



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	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 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+	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

Eric Ramirez

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:** 09/13/2022**Duration of event:** 12 Hours 39 Minutes**MCF Flared:** 9200.58**Start Time:** 11:20 AM**End Time:** 11:59 PM**Cause:** Third party operated downstream facility > Mark West > Facility issues > Liquid Issues and Pig Running > Miscommunication**Method of Flared Gas Measurement:** Gas Flare Meter**Comments:** This event lasted from September 13, 2022, approximately beginning at 11:20 AM to September 14, 2022, approximately ending at 01:10 AM.

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 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, this event lasted within a two-day period. On September 13, 2022, during DCP's scheduled maintenance downtime, Oxy coordinated and engaged its secondary offloading plans by routing its gas to third party downstream pipeline operator, Mark West. Unfortunately, Mark West's downstream plant, had issues which affected the Lost Tank 18 CPF's operations and equipment, during DCP's scheduled maintenance downtime. Mark West's plant facility began to encounter liquid issues and requested Oxy personnel for rate cuts in the gas volume being sent to them, while they were also making remote automated adjustments with very little notice to Oxy to adjust their flow rates, before they completely shut in their service pipeline system to Oxy, with no advance notice of this action. In addition, Mark West's plant also began running pigs to identify and resolve additional issues they were having with their service pipeline system. Regrettably, Mark West personnel continually provided ambiguous information as to when they would resume full and normal operations, which caused Oxy personnel to consistently shut and open wells in anticipation of sending gas, which in turn, then wouldn't occur, which then caused large amounts of gas to flare until wells could be shut in again. This event could not have been avoided or prevented from happening as third party owned and operated Mark West's downstream facility unexpectedly had issues which they needed to resolve and unexpectedly shut in their pipeline to Oxy. 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, this event lasted within a two-day period. On September 13, 2022, during DCP's scheduled maintenance downtime, Oxy coordinated

and engaged its secondary offloading plans by routing its gas to third party downstream pipeline operator, Mark West. Unfortunately, Mark West's downstream plant, had issues which affected the Lost Tank 18 CPF's operations and equipment, during DCP's scheduled maintenance downtime. Mark West's plant facility began to encounter liquid issues and requested Oxy personnel for rate cuts in the gas volume being sent to them, while they were also making remote automated adjustments with very little notice to Oxy to adjust their flow rates, before they completely shut in their service pipeline system to Oxy, with no advance notice of this action. In addition, Mark West's plant also began running pigs to identify and resolve additional issues they were having with their service pipeline system. Regrettably, Mark West personnel continually provided ambiguous information as to when they would resume full and normal operations, which caused Oxy personnel to consistently shut and open wells in anticipation of sending gas, which in turn, then wouldn't occur, which then caused large amounts of gas to flare until wells could be shut in again. This event could not have been avoided or prevented from happening as third party owned and operated Mark West's downstream facility unexpectedly had issues which they needed to resolve and unexpectedly shut in their pipeline to Oxy. 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 an Mark West downstream facility or gas plant 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. Mark West and its associated downstream facilities will have issues which will reoccur from time to time, and its subsequent actions to reduce, curtail and/or perform any type of adjustments to its incoming flow intake rates, thusly, directly impacts Oxy's ability to send gas to them. When Mark West has downstream activity issues or greatly struggles to handle the volume of gas being sent to them by Oxy, this in turn, forces OXY's gas to route to the flare. OXY makes every effort to control and minimize emissions as much as possible when this circumstance occurs. The only actions that Oxy can take and handle that is within its control, is to keep continually communicate with third-party pipeline operator, Mark West, and its personnel 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 150167

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 150167
	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: • 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 150167

QUESTIONS

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	Action Number: 150167
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Prerequisites <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	[30-025-46474] LOST TANK 30 19 FEDERAL COM #001H
Incident Facility	Not answered.
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.	

Determination of Reporting Requirements <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	Yes
Is this considered a submission for a vent or flare event	Yes, major 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 operated downstream facility > Mark West > Facility issues > Liquid Issues and Pig Running > Miscommunication

Representative Compositional Analysis of Vented or Flared Natural Gas <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 (CO2) percentage, if greater than one percent	4
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 Sufide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 150167

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	09/13/2022
Time vent or flare was discovered or commenced	11:20 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	13

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: 9,200 Mcf Recovered: 0 Mcf Lost: 9,200 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	Yes
Was notification of downstream activity received by this operator	No
Downstream OGRID that should have notified this operator	[329252] MarkWest Energy West Texas Gas Company, L.L.C
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	In this case, this event lasted within a two-day period. On September 13, 2022, during DCP's scheduled maintenance downtime, Oxy coordinated and engaged its secondary offloading plans by routing its gas to third party downstream pipeline operator, Mark West. Unfortunately, Mark West's downstream plant, had issues which affected the Lost Tank 18 CPF's operations and equipment, during DCP's scheduled maintenance downtime. Mark West's plant facility began to encounter liquid issues and requested Oxy personnel for rate cuts in the gas volume being sent to them, while they were also making remote automated adjustments with very little notice to Oxy to adjust their flow rates, before they completely shut in their service pipeline system to Oxy, with no advance notice of this action. In addition, Mark West's plant also began running pigs to identify and resolve additional issues they were having with their service pipeline system. Regrettably, Mark West personnel continually provided ambiguous information as to when they would resume full and normal operations, which caused Oxy personnel to consistently shut and open wells in anticipation of sending gas, which in turn, then wouldn't occur, which then caused large amounts of gas to flare until wells could be shut in again. This event could not have been avoided or prevented from happening as third party owned and operated Mark West's downstream facility unexpectedly had issues which they needed to resolve and unexpectedly shut in their pipeline to Oxy. 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

☒	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.
☒	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.
☒	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.
☒	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

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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.	10/11/2022