Certificate of Analysis

Number: 6030-21010243-001A

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. 29, 2021

Field:	Sand Dunes	Sampled By:	Scott Beasley
Station Name:	Enterprise Sand Dunes Central Inlet	Sample Of:	Gas Spot
Station Number:	N/A	Sample Date:	01/27/2021 09:32
Sample Point:	Inlet Meter Run	Sample Conditions:	89.7 psig, @ 56.9 °F Ambient: 42 °F
Meter Number:		Effective Date:	01/27/2021 09:32
County:	Eddy	Method:	GPA-2261M
Type of Sample:	Spot-Cylinder	Cylinder No:	1111-003934
Heat Trace Used:	N/A	Instrument:	6030_GC6 (Inficon GC-3000 Micro)
Sampling Method:	Fill and Purge	Last Inst. Cal.:	01/25/2021 0:00 AM
Sampling Company:	OXY	Analyzed:	01/29/2021 09:36:22 by KNF

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.000	0.000		GPM TOTAL C2+	6.347
Nitrogen	2.197	2.199	2.679		GPM TOTAL C3+	3.174
Methane	71.063	71.131	49.626		GPM TOTAL iC5+	0.533
Carbon Dioxide	4.248	4.252	8.138			
Ethane	11.874	11.885	15.542	3.173		
Propane	6.449	6.455	12.379	1.775		
Iso-butane	0.800	0.801	2.025	0.262		
n-Butane	1.917	1.919	4.851	0.604		
Iso-pentane	0.402	0.402	1.261	0.147		
n-Pentane	0.410	0.410	1.286	0.148		
Hexanes Plus	0.545	0.546	2.213	0.238		
	99.905	100.000	100.000	6.347		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7968	3.2176
Calculated Molecular Weight	22.99	93.19
Compressibility Factor	0.9960	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1241	5113
Water Sat. Gas Base BTU	1220	5024
Ideal, Gross HV - Dry at 14.65 psia	1236.5	5113.2
Ideal, Gross HV - Wet	1214.8	5023.7
Net BTU Dry Gas - real gas	1127	
Net BTU Wet Gas - real gas	1108	

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.

Powered By SURECHEM

Scott Beasley

EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Sand Dunes Enterprise Flare

Start Date: 06/17/2021 **End Date:** 06/17/2021

Cause: Power Failure

Duration of event: 6.4 minutes **MCF Volume Flared:** 178

Method of Flared Gas Measurement: Flare Meter

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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 or prevented by good design, operation, and preventative maintenance practices. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, due to malfunction and/or alarms, production techs are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions.

During this event, the flaring was caused by a blown fuse at the PLC causing the station to lose power and the station go off line. Oxy personnel immediately responded to replace the blown fuse to restore power and get the station back up and running. Once all units and equipment were back online, all flaring ceased. During the event, OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.

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

In this case, Oxy responded immediately responded to replace the blown fuse and restore power to the station. Once the units were restarted and gas sales resumed, flaring ceased.

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

The 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 cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding proper gas compressor design, operation, and maintenance; various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected. 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 dedicated compression equipment preventative maintenance program in place.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
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

QUESTIONS

Action 42990

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 42990
	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	**[30-015-37330] FEDERAL 29 #001**
Incident Facility	*Not answered.*

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 or is this venting and/or flaring caused by an emergency or malfunction	Yes
Did or will this venting and/or flaring last eight hours or more cumulatively within any 24-hour period from a single event	No
Is this considered a submission for a notification of a major venting and/or flaring	**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 or will there be **at least 50 MCF** of natural gas vented and/or flared during this event	Yes
Did this venting and/or flaring 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 venting and/or flaring 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 due to power loss

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	71
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	4
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.*

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	06/17/2021
Time venting and/or flaring was discovered or commenced	12:00 AM
Time venting and/or flaring was terminated	06:20 AM
Cumulative hours during this event	6

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: 178 Mcf | Recovered: 0 Mcf | Lost: 178 Mcf]
Other Released Details	*Not answered.*
Additional details for Measured or Estimated Volume(s). Please specify	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 or is this venting and/or flaring a result of downstream activity	*Not answered.*
Date notified of downstream activity requiring this venting and/or flaring	*Not answered.*
Time notified of downstream activity requiring this venting and/or flaring	*Not answered.*

Steps and Actions to Prevent Waste	
For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control.	True
Please explain reason for why this event was beyond your 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 or prevented by good design, operation, and preventative maintenance practices. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, due to malfunction and/or alarms, production techs are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. During this event, the flaring was caused by a blown fuse at the PLC causing the station to lose power and the station go off line. Oxy personnel immediately responded to replace the blown fuse to restore power and get the station back up and running. Once all units and equipment were back online, all flaring ceased. During the event, OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.
Steps taken to limit the duration and magnitude of venting and/or flaring	In this case, Oxy responded immediately responded to replace the blown fuse and restore power to the station. Once the units were restarted and gas sales resumed, flaring ceased.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	The 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 cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding proper gas compressor design, operation, and maintenance; various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected. 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 dedicated compression equipment preventative maintenance program in place.

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CONDITIONS

Action 42990

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 42990
	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.	8/18/2021