



## Certificate of Analysis

Number: 6030-21060199-006A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

June 22, 2021

Field: Mills Ranch  
Station Name: Red Tank 19 CTB Check B  
Station Number: 15600D  
Station Location: CTB  
Sample Point: Meter  
Formation: Monthly  
County: Lea  
Type of Sample: : Spot-Cylinder  
Heat Trace Used: N/A  
Sampling Method: : Fill and Purge  
Sampling Company: : SPL

Sampled By: Javier Lazo  
Sample Of: Gas Spot  
Sample Date: 06/18/2021 10:41  
Sample Conditions: 82 psia, @ 93 °F Ambient: 89 °F  
Effective Date: 06/18/2021 10:41  
Method: GPA-2261M  
Cylinder No: 1111-002405  
Instrument: 70104124 (Inficon GC-MicroFusion)  
Last Inst. Cal.: 06/21/2021 0:00 AM  
Analyzed: 06/22/2021 08:54:19 by EJ R

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.002	0.003		GPM TOTAL C2+	5.644
Nitrogen	2.237	2.247	2.707		GPM TOTAL C3+	3.045
Methane	71.658	71.976	49.651		GPM TOTAL iC5+	0.779
Carbon Dioxide	6.194	6.221	11.773			
Ethane	9.693	9.736	12.588	2.599		
Propane	5.475	5.499	10.427	1.512		
Iso-butane	0.663	0.666	1.665	0.218		
n-Butane	1.695	1.703	4.256	0.536		
Iso-pentane	0.466	0.468	1.452	0.171		
n-Pentane	0.507	0.509	1.579	0.184		
Hexanes Plus	0.969	0.973	3.899	0.424		
	99.557	100.000	100.000	5.644		

## Calculated Physical Properties

Relative Density Real Gas	0.8058	C6+	3.2176
Calculated Molecular Weight	23.26		93.19
Compressibility Factor	0.9961		

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia & 60°F

Real Gas Dry BTU	1205	5113
Water Sat. Gas Base BTU	1184	5024
Ideal, Gross HV - Dry at 14.65 psia	1200.1	5113.2
Ideal, Gross HV - Wet	1179.1	5023.7
Net BTU Dry Gas - real gas	1094	
Net BTU Wet Gas - real gas	1075	

Comments: H2S Field Content 20 ppm  
Mcf/day 8388

*Jesus Escobedo*

*Eric Ramirez*

Data reviewed by: Eric Ramirez, Analyst

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

**EVENT SPECIFIC JUSTIFICATIONS FORM****Facility:** Red Tank 19 CTB**Start Date:** 07/16/2021**End Date:** 07/16/2021**Cause:** Power Failure**Duration of event:** 0.14 minutes**MCF Volume Flared:** 62**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  
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**District II**

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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 43138

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 43138
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b>	
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	[30-025-45956] AVOGATO 30 31 STATE COM #011H
Incident Facility	Not answered.

<b>Determination of Reporting Requirements</b>	
Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional 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

<b>Equipment Involved</b>	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	emergency flare due to power failure

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	72
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	2
Carbon Dioxide (CO2) percentage, if greater than one percent	6
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 Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

<b>Date(s) and Time(s)</b>	
Date venting and/or flaring was discovered or commenced	07/16/2021
Time venting and/or flaring was discovered or commenced	12:00 AM
Time venting and/or flaring was terminated	12:08 AM
Cumulative hours during this event	0

<b>Measured or Estimated Volume of Vented or Flared Natural Gas</b>	
Natural Gas Vented (Mcf) Details	Not answered.

Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 62 Mcf   Recovered: 0 Mcf   Lost: 62 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

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CONDITIONS  
  
Action 43138

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Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 43138
	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