

# Certificate of Analysis

Number: 6030-21060185-002A

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 21, 2021

Field: Cal Mon Sampled By: Michael Mirabal Station Name: Pure Gold A Fed 8 Battery Sample Of: Gas Spot Station Number: 83293 Sample Date: 06/17/2021 08:21

Station Location: CTB Sample Conditions: 30 psia, @ 86 °F Ambient: 82 °F Sample Point: Meter Effective Date: 06/17/2021 08:21 Formation: Quarterly Method: GPA-2261M

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Type of Sample: : Spot-Cylinder Instrument: 70104124 (Inficon GC-MicroFusion)

Heat Trace Used: N/A Last Inst. Cal.: 05/18/2021 0:00 AM

Sampling Method: Fill and Purge Analyzed: 06/21/2021 09:45:07 by KNF Sampling Company: :SPL

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia	
Hydrogen Sulfide	NIL	NIL	NIL		
Nitrogen	5.004	5.04821	5.940		
Carbon Dioxide	0.110	0.11066	0.205		
Methane	69.004	69.61086	46.901		
Ethane	11.712	11.81450	14.921	3.156	
Propane	7.762	7.83037	14.502	2.155	
Iso-Butane	0.865	0.87220	2.129	0.285	
n-Butane	2.053	2.07136	5.056	0.652	
Iso-Pentane	0.532	0.53648	1.626	0.196	
n-Pentane	0.501	0.50541	1.532	0.183	
Hexanes	0.362	0.36559	1.323	0.150	
Heptanes	0.416	0.41956	1.766	0.193	
Octanes	0.489	0.49310	2.366	0.252	
Nonanes Plus	0.319	0.32170	1.733	0.181	
	99.129	100.00000	100.000	7.403	
Calculated Physical F	Properties	Tota		C9+	
Calculated Molecular V	Veight	23.81		128.26	
Compressibility Factor		0.9955	5		
Relative Density Real		0.8255	5	4.4283	
<b>GPA 2172 Calculation</b>					
Calculated Gross BTI	J per ft³ @ 14.65 ps	sia & 60°F			
Real Gas Dry BTU		1342.4		6974.4	
Water Sat. Gas Base E		1319.5		6852.4	
Ideal, Gross HV - Dry a	at 14.65 psia	1336.4		6974.4	
Ideal, Gross HV - Wet		1313.0	)	6852.4	
Comments: H2S Fiel					

Mcf/day 291

Eve Ramo

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.

Jesus Escobedo

### **EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Pure Gold A8 is nearest facility (Remote location: 32.2920609, -103.7849197)

**Start Date:** 07/10/2021 **End Date:** 07/10/2021

Cause: Gas Line Damage - Malfunction

**Duration of event:** 24 hours **MCF Volume Flared:** 250

Method of Flared Gas Measurement: Allocation

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

The leak was caused by a longitudinal seam failure on a gas line. The type of damage on this type of gas line is not a common occurrence and was not anticipated. We believe the leak was a sudden, unavoidable failure beyond Oxy's reasonable control. While this type of seam failure on this type of line is infrequent, Oxy has initiated a root cause analysis to determine why the leak may have occurred and how Oxy can prevent this type of event from happening in the future.

Oxy contracts with third-party aerial survey contractors, and on July 12, 2021, Oxy became aware of a potential leak detected in the middle of a remote field. The potential leak was geographically removed from wells and tank batteries, but somewhat within the vicinity of Oxy's operations. Within 24 hours, an Oxy field crew was deployed to the remote area to search for the potential leak. A rip on the seam was detected in a surface gas line. Upon verification of the leak, Oxy immediately shut-in producing wells to stop the leak. The damaged gas line was repaired the next day on July 14, 2021.

Once the leak was verified and stopped, and the damaged gas line was repaired, Oxy's Operations group then transitioned its focus on performing an extensive review to determine how long the leak may have gone on for. The review demanded a significant amount of time and resources, including conducting field visits to ensure the leak was isolated to this remote gas line, and performing extensive data analysis of historical production and pressure records on the Pure Gold A Fed 8 battery production meter.

The group determined that the leak was isolated to the damaged gas line, and also identified an August 31, 2020 pressure drop, providing insight into the potential timing of when the leak first occurred. While not certain, the group used best engineering and operational estimates to determine that, based on the pressure drop on August 31, 2020 found in historical production and pressure records, it is possible that a total of 79,369 mscf of gas may have leaked from the failed seam on the gas line, an amount that meets the definition of a "major release." This estimated total covers the timeframe from August 31, 2020 until July 13, 2021, when the leak was stopped.

Upon conclusion of the review, when Oxy had an objectively reasonable basis to determine that a major release likely took place, Oxy reached out to the Division, and informed them of the event and our plans to submit a C-141 for the time period covering August 31, 2020 until May 24, 2021 (the day before the NMOCD's venting/flaring rule went into effect) for estimated emissions of 66,646 mscf, and that additional C-129's would be submitted for May 25, 2021 until July 11, 2021, and July 13, 2021 for a total of 12,420 mscf covering both timeframes. A C-129 has already been submitted for July 12, 2021, the day Oxy became aware of a potential leak, reporting 303 mscf for that day. It should be noted that upon further review and after the first C-129 submittal covering July 12, 2021 when Oxy became aware of the leak; it was determined that the volume reported for July 12, 2021 should have been 259 mscf instead of the 303 mscf initially reported. Therefore, we have contacted The Division to amend that initial C-129 submittal.

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

Oxy became aware of a potential leak detected in the middle of a remote field on July 12, 2021. The potential leak was geographically removed from wells and tank batteries, but somewhat within the vicinity of Oxy's operations. Within 24 hours, on July 13, 2021, an Oxy field crew was deployed to the remote area to search for the potential leak. A rip on the seam was detected in a surface gas line. Upon verification of the leak, Oxy immediately shut-in producing wells to stop the leak. The damaged gas line was repaired the next day on July 14, 2021.

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

The leak was verified and stopped on July 13, 2021. The next day, on July 14, 2021, the damaged gas line was repaired.

The leak was caused by a longitudinal seam failure on a gas line. The type of damage on this type of gas line is not a common occurrence and was not anticipated. We believe the leak was a sudden, unavoidable failure beyond Oxy's reasonable control. While this type of seam failure on this type of line is infrequent, Oxy has initiated a root cause analysis to determine why the leak may have occurred and how Oxy can prevent this type of event from happening in the future.

<u>District I</u> 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

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 52316

### **QUESTIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	52316
	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	[30-015-35296] PURE GOLD A FEDERAL #008	
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 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	Yes		
Is this considered a submission for a venting and/or flaring 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 was there or will there be at least 50 MCF of natural gas vented and/or flared	venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.  Yes		
during this event	res		
Did this venting and/or flaring result in the release of <b>ANY</b> 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	Flow Line - Production
Additional details for Equipment Involved, Please specify	gas production flowline

Representative Compositional Analysis of Vented or Flared Natural Gas		
Please provide the mole percent for the percentage questions in this group.		
Methane (CH4) percentage	69	
Nitrogen (N2) percentage, if greater than one percent	5	
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 and/or flaring was discovered or commenced	07/10/2021	
Time venting and/or flaring was discovered or commenced	12:00 AM	
Time venting and/or flaring was terminated	11:59 PM	
Cumulative hours during this event	24	

Measured or Estimated Volume of Vented or Flared Natural Gas	
	e: Equipment Failure   Flow Line - Production   Natural Gas Vented   Released: 250 Mcf   vered: 0 Mcf   Lost: 250 Mcf ]

Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Not answered.
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	No	
Was notification of downstream activity received by you or your operator	Not answered.	
Downstream OGRID that should have notified you or your operator	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	The leak was caused by a longitudinal seam failure on a gas line. The type of damage on this type of gas line is not a common occurrence and was not anticipated. We believe the leak was a sudden, unavoidable failure beyond Oxy's reasonable control. While this type of seam failure on this type of line is infrequent, Oxy has initiated a root cause analysis to determine why the leak may have occurred and how Oxy can prevent this type of event from happening in the future.		
Steps taken to limit the duration and magnitude of venting and/or flaring	Oxy became aware of a potential leak detected in the middle of a remote field on July 12, 2021. The potential leak was geographically removed from wells and tank batteries, but somewhat within the vicinity of Oxy's operations. Within 24 hours, on July 13, 2021, an Oxy field crew was deployed to the remote area to search for the potential leak. A rip on the seam was detected in a surface gas line. Upon verification of the leak, Oxy immediately shut-in producing wells to stop the leak. The damaged gas line was repaired the next day on July 14, 2021.		
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	The leak was verified and stopped on July 13, 2021. The next day, on July 14, 2021, the damaged gas line was repaired. The leak was caused by a longitudinal seam failure on a gas line. The type of damage on this type of gas line is not a common occurrence and was not anticipated. We believe the leak was a sudden, unavoidable failure beyond Oxy's reasonable control. While this type of seam failure on this type of line is infrequent, Oxy has initiated a root cause analysis to determine why the leak may have occurred and how Oxy can prevent this type of event from happening in the future.		

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CONDITIONS

Action 52316

## **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	52316
	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.	9/28/2021