during this event	9

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: 112 Mcf Recovered: 0 Mcf Lost: 112 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, because of the extreme cold and freezing weather conditions in the area, throughout the day, multitude of equipment malfunctions occurred with the compression equipment, due to recurrent freezing issues affecting the equipment. The facility was having extreme difficulty operating in its normal manner as result which caused OXY to intermittently flare several times within a 24-Hour period. Notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues, resulting from extreme weather conditions, can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Compressor engines are designed to operate in a precise manner, such as certain maximum speeds, temperatures, and/or pressure capacity, etc., and when malfunctions occur, it disrupts the gas compressor's operating manner and cuts off engine power, which in turn, prompts an automatic shutdown of the unit to avoid both catastrophic and long-term damage to the compressor units. Compression malfunctions occur without warning and therefore, Oxy is unable to predict, avoid or prevent this type of equipment malfunction from occurring. This malfunctioning 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, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, because of the extreme cold and freezing weather conditions in the area, throughout the day, multitude of equipment malfunctions occurred with the compression equipment, due to recurrent freezing issues affecting the equipment. The facility was having extreme difficulty operating in its normal manner as result which caused OXY to intermittently flare several times within a 24-Hour period. Oxy production techs immediately inspected the compressor units when they malfunctioned and restarted them as soon as possible. Several compressor units were restarted numerous times until they stayed running, and a third-party compression mechanic was requested to be dispatched to assist in keeping the units operational. Oxy field personnel are not authorized to troubleshoot or resolve issues with the compression equipment, although they can clear alarm panels and restart gas compression units, when possible. A third-party compression mechanic was in the area and quickly arrived to assist in resolving the issues. OXY made every effort to control and minimize emissions as much as possible during this event.
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ACKNOWLEDGMENTS

Action 305287

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Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 305287
	Action Type: [C-129] Venting and/or Flaring (C-129)

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 305287

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	Action Number: 305287
	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.	1/18/2024