Certificate of Analysis

Number: 6030-23020273-001A

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

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

Feb. 24, 2023

Field:	Sand Dunes	Sampled By:	Raul Salazar
Station Name:	Sand Dunes CTB Check 2	Sample Of:	Gas Spot
Station Number:	17025C	Sample Date:	02/21/2023
Station Location:	CTB	Sample Conditions:	100 psig, @ 62.1 °F Ambient: 62 °F
Sample Point:	Meter	Effective Date:	02/21/2023
Formation:	Monthly	PO/Ref. No:	4501167592
County:	Eddy	Method:	GPA-2261M
Type of Sample: :	Spot-Cylinder	Cylinder No:	1111-007466
Heat Trace Used:	N/A	Instrument:	6030_GC6 (Inficon GC-3000 Micro)
Sampling Method: :	Fill and Purge	Last Inst. Cal.:	02/20/2023 0:00 AM
Sampling Company: :	SPL	Analyzed:	02/24/2023 09:47:34 by EBH

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	1.054	1.045	1.334		GPM TOTAL C2+	6.379
Methane	75.892	75.273	55.022		GPM TOTAL C3+	3.114
Carbon Dioxide	1.112	1.103	2.212		GPM TOTAL iC5+	0.512
Ethane	12.332	12.231	16.758	3.265		
Propane	6.406	6.354	12.766	1.747		
Iso-butane	0.806	0.799	2.116	0.261		
n-Butane	1.901	1.886	4.995	0.594		
Iso-pentane	0.390	0.387	1.272	0.141		
n-Pentane	0.410	0.407	1.338	0.147		
Hexanes Plus	0.519	0.515	2.187	0.224		
	100.822	100.000	100.000	6.379		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7604	3.2176
Calculated Molecular Weight	21.95	93.19
Compressibility Factor	0.9961	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1283	5113
Water Sat. Gas Base BTU	1261	5024
Ideal, Gross HV - Dry at 14.65 psia	1278.3	5113.2
Ideal, Gross HV - Wet	1255.9	5023.7
Net BTU Dry Gas - real gas	1165	
Net BTU Wet Gas - real gas	1145	

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Sand Dunes South Corridor CTB

Venting Date: 12/17/2023

Duration of Event: 24 Hours

MCF Vented: 109

Start Time: 12:00 AM

End Time: 11:59 PM

Cause: Venting > Wedge Production > Flash Volume > OGS Oil Tank 16

Method of Gas Measurement: Estimated Vent Calculations

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

This event was 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. In this case, wedge production led to more flash volume than anticipated via simulation, which then triggered venting to occur. All facility operations and equipment were working as designed prior to the sudden and without warning venting occurrence.

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

In this case, wedge production led to more flash volume than anticipated via simulation, which then triggered venting to occur. When venting was identified, Operations immediately made changes to the heater setpoints and pressure settings to minimize flash to the tanks. In addition, field personnel will continue to monitor the pressure settings. All facility operations and equipment were working as designed prior to the sudden and without warning venting occurrence. This event was out Oxy's control, yet every effort was made to minimize the emissions.

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

Oxy is limited in the corrective actions to eliminate the cause and potential reoccurrence of a flash volume Notwithstanding proper tank design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause tank malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its equipment preventative maintenance program for this facility.

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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: 298648
	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 298648

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 298648
	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	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	Venting > Wedge Production > Flash Volume > OGS Oil Tank 16

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: 298648
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	12/17/2023
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	24

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Other | Other (Specify) | Natural Gas Vented | Released: 109 Mcf | Recovered: 0 Mcf | Lost: 109 Mcf.
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Additional details for Measured or Estimated Volume(s). Please specify	Estimated Vent Calculations
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 event was 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. In this case, wedge production led to more flash volume than anticipated via simulation, which then triggered venting to occur. All facility operations and equipment were working as designed prior to the sudden and without warning venting occurrence.
Steps taken to limit the duration and magnitude of vent or flare	In this case, wedge production led to more flash volume than anticipated via simulation, which then triggered venting to occur. When venting was identified, Operations immediately made changes to the heater setpoints and pressure settings to minimize flash to the tanks. In addition, field personnel will continue to monitor the pressure settings. All facility operations and equipment were working as designed prior to the sudden and without warning venting occurrence. This event was out Oxy's control, yet every effort was made to minimize the emissions.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in the corrective actions to eliminate the cause and potential reoccurrence of a flash volume Notwithstanding proper tank design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause tank malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with

	good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its equipment preventative maintenance program for this facility.

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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 298648
	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 298648

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 298648
	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.	1/1/2024