Certificate of Analysis

Number: 6030-21060187-001A

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:	Lost Tank	Sampled By:	Michael Mirabal
Station Name:	Lost Tank 30-19 Fed Com 1H	Sample Of:	Gas Spot
Station Number:	16102T	Sample Date:	06/16/2021 02:20
Station Location:	CTB	Sample Conditions:	113 psia, @ 92 °F Ambient: 95 °F
Sample Point:	Meter	Effective Date:	06/16/2021 02:20
Formation:	Quarterly	Method:	GPA-2261M
County:	Lea	Cylinder No:	1111-002369
Type of Sample: :	Spot-Cylinder	Instrument:	70104124 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	06/21/2021 0:00 AM
Sampling Method: :	Fill and Purge	Analyzed:	06/21/2021 12:21:17 by EJR
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+	5.748
Nitrogen	3.714	3.705	4.543		GPM TOTAL C3+	2.964
Methane	72.207	72.042	50.591		GPM TOTAL iC5+	0.710
Carbon Dioxide	4.233	4.223	8.135			
Ethane	10.455	10.431	13.730	2.784		
Propane	5.365	5.353	10.332	1.472		
Iso-butane	0.671	0.669	1.702	0.219		
n-Butane	1.794	1.790	4.554	0.563		
Iso-pentane	0.444	0.443	1.399	0.162		
n-Pentane	0.510	0.509	1.608	0.184		
Hexanes Plus	0.837	0.835	3.406	0.364		
	100.230	100.000	100.000	5.748		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7915	3.2176
Calculated Molecular Weight	22.84	93.19
Compressibility Factor	0.9962	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1209	5113
Water Sat. Gas Base BTU	1188	5024
Ideal, Gross HV - Dry at 14.65 psia	1204.2	5113.2
Ideal, Gross HV - Wet	1183.1	5023.7
Net BTU Dry Gas - real gas	1098	
Net BTU Wet Gas - real gas	1079	

Comments: H2S Field Content 0 ppm
Mcf/day 3276

Jesus Escobedo

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.

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Lost Tank 18 CPF

Flare Date: 01/12/2023

Duration of event: 60 Minutes

MCF Flared: 210

Start Time: 7:00 PM

End Time: 8:00 PM

Cause: Emergency Flare > Third Party > USA Compression > Lost Tank 13 Boo CS > Compression Equipment Issues

Method of Flared Gas Measurement: Gas Flare Meter

Comments:

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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 compressor station operator, which impacted Oxy's ability to send gas to them. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline compression station operator is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, 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, Lost Tank Boo 13 compressor station, third party owned and operated by USA Compression, had 2 units go down on high high liquid level on scrubber 2, which then instigated a sudden and unexpected restriction of gas flow intake by Lost Tank Boo 13 compressor station, which in turn, prompted Oxy's Lost Tank 18 CPF to pressure up automatically and trigger a flaring event to occur. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel from USA Compression personnel. Lost Tank 13 Boo compressor station is the first stopping point, where OXY sends its sales gas from its facility, before it is pushed further down the pipeline for further processing at Mark West, a downstream gathering system facility, which is downstream of Oxy's control.

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

It is OXY's policy to route its stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, that is beyond Oxy's control to avoid, prevent or foresee, to minimize emissions as much as possible as part of the overall steps taken to limit duration and magnitude of flaring. The flare at this facility has a 98% combustion efficiency to lessen emissions as much as possible. In this case, third party owned and operated compressor station, Lost Tank 13 Boo compressor station, had 2 units go down on high high liquid level on scrubber 2, which caused a restriction of gas flow intake, which in turn, caused Oxy's Lost Tank 18 CPF to pressure up and a flaring event to occur. As soon as the Oxy production tech, who was on-site, saw flaring occur, he began to make phone calls to USA Compression personnel for an update on compression equipment. The Oxy production tech then contacted Oxy's personnel to begin making injection rate changes, so that field pressure would stay below the flare trigger setpoints of the CTB to cease flaring. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.

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

Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of a third-party owned and operated compressor station's sudden and unexpected gas flow intake restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. Third-party downstream compression station owner operators may have equipment issues, which will reoccur from time to time, which in turn, directly impacts Oxy's ability to send its sales gas to them, and potentially triggering a flaring event. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to continually communicate with USA Compression personnel, who operate the Lost Tank 13 Boo Compressor Station, when possible, during these types of circumstances.

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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

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 181867
	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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QUESTIONS

Action 181867

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 181867
	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	*Unavailable.*
Incident Facility	**[fAPP2226965761] Lost Tank 18 CPF**

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 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 venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.	
Was there **at least 50 MCF** of natural gas vented and/or flared during this event	Yes
Did this vent or flare 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 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 > Third Party > USA Compression > Lost Tank 13 Boo CS > Compression Equipment Issues

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	72
Nitrogen (N2) percentage, if greater than one percent	4
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	4
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.*

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 181867
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	01/12/2023
Time vent or flare was discovered or commenced	07:00 PM
Time vent or flare was terminated	08:00 PM
Cumulative hours 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 | Released: 210 Mcf | Recovered: 0 Mcf | Lost: 210 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.*

Steps and Actions to Prevent Waste	
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 compressor station operator, which impacted Oxy's ability to send gas to them. This interruption, restriction or complete shut-in of the gas pipeline by a third-party pipeline compression station operator is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, 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, Lost Tank Boo 13 compressor station, third party owned and operated by USA Compression, had 2 units go down on high high liquid level on scrubber 2, which then instigated a sudden and unexpected restriction of gas flow intake by Lost Tank Boo 13 compressor station, which in turn, prompted Oxy's Lost Tank 18 CPF to pressure up automatically and trigger a flaring event to occur. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel from USA Compression personnel. Lost Tank 13 Boo compressor station is the first stopping point, where OXY sends its sales gas from its facility, before it is pushed further down the pipeline for further processing at Mark West, a downstream gathering system facility, which is downstream of Oxy's control.
Steps taken to limit the duration and magnitude of vent or flare	It is OXY's policy to route its stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, that is beyond Oxy's control to avoid, prevent or foresee, to minimize emissions as much as possible as part of the overall steps taken to limit duration and magnitude of flaring. The flare at this facility has a 98% combustion efficiency to lessen emissions as much as possible. In this case, third party owned and operated compressor station, Lost Tank 13 Boo compressor station, had 2 units go down on high high liquid level on scrubber 2, which caused a restriction of gas flow intake, which in turn, caused Oxy's Lost Tank 18 CPF to pressure up and a flaring event to occur. As soon as the Oxy production tech, who was on-site, saw flaring occur, he began to make phone calls to USA Compression personnel for an update on compression equipment. The Oxy production tech then contacted Oxy's personnel to begin making injection rate changes, so that field pressure would stay below the flare trigger setpoints of the CTB to cease flaring. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of a third-party owned and operated compressor station's sudden and unexpected gas flow intake restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. Third-party downstream compression station owner operators may have equipment issues, which will reoccur from time to time, which in turn, directly impacts Oxy's ability to send its sales gas to them, and potentially triggering a flaring event. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to continually communicate with USA Compression personnel, who operate the Lost Tank 13 Boo Compressor Station, when possible, during these types of circumstances.

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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 181867
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

☑	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.
☑	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.
☑	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.
☑	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.
☑	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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 181867
	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.	2/1/2023