

# Certificate of Analysis

Number: 6030-22030260-001A

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

Mar. 17, 2022

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

Scott Beasley Field: Pue Gold Sampled By: Station Name: Gold CTB Check Meter Sample Of: Gas Spot

Station Number: 17200c Sample Date: 03/15/2022 09:00 Sample Point: Sample Conditions: 78.3 psig, @ 53.2 °F Ambient: 42 °F Meter

4000524218 03/15/2022 09:00 Meter Number: Effective Date: GPA-2261M County: Eddy Method: Type of Sample: Spot-Cylinder Cylinder No: 1111-002654

Heat Trace Used: No Instrument: 70142339 (Inficon GC-MicroFusion)

Sampling Method: Fill and Purge Last Inst. Cal.: 03/07/2022 0:00 AM

Sampling Company: OXY Analyzed: 03/17/2022 09:15:18 by ERG

## **Analytical Data**

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	NIL	NIL	NIL	
Nitrogen	2.356	2.37352	2.988	
Carbon Dioxide	2.378	2.39487	4.736	
Methane	73.277	73.81252	53.210	
Ethane	11.392	11.47495	15.505	3.063
Propane	5.864	5.90635	11.703	1.624
Iso-Butane	0.769	0.77462	2.023	0.253
n-Butane	1.921	1.93544	5.055	0.609
Iso-Pentane	0.429	0.43214	1.401	0.158
n-Pentane	0.448	0.45117	1.463	0.163
Hexanes	0.219	0.22080	0.855	0.091
Heptanes	0.150	0.15059	0.678	0.069
Octanes	0.058	0.05873	0.301	0.030
Nonanes Plus	0.014	0.01430	0.082	0.008
	99.275	100.00000	100.000	6.068
Calculated Physical P	Properties	Tota		C9+
Calculated Molecular W	Veight	22.25	5	128.26
Compressibility Factor		0.9962	2	
Relative Density Real C	Gas	0.7710	)	4.4283
<b>GPA 2172 Calculation</b>	) <b>:</b>			
Calculated Gross BTU	J per ft <sup>3</sup> @ 14.65 ps	sia & 60°F		
Real Gas Dry BTU		1245.2	<u> </u>	6974.4
Water Sat. Gas Base B	BTU	1223.9	)	6852.4
Ideal, Gross HV - Dry a	nt 14.65 psia	1240.5	5	6974.4
Ideal, Gross HV - Wet		1218.7	,	6852.4
Comments: H2S Field	d Content 0 ppm			

Mcf/day 33915

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality

assurance, unless otherwise stated.

### **UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Gold NC 29 CTB

Date: 06/01/2022

**Duration of event:** 10 Minutes **MCF Flared:** 60

Start Time: 08:50 PM End Time: 09:00 PM

Cause: Equipment Fail > Tank Dump Valve

Method of Flared Gas Measurement: Gas Flare Meter

**Comments:** This upset event was not caused by any wells associated with the facility.

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

The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction or complete shut-in of a gas pipeline by a third-party pipeline operator, which impacted Oxy's ability to send gas to a third-party gas pipeline. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. In this case, Iridium Satellite tester #1 oil side dump valve controller failed to shut, which then prompted gas to be sent to the Gold CTB facility. Gas flowed down the oil line to the facility's production heater treater units #1 & #2, which then began increasing the amount of pressure normally breaking out of the oil stream. The extra volume of gas over pressured the high pressure VRU's at the facility, which then triggered a shutdown of the equipment on a high inlet suction pressure malfunction. Once the high pressure VRU's were non-operational, the extra gas was sent to the low pressure flare. The dump valve was repaired by the production tech, who on-site, at the time, and once the repair was complete, and return to its normal working condition, gas pressures dropped and the high pressure VRU's alarms were cleared and returned back to normal operation. All of Oxy's facility equipment were operating as designed prior to the sudden and unexpected flaring event occurring.

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

This facility is unmanned, except when Oxy production techs are gathering data daily or conducting daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring, which in turn, are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, increased sensor pressure/level alarms, other process equipment issues, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. In this case, Iridium Satellite tester #1 oil side dump valve controller failed to shut, which then prompted gas to be sent to the Gold CTB facility. Gas flowed down the oil line to the facility's production

heater treater units #1 & #2, which then began increasing the amount of pressure normally breaking out of the oil stream. The extra volume of gas over pressured the high pressure VRU's at the facility, which then triggered a shutdown of the equipment on a high inlet suction pressure malfunction. Once the high pressure VRU's were non-operational, the extra gas was sent to the low pressure flare. The dump valve was repaired by the production tech, who on-site, at the time, and once the repair was complete, and return to its normal working condition, gas pressures dropped and the high pressure VRU's alarms were cleared and returned back to normal operation. All of Oxy's facility equipment were operating as designed prior to the sudden and unexpected flaring event occurring.

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

Oxy is limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of this type of dump control valve equipment fail malfunction as notwithstanding typical operating equipment design and operations are inherently dynamic and even the smallest fails or malfunctions, false or true, can be sudden, reasonably unforeseeable and unexpected. The only action that Oxy can take is to continue with the equipment preventative maintenance program for this facility and coordinate with its automation team personnel to look into this type of unexpected malfunction to prevent a potential recurrence of such. This event is out of OXY's control yet, OXY made every effort to control and minimize emissions as much as possible.

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

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** 

DEFINITIONS

Action 120323

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	120323
	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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1220 S. St Francis Dr., Santa Fe, NM 87505

## **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 120323

Phone: (505) 476-3470 Fax: (505) 476-3462				
Q	UESTIONS			
Operator:		OGRID:		
OXY USA INC P.O. Box 4294		16696 Action Number:		
Houston, TX 772104294		120323		
		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 wi	ith the rest of the questions.		
Incident Well	Not answered.			
Incident Facility	[fAPP2126660185] GOLD I	[fAPP2126660185] GOLD BATTERY		
Determination of Reporting Requirements				
Answer all questions that apply. The Reason(s) statements are calculated based on your answers a	nd may provide addional quidance	9		
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	No			
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 v	centing and/or floring that is as ma	who a major or minor release under 40.45.00.7 NMAC		
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes	y be a major or minor release under 19.13.29.7 NWAC.		
Did this vent or flare 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 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	Emergency Flare > Equipn	nent Fail > Tank Dump Valve		
Description Operation I Amelia of Market and Elevel National Operation				
Representative Compositional Analysis of Vented or Flared Natural Gas				
Please provide the mole percent for the percentage questions in this group.  Methane (CH4) percentage	74			
Nitrogen (N2) percentage, if greater than one percent	2			
Hydrogen Sulfide (H2S) PPM, rounded up	0			
Carbon Dioxide (CO2) percentage, if greater than one percent	2			
Oxygen (02) percentage, if greater than one percent	0			
Oxygen (oz) percentage, ii greater than one percent	U			
If you are venting and/or flaring because of Pipeline Specification, please provide the required spec	cifications 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.			

QUESTIONS, Page 2

Action 120323

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Pinetick IV

District IV

## **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe. NM 87505**

Phone:(505) 476-3470 Fax:(505) 476-3462	ONO (southwest)
QUESTI Operator:	ONS (continued)
OXY USA INC	16696
P.O. Box 4294 Houston, TX 772104294	Action Number: 120323
	Action Type:
CUITOTIONIO	[C-129] Venting and/or Flaring (C-129)
QUESTIONS	
Date(s) and Time(s)	
Date vent or flare was discovered or commenced	06/10/2022
Time vent or flare was discovered or commenced  Time vent or flare was terminated	08:50 PM
Cumulative hours during this event	09:00 PM 0
Cumulative fledie during the event	0
Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Cas Flored (Met) Datails	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 60 Mcf   Recovered: 0 Mcf
Natural Gas Flared (Mcf) Details	Lost: 60 Mcf]
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Gas 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 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.
Otana and Antique to Design Waste	
Steps and Actions to Prevent Waste	T
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	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction or complete shut-in of a gas pipeline by a third-party pipeline operator, which impacted Oxy's ability to send gas to a third-party gas pipeline. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline operator is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. In this case, Iridium Satellite tester #1 oil side dump valve controller failed to shut, which then prompted gas to be sent to the Gold CTB facility. Gas flowed down the oil line to the facility's production heater treater units #1 \$ #2, which then began increasing the amount of pressure normally breaking out of the oil stream. The extra volume of gas over pressured the high pressure VRU's at the facility, which then triggered a shutdown of the equipment on a high inlet suction pressure malfunction. Once the high pressure VRU's were non-operational, the extra gas was sent to the low pressure flare. The dump valve was repaired by the production tech, who on-site, at the time, and once the repair was complete, and return to its normal working condition, gas pressures dropped and the high pressure VRU's alarms were cleared and returned back to normal operation. All of Oxy's facility equipment were operating as designed prior to the sudden and unexpected flaring event occurring.
Steps taken to limit the duration and magnitude of vent or flare	In this case, Iridium Satellite tester #1 oil side dump valve controller failed to shut, which then prompted gas to be sent to the Gold CTB facility. Gas flowed down the oil line to the facility's production heater treater units #1 & #2, which then began increasing the amount of pressure normally breaking out of the oil stream. The extra volume of gas over pressured the high pressure VRU's at the facility, which then triggered a shutdown of the equipment on a high inlet suction pressure malfunction. Once the high pressure VRU's were non-operational, the extra gas was sent to the low pressure flare. The dump valve was repaired by the production tech, who on-site, at the time, and once the repair was complete, and return to its normal working condition, gas pressures dropped and the high pressure VRU's alarms were cleared and returned back to normal operation. All of Oxy's facility equipment were operating as designed prior to the sudden and unexpected flaring event occurring.
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ACKNOWLEDGMENTS

Action 120323

### **ACKNOWLEDGMENTS**

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P.O. Box 4294	Action Number:
Houston, TX 772104294	120323
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### **ACKNOWLEDGMENTS**

V	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.
V	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.
V	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.
V	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.
V	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 120323

### **CONDITIONS**

Operator:	OGRID:
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P.O. Box 4294	Action Number:
Houston, TX 772104294	120323
	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.	6/24/2022