



## Certificate of Analysis

Number: 6030-21060187-001A

Artesia Laboratory

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

June 21, 2021

Field: Lost Tank  
 Station Name: Lost Tank 30-19 Fed Com 1H  
 Station Number: 16102T  
 Station Location: CTB  
 Sample Point: Meter  
 Formation: Quarterly  
 County: Lea  
 Type of Sample: : Spot-Cylinder  
 Heat Trace Used: N/A  
 Sampling Method: : Fill and Purge  
 Sampling Company: : SPL

Sampled By: Michael Mirabal  
 Sample Of: Gas Spot  
 Sample Date: 06/16/2021 02:20  
 Sample Conditions: 113 psia, @ 92 °F Ambient: 95 °F  
 Effective Date: 06/16/2021 02:20  
 Method: GPA-2261M  
 Cylinder No: 1111-002369  
 Instrument: 70104124 (Inficon GC-MicroFusion)  
 Last Inst. Cal.: 06/21/2021 0:00 AM  
 Analyzed: 06/21/2021 12:21:17 by EJ R

## 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

Relative Density Real Gas	Total	C6+
	0.7915	3.2176
Calculated Molecular Weight	22.84	93.19
Compressibility Factor	0.9962	

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 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

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. 44

**UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM****Facility:** Lost Tank 18 CPF**Flare Date:** 10/04/2022**Duration of event:** 1 Hour 34 Minutes**MCF Flared:** 2920**Start Time:** 04:52 PM**End Time:** 06:26 PM**Cause:** Third-Party Unplanned > Lost Tank 13 Boo CS > Compression Equipment Issues > Instrument Air**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, third party owned and operated compressor station, Lost Tank Boo 13 CS, had compression equipment issues, resulting from instrument air issues, which then prompted all their compressors to shut down suddenly. The loss of compression equipment at the Lost Tank 13 Boo station caused Oxy's Lost Tank 18 Central Processing Facility to pressure up and a flaring event to occur and cause subsequent intermittent flaring to occur. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.

**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 Boo 13 CS, had compression equipment issues, resulting from instrument air issues, which then prompted all their compressors to shut down suddenly. The loss of compression equipment at the Lost Tank 13 Boo station caused Oxy's Lost Tank 18 Central Processing Facility to pressure up and a flaring event to occur, and until USA Compression could stabilize their compression equipment and keep them running, this also cause subsequent intermittent flaring to occur. As soon as the Oxy production techs, who were on-site, saw flaring occur, they immediately called USA Compression Lost Tank Boo 13 station personnel to determine cause and were informed that they were having instrument air issues which was affecting their compression equipment. After approximately, 15-20 minutes after flaring began, USA Compression personnel informed the Oxy production techs who were on-site that several compressors were restarted but a few more compressors were having trouble staying running. The continuation of compression equipment issues at the Lost Tank Boo 13 CS, continued to trigger subsequent minute instances of flaring to occur. Oxy productions tech made arrangements with Oxy's flowback personnel to choke several

GOR wells, so that the pressure would fall below the flare setpoints of the Lost Tank 18 Central Processing Facility, and flaring would cease. 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 compressor station operated restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid, prevent from happening or reoccurring. Third-party downstream compression station operators may have equipment issues which will reoccur from time to time and may prompt a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them, which then triggers 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 keep continually communicate with USA Compression, who owns the Lost Tank Boo 13 Compressor Station, when possible, during these types of situations.

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

DEFINITIONS

Action 155848

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 155848
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

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: <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul>
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QUESTIONS

Action 155848

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 155848
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

<b>Prerequisites</b> <i>Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.</i>	
Incident Operator	[16696] OXY USA INC
Incident Type	Flare
Incident Status	Closure Not Approved
Incident Well	Unavailable.
Incident Facility	[fAPP2226965761] Lost Tank 18 CPF
<i>Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.</i>	

<b>Determination of Reporting Requirements</b> <i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i>	
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, major venting and/or flaring of natural gas.
<i>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.</i>	
Was there <b>at least 50 MCF</b> of natural gas vented and/or flared during this event	Yes
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

<b>Equipment Involved</b>	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > Third-Party Unplanned > Lost Tank 13 Boo CS > Compression Equipment Issues > Instrument Air

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b> <i>Please provide the mole percent for the percentage questions in this group.</i>	
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 (O2) percentage, if greater than one percent	0
<i>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</i>	
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 (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 155848

QUESTIONS (continued)

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	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	10/04/2022
Time vent or flare was discovered or commenced	04:52 PM
Time vent or flare was terminated	06:26 PM
Cumulative hours during this event	2

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: 2,920 Mcf   Recovered: 0 Mcf   Lost: 2,920 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	
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, third party owned and operated compressor station, Lost Tank Boo 13 CS, had compression equipment issues, resulting from instrument air issues, which then prompted all their compressors to shut down suddenly. The loss of compression equipment at the Lost Tank 13 Boo station caused Oxy's Lost Tank 18 Central Processing Facility to pressure up and a flaring event to occur and cause subsequent intermittent flaring to occur. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
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 Boo 13 CS, had compression equipment issues, resulting from instrument air issues, which then prompted all their compressors to shut down suddenly. The loss of compression equipment at the Lost Tank 13 Boo station caused Oxy's Lost Tank 18 Central Processing Facility to pressure up and a flaring event to occur, and until USA Compression could stabilize their compression equipment and keep them running, this also cause subsequent intermittent flaring to occur. As soon as the Oxy production techs, who were on-site, saw flaring occur, they immediately called USA Compression Lost Tank Boo 13 station personnel to determine cause and were informed that they were having instrument air issues which was affecting their compression equipment. After approximately, 15-20 minutes after flaring began, USA Compression personnel informed the Oxy production techs who were on-site that several compressors were restarted but a few more compressors were having trouble staying running. The continuation of compression equipment issues at the Lost Tank Boo 13 CS, continued to trigger subsequent minute instances of flaring to occur. Oxy productions tech made arrangements with Oxy's flowback personnel to choke several GOR wells, so that the pressure would fall below the flare setpoints of the Lost Tank 18 Central Processing Facility, and flaring would cease. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
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ACKNOWLEDGMENTS

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**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
<input checked="" type="checkbox"/>	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
<input checked="" type="checkbox"/>	I hereby certify the statements in this amending 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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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 155848

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	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**CONDITIONS**

Created By	Condition	Condition Date
marialuna2	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	11/5/2022