



Certificate of Analysis

Number: 6030-21060266-003A

Artesia Laboratory

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

June 28, 2021

Field:	Sand Dunes	Sampled By:	Javier Lazo
Station Name:	Sand Dunes CTB Train 3 Production	Sample Of:	Gas Spot
Station Number:	17009P	Sample Date:	06/24/2021 12:27
Station Location:	CTB	Sample Conditions:	90 psia, @ 105 °F Ambient: 100 °F
Sample Point:	Meter	Effective Date:	06/24/2021 12:27
Formation:	Monthly	Method:	GPA-2261M
County:	Eddy	Cylinder No:	1111-002295
Type of Sample:	Spot-Cylinder	Instrument:	70104124 (Inficon GC-MicroFusion)
Heat Trace Used:	N/A	Last Inst. Cal.:	05/18/2021 0:00 AM
Sampling Method:	Fill and Purge	Analyzed:	06/25/2021 13:45:45 by KNF
Sampling Company:	SPL		

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	NIL	NIL	NIL	
Nitrogen	1.770	1.78383	2.131	
Carbon Dioxide	1.321	1.33170	2.500	
Methane	72.953	73.52731	50.313	
Ethane	11.168	11.25608	14.436	3.007
Propane	6.184	6.23236	11.722	1.715
Iso-Butane	0.769	0.77545	1.922	0.253
n-Butane	1.954	1.96948	4.882	0.620
Iso-Pentane	0.551	0.55564	1.710	0.203
n-Pentane	0.641	0.64574	1.987	0.234
Hexanes	0.546	0.55030	2.023	0.226
Heptanes	0.675	0.68001	2.906	0.313
Octanes	0.527	0.53084	2.586	0.272
Nonanes Plus	0.160	0.16126	0.882	0.091
	99.219	100.0000	100.000	6.934

Calculated Physical Properties	Total	C9+
Calculated Molecular Weight	23.45	128.26
Compressibility Factor	0.9955	
Relative Density Real Gas	0.8129	4.4283

GPA 2172 Calculation:

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

Real Gas Dry BTU	1346.1	6974.4
Water Sat. Gas Base BTU	1323.2	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1340.1	6974.4
Ideal, Gross HV - Wet	1316.6	6852.4

Comments: H2S Field Content 0 ppm
Mcf/day 3116

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:** Sand Dunes South Corridor CTB**Flare Date:** 01/02/2022**Duration of event:** 40 Minutes**MCF Flared:** 138**Start Time:** 08:20 AM**End Time:** 09:00 AM**Cause:** Third Party Energy Power Provider > Xcel Energy > Power Glitch Equipment Issues**Method of Flared Gas Measurement:** Gas Flare Meter**Comments:** This upset event was not caused by any wells associated with the facility.

1. Reason why this event was beyond Operator's control:

This emissions were caused by the sudden, 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 maintenance practices. In this case, Xcel Energy, experienced a power glitch due to their service technician personnel opening their recloser to replace a pole which had burned down the previous day on January 01, 2022. As a result of the Xcel technicians opening their recloser, their actions triggered an area power outage glitch in the South Corridor area and an unanticipated emergency shut down of the Enterprise South Station as well as Rios compressor station and causing malfunctions of Oxy's facility equipment at the Sand Dunes South Corridor CTB. The Enterprise station shutdown caused Oxy's upstream facility to pressure up, and engage in secondary alternative offload procedures to Lucid, with additional efforts to divert its gas to its North Corridor/ Central stations.

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 in order to lessen emissions as much as possible. In this case, Xcel Energy, experienced a power glitch due to their service technician personnel opening their recloser to replace a pole which had burned down the previous day on January 01, 2022. As a result of the Xcel technicians opening their recloser, their actions triggered an area power outage glitch in the South Corridor area and an unanticipated emergency shut down of the Enterprise South Station as well as Rios compressor station and causing malfunctions of Oxy's facility equipment at the Sand Dunes South Corridor CTB. The Enterprise station shutdown caused Oxy's upstream facility to pressure up, and engage in secondary alternative offload procedures to Lucid, with additional efforts to divert its gas to its North Corridor/ Central stations. Once Enterprise downstream facility resumed normal working operations and began gas sales pipeline service once again, did flaring cease.

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 Enterprise gas flow pipeline 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. Enterprise 's downstream facility issues will re-occur

from time to time, which in turn, directly impacts Oxy's ability to send gas to them. When Enterprise downstream facility and/or its facility equipment has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enterprise then restricts or cuts off Oxy's ability to send gas, which then prompts Oxy to route its stranded gas not pushed into the Enterprise gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible during these circumstances. In this case, as this event was caused by a third-party energy power provider, Xcel Energy, whose service repair actions triggered a power outage, then the limited actions that Oxy can do in this circumstance is to engage in secondary third-party operator offload alternative routes/operators to minimize flaring volumes during a circumstance such as this.

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Phone:(575) 393-6161 Fax:(575) 393-0720
District II
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Phone:(575) 748-1283 Fax:(575) 748-9720
District III
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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

Action 73029

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 73029
	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 73029

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 73029
	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	[fAPP2127048458] Sand Dunes South Corridor CTB

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 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	Not answered.
Additional details for Equipment Involved. Please specify	Emergency Flare > Third Party Energy Power Provider > Xcel Energy > Power Glitch 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	74
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	1
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.

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QUESTIONS, Page 2

Action 73029

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	01/02/2022
Time vent or flare was discovered or commenced	08:20 AM
Time vent or flare was terminated	09:00 AM
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: 138 Mcf Recovered: 0 Mcf Lost: 138 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	This emissions were caused by the sudden, 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 maintenance practices. In this case, Xcel Energy, experienced a power glitch due to their service technician personnel opening their recloser to replace a pole which had burned down the previous day on January 01, 2022. As a result of the Xcel technicians opening their recloser, their actions triggered an area power outage glitch in the South Corridor area and an unanticipated emergency shut down of the Enterprise South Station as well as Rios compressor station and causing malfunctions of Oxy's facility equipment at the Sand Dunes South Corridor CTB. The Enterprise station shutdown caused Oxy's upstream facility to pressure up, and engage in secondary alternative offload procedures to Lucid, with additional efforts to divert its gas to its North Corridor/ Central stations.
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 in order to lessen emissions as much as possible. In this case, Xcel Energy, experienced a power glitch due to their service technician personnel opening their recloser to replace a pole which had burned down the previous day on January 01, 2022. As a result of the Xcel technicians opening their recloser, their actions triggered an area power outage glitch in the South Corridor area and an unanticipated emergency shut down of the Enterprise South Station as well as Rios compressor station and causing malfunctions of Oxy's facility equipment at the Sand Dunes South Corridor CTB. The Enterprise station shutdown caused Oxy's upstream facility to pressure up, and engage in secondary alternative offload procedures to Lucid, with additional efforts to divert its gas to its North Corridor/ Central stations. Once Enterprise downstream facility resumed normal working operations and began gas sales pipeline service once again, did flaring cease.
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 Enterprise gas flow pipeline 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. Enterprise 's downstream facility issues will re-occur from time to time, which in turn, directly impacts Oxy's ability to send gas to them. When Enterprise downstream facility and/or its facility equipment has issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enterprise then restricts or cuts off Oxy's ability to send gas, which then prompts Oxy to route its stranded gas not pushed into the Enterprise gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible during these circumstances. In this case, as this event was cause by a third-party energy power provider, Xcel Energy, whose service repair actions triggered a power outage, then the limited actions that Oxy can do in this circumstance is to engage in secondary third-party operator offload alternative routes/operators to minimize flaring volumes during a circumstance such as this.

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ACKNOWLEDGMENTS

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ACKNOWLEDGMENTS

☒	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (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

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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.	1/17/2022