



Certificate of Analysis

Number: 6030-21030124-006A

Artesia Laboratory

200 E Main St.
Artesia, NM 88210
Phone 575-746-3481Chandler Montgomery
Occidental Petroleum
1502 W Commerce Dr.
Carlsbad, NM 88220

Mar. 12, 2021

Field:	Mesa Verde	Sampled By:	Javier Lazo
Station Name:	Mesa Verde BSU 18H LG	Sample Of:	Gas Spot
Station Number:	15538I	Sample Date:	03/10/2021 09:30
Station Location:	OXY	Sample Conditions:	1185 psia, @ 89 °F Ambient: 67 °F
Sample Point:	Meter Run	Effective Date:	03/10/2021 09:30
Formation:	Quarterly	Method:	GPA-2261M
County:	Lea	Cylinder No:	5030-01186
Type of Sample:	Spot-Cylinder	Instrument:	70104251 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	03/08/2021 0:00 AM
Sampling Method:	Fill and Purge	Analyzed:	03/12/2021 13:31:22 by EJ R
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+	6.195
Nitrogen	1.367	1.362	1.750		GPM TOTAL C3+	2.934
Methane	75.196	74.948	55.148		GPM TOTAL iC5+	0.331
Carbon Dioxide	1.568	1.563	3.155			
Ethane	12.258	12.217	16.849	3.261		
Propane	6.378	6.357	12.857	1.748		
Iso-butane	0.810	0.807	2.151	0.264		
n-Butane	1.884	1.878	5.006	0.591		
Iso-pentane	0.325	0.324	1.072	0.118		
n-Pentane	0.325	0.324	1.072	0.117		
Hexanes Plus	0.221	0.220	0.940	0.096		
	100.332	100.000	100.000	6.195		

Calculated Physical Properties

	Total	C6+
Relative Density Real Gas	0.7553	3.2176
Calculated Molecular Weight	21.80	93.19
Compressibility Factor	0.9963	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1259	5113
Water Sat. Gas Base BTU	1237	5024
Ideal, Gross HV - Dry at 14.65 psia	1253.9	5113.2
Ideal, Gross HV - Wet	1232.0	5023.7
Net BTU Dry Gas - real gas	1142	
Net BTU Wet Gas - real gas	1123	

Comments: H₂S Field Content 0 ppm
Mcf/day 839

Hydrocarbon Laboratory Manager

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:** MV 18 CTB**Start Date:** 07/04/2021**End Date:** 07/04/2021**Cause:** Malfunction**Duration of event:** 0.07 hours**MCF Volume Flared:** 109**Method of Flared Gas Measurement:** Flare Meter

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, the flaring event occurred when the HYBON: HP VRU #1 GOING DOWN ON HIHI VIBRATION, #2 HP VRU EXCESSIVE AUTO STARTS.third party gas gatherer, Enlink, experiencing a power outage that affected Enlink's Lobo delivery station. Once Enlink was able restore service, Oxy immediately resumed gas sales to the third-party system. 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:

Oxy resumed gas sales to the third-party system as soon as Enlink was able to restore service to the facility. During the shut-in OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.

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.

District I1625 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 42544

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 42544
	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	[30-015-44549] MESA VERDE BONE SPRING UNIT #018H
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	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 compressor malfunction.

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	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	2
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.

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	07/04/2021
Time venting and/or flaring was discovered or commenced	12:00 AM
Time venting and/or flaring was terminated	12:04 AM
Cumulative hours during this event	0

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: 109 Mcf Recovered: 0 Mcf Lost: 109 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. In this case, the flaring event occurred when the HYBON: HP VRU #1 GOING DOWN ON HIHI VIBRATION, #2 HP VRU EXCESSIVE AUTO STARTS.third party gas gatherer, Enlink, experiencing a power outage that affected Enlink's Lobo delivery station. Once Enlink was able restore service, Oxy immediately resumed gas sales to the third-party system. 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	Oxy resumed gas sales to the third-party system as soon as Enlink was able to restore service to the facility. During the shut-in OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.
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.

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CONDITIONS

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	Action Number: 42544
	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.	8/17/2021