Certificate of Analysis

Number: 6030-21060103-008A

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 11, 2021

Field:	Turkey Track	Sampled By:	Javier Lazo
Station Name:	Turkey Track CTB Check A	Sample Of:	Gas Spot
Station Number:	14670A	Sample Date:	06/08/2021 02:15
Station Location:	CTB	Sample Conditions:	96 psia, @ 96 °F Ambient: 98 °F
Sample Point:	Meter	Effective Date:	06/08/2021 02:15
Formation:	Monthly	Method:	GPA-2261M
County:	Eddy	Cylinder No:	1111-001201
Type of Sample: :	Spot-Cylinder	Instrument:	70104124 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	05/24/2021 0:00 AM
Sampling Method: :	Fill and Purge	Analyzed:	06/11/2021 08:44:07 by KNF
Sampling Company: :	SPL		

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.000	0.000		GPM TOTAL C2+	6.654
Nitrogen	1.967	2.018	2.511		GPM TOTAL C3+	3.506
Methane	72.913	74.814	53.308		GPM TOTAL iC5+	1.028
Carbon Dioxide	0.237	0.243	0.475			
Ethane	11.489	11.789	15.745	3.148		
Propane	5.823	5.975	11.702	1.644		
Iso-butane	0.716	0.735	1.897	0.240		
n-Butane	1.838	1.886	4.869	0.594		
Iso-pentane	0.509	0.522	1.673	0.191		
n-Pentane	0.556	0.570	1.827	0.206		
Hexanes Plus	1.411	1.448	5.993	0.631		
	97.459	100.000	100.000	6.654		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7803	3.2176
Calculated Molecular Weight	22.51	93.19
Compressibility Factor	0.9959	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1319	5113
Water Sat. Gas Base BTU	1297	5024
Ideal, Gross HV - Dry at 14.65 psia	1313.9	5113.2
Ideal, Gross HV - Wet	1290.9	5023.7
Net BTU Dry Gas - real gas	1199	
Net BTU Wet Gas - real gas	1178	

Comments: H2S Field Content 2.5 ppm
Mcf/day 21793

Report generated by: Eric Ramirez

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: Turkey Track CTB

Start Date: 08/01/2021 @ 10:30 PM **End Date:** 08/02/2021 @ 12:00 AM

Cause: Compressor Malfunction > Sales Compressor Unit #5

Duration of event: 1 hour 29 minutes

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.

In this case, Oxy production tech determined that the cause of the malfunction of NGSG gas compressor unit # 5 was due to the compressor unit suddenly had a blown fuse on the discharge transmitter, which happened suddenly and without warning. Oxy production tech quickly responded to the malfunction alarm of NGSG gas compressor unit # 5, resolved the situation by having the blown fuse replaced and restarted the unit. NGSG gas compressor unit # 5 was working properly and operating as designed prior to the malfunction occurring. During the time that NGSG gas compressor unit # 5 were down, 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:

It is OXY's policy to route all stranded sales gas to a flare during a sudden, unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements.

In this case, the steps taken to limit duration and magnitude of flaring was for an Oxy production tech to quickly respond to the malfunction alarms of NGSG gas compressor unit # 5, have the blown fuse on the discharge transmitter replaced and restart the unit. During the time that NGSG gas compressor unit # 5 was down, OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.

All OXY operations and facility equipment were running at maximized optimization prior to the sudden and unexpected compressor malfunction occurring. This incident was completely out of Oxy's control to prevent from happening. 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:

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. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare is regularly monitored to the ensure the flame is lit and meeting opacity requirements. Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions 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 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 compression equipment preventative maintenance program in place. This incident was completely out of OXY's control to prevent from happening as it was determined the malfunction occurred from blown fuse on the discharge transmitter which shut the unit down automatically to avoid catastrophic damage to the unit. Malfunction alarms can occur without warning and be true or false, yet, OXY makes every effort to control and minimize emissions as much as possible during these circumstances. The only actions that Oxy can take and handle that is within its control, is to keep continue with its compression equipment preventative maintenance program for this unit.

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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 41796

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 41796
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

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 or flaring caused by an emergency or malfunction	Yes
Did or will this venting 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 or flaring	**Yes, minor venting or flaring of natural gas.**
The operator shall file a form C-141 instead of a form C-129 for a release that includes liquid during venting 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 or flared during this event	Yes
Did this venting 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

Unregistered Facility Site	
Please provide the facility details, if the venting or flaring occurred or is occuring at a facility that does not have an Facility ID (f#) yet.	
Facility or Site Name	*Not answered.*
Facility Type	*Not answered.*

Equipment Involved	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare>Compressor Malfunction > Sales Compressor Unit #5

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	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	0
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 or flaring was discovered or commenced	08/01/2021
Time venting or flaring was discovered or commenced	10:30 PM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	08/02/2021
Time venting or flaring was terminated	12:00 AM
Total duration of venting or flaring in hours, if venting or flaring has terminated	2
Longest duration of cumulative hours within any 24-hour period during this event	1

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 | Spilled: 225 Mcf | Recovered: 0 Mcf | Lost: 225 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 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 or flaring a result of downstream activity	No
Date notified of downstream activity requiring this venting or flaring	*Not answered.*
Time notified of downstream activity requiring this venting 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	See Justification Form >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.
Steps taken to limit the duration and magnitude of venting or flaring	See Justification Form >It is OXY's policy to route all stranded sales gas to a flare during a sudden, unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	See Justification Form >Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions 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 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 compression equipment preventative maintenance program in place. This incident was completely out of OXY's control to prevent from happening.

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CONDITIONS

Action 41796

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Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 41796
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
system	If the information provided in this report requires an amendment, submit a [C-129] Request to Amend Venting and/or Flaring Incident, utilizing your incident number from this event.	8/12/2021