Certificate of Analysis

Number: 6030-21120194-001A

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

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

Dec. 20, 2021

Field:			
Station Name:	Federal 12 NO 001H Production	Sampled By:	Michael Mirabal
Station Number:	57398P	Sample Of:	Gas Spot
Station Location:	CTB	Sample Date:	12/16/2021 01:38
Sample Point:	Meter	Sample Conditions:	55 psig, @ 83 °F Ambient: 63 °F
Formation:	Quarterly	Effective Date:	12/16/2021 01:38
County:	Eddy, NM	Method:	GPA-2261M
Type of Sample: :	Spot-Cylinder	Cylinder No:	5030-00507
Heat Trace Used:	N/A	Instrument:	70142339 (Inficon GC-MicroFusion)
Sampling Method: :	Fill and Purge	Last Inst. Cal.:	12/13/2021 0:00 AM
Sampling Company: :	SPL	Analyzed:	12/20/2021 09:07:50 by ERG

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	NIL	NIL	NIL	
Nitrogen	4.243	4.29560	5.263	
Carbon Dioxide	0.054	0.05507	0.106	
Methane	71.211	72.09036	50.583	
Ethane	11.472	11.61376	15.274	3.101
Propane	6.692	6.77423	13.065	1.863
Iso-Butane	0.847	0.85726	2.179	0.280
n-Butane	2.095	2.12097	5.392	0.668
Iso-Pentane	0.543	0.54991	1.735	0.201
n-Pentane	0.593	0.59982	1.893	0.217
Hexanes	0.425	0.43005	1.621	0.177
Heptanes	0.355	0.35979	1.577	0.166
Octanes	0.175	0.17665	0.883	0.090
Nonanes Plus	0.076	0.07653	0.429	0.043
	98.781	100.00000	100.000	6.806

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	22.86	128.26
Compressibility Factor	0.9959	
Relative Density Real Gas	0.7924	4.4283
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1305.1	6974.4
Water Sat. Gas Base BTU	1282.8	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1299.8	6974.4
Ideal, Gross HV - Wet	1277.0	6852.4

Comments: H2S Field Content 0 ppm
Mcf/day 271

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: Federal 12-1H CTB **Flare Date:** 03/05/2022

Duration of event: 24 Hours **MCF Flared:** 79.50

Start Time: 12:00 AM **End Time:** 11:59 PM

Cause: Downstream Activity Issue > Energy Transfer > James Ranch Compressor Station > Equipment Issues

Method of Flared Gas Measurement: Gas Flare Meter

Comments: This upset event was not caused by any wells associated with the facility. This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable issue 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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1. Reason why this event was beyond Operator's control:

This 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, this was a sudden and reasonably unforeseeable incident outside of OXY's control, but that impacted OXY's upstream facility which led to a flaring event that lasted a total of 2 days, 2 hours, and 43 minutes. Third-party pipeline operator, Energy Transfer, who owns and operates the sales gas service system pipeline, did not provide advance notice of the disruption to their pipeline due to gas compression equipment issues. OXY personnel contacted Energy Transfer personnel about the sudden and unforeseeable pipeline shut-in interruption and when they would be back online. No timeline was provided as to when their gas system pipeline services would be restored. Energy Transfer personnel informed OXY that the cause of the shut-in was due to a downstream facility, James Ranch Compressor Station, having gas compression equipment issues, and having to wait on a mechanic to come out and troubleshoot their gas compression equipment issues. OXY was in communication with Energy Transfer personnel throughout the outage and brought the OXY facility compression equipment back online as soon as Energy Transfer's equipment was resolved, and they resumed normal working sales gas service system pipeline operations. OXY routed all routed its stranded gas to a flare to minimize emissions as much as possible. Energy Transfer's compression mechanic was called out multiple times during this flaring period to troubleshoot their equipment issues.

The total flare event volume is 168 MCF, yet the daily 24-hr per day event volume is as follows:

1) March 04, 2022, 15 hrs., from 09:00 AM to 11:59 PM, 49.69 MCF (non-reportable)
2) ***March 05, 2022, 24 hrs., from 12:00 AM to 11:59 PM,79.50 MCF (reportable)***
3) March 06, 2022, 11 hrs. 43 minutes, from 12: 00 AM to 11:43 AM, 38.81 MCF (non-reportable)

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, 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 notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible 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. In this case, this was a sudden and reasonably unforeseeable incident outside of OXY's control, but that impacted OXY's upstream facility. Third-party pipeline operator, Energy Transfer, who owns and operates the sales gas service system pipeline, did not provide advance notice of the disruption to their pipeline due to gas compression equipment issues. Energy Transfer communicated to Oxy personnel that a compression mechanic had to be called out to troubleshoot their issues, which would take time. Oxy made every effort to shut in as much of production/wells as possible, yet it was critical to Oxy's operational safety and start up procedures to allow some production to occur at this facility, as it was necessary to maintain a minimal amount of gas flow to restart the facility's compression equipment, when Energy Transfer was ready and able to start taking gas again. The minimal amount of gas flow allowed to be produced and flare was done out of necessity to protect personnel and equipment as a safeguard against potential issues and until Energy Transfer was able to resolve their compression equipment issues completely. OXY was in communication with Energy Transfer personnel throughout the outage and brought the OXY facility compression equipment back online as soon as Energy Transfer's equipment was resolved, and they resumed normal working sales gas service system pipeline operations. Energy Transfer's compression mechanic was called out multiple times during this flaring period to troubleshoot their equipment issues.

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

Oxy is limited in its corrective actions to eliminate the cause and potential reoccurrence of an Energy Transfer sales gas service system pipeline constraint/restriction or shut in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening or reoccurring. Energy Transfer's downstream facility issues will reoccur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When Energy Transfer's downstream facility and/or its associating downstream facilities has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Energy Transfer then restricts Oxy's ability to send gas, which then prompts Oxy to route its stranded gas not pushed into the Energy Transfer sales gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The limited reactive actions that Oxy can do in this circumstance is to shut in multiple wells to minimize gas throughput to match and reduce flaring volumes during this third-party pipeline operator gas service pipeline shut in as well as continually communicate with Energy Transfer personnel throughout these type 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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 90392
	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 90392

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 90392
	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	*Not answered.*
Incident Facility	**[fAPP2126663359] FEDERAL 12-1H BATTERY**

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	Yes
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 Flaring > Downstream Activity Issue > Energy Transfer > James Ranch Compressor Station > 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	0
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: 90392
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	03/05/2022
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	24

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: 80 Mcf | Recovered: 0 Mcf | Lost: 80 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	[267255] ENERGY TRANSFER PARTNERS, LP
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	See Justification Form> In this case, this was a sudden and reasonably unforeseeable incident outside of OXY's control, but that impacted OXY's upstream facility which led to a flaring event that lasted a total of 2 days, 2 hours, and 43 minutes. Third-party pipeline operator, Energy Transfer, who owns and operates the sales gas service system pipeline, did not provide advance notice of the disruption to their pipeline due to gas compression equipment issues. OXY personnel contacted Energy Transfer personnel about the sudden and unforeseeable pipeline shut-in interruption and when they would be back online. No timeline was provided as to when their gas system pipeline services would be restored. Energy Transfer personnel informed OXY that the cause of the shut-in was due to a downstream facility, James Ranch Compressor Station, having gas compression equipment issues, and having to wait on a mechanic to come out and troubleshoot their gas compression equipment issues. OXY was in communication with Energy Transfer personnel throughout the outage and brought the OXY facility compression equipment back online as soon as Energy Transfer's equipment was resolved, and they resumed normal working sales gas service system pipeline operations. OXY routed all routed its stranded gas to a flare to minimize emissions as much as possible. Energy Transfer's compression mechanic was called out multiple times during this flaring period to troubleshoot their equipment issues.
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, 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 notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible 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. In this case, this was a sudden and reasonably unforeseeable incident outside of OXY's control, but that impacted OXY's upstream facility. Third-party pipeline operator, Energy Transfer, who owns and operates the sales gas service system pipeline, did not provide advance notice of the disruption to their pipeline due to gas compression equipment issues. Energy Transfer communicated to Oxy personnel that a compression mechanic had to be called out to troubleshoot their issues, which would take time. Oxy made every effort to shut in as much of production/wells as possible, yet it was critical to Oxy's operational safety and start up procedures to allow some production to occur at this facility, as it was necessary to maintain a minimal amount of gas flow to restart the facility's compression equipment, when Energy Transfer was ready and able to start taking gas again. The minimal amount of gas flow allowed to be produced and flare was done out of necessity to protect personnel and equipment as a safeguard against potential issues and until Energy Transfer was able to resolve their compression equipment issues.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in its corrective actions to eliminate the cause and potential reoccurrence of an Energy Transfer sales gas service system pipeline constraint/restriction or shut in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid or prevent from happening or reoccurring. Energy Transfer's downstream facility issues will reoccur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When Energy Transfer's downstream facility and/or its associating downstream facilities has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Energy Transfer then restricts Oxy's ability to send gas, which then prompts Oxy to route its stranded gas not pushed into the Energy Transfer sales gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The limited reactive actions that Oxy can do in this circumstance is to shut in multiple wells to minimize gas throughput to match and reduce flaring volumes during this third-party pipeline operator gas service pipeline shut in as well as continually communicate with Energy Transfer personnel throughout these type of situations.

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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 90392
	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

Action 90392

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 90392
	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.	3/15/2022