



## Certificate of Analysis

Number: 6030-21110261-001A

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. 01, 2021

Field: Sand Dunes  
Station Name: Sand Dunes CTB Production 2  
Station Number: 17012P  
Station Location: CTB  
Sample Point: Meter  
Formation: Monthly  
County: Eddy, NM  
Type of Sample: : Spot-Cylinder  
Heat Trace Used: No  
Sampling Method: : Fill and Purge  
Sampling Company: : SPL

Sampled By: Scott Beasely  
Sample Of: Gas Spot  
Sample Date: 11/23/2021 10:21  
Sample Conditions: 77.7 psig, @ 62.5 °F Ambient: 61 °F  
Effective Date: 11/23/2021 10:21  
Method: GPA-2261M  
Cylinder No: 1111-002678  
Instrument: 70142339 (Inficon GC-MicroFusion)  
Last Inst. Cal.: 11/15/2021 0:00 AM  
Analyzed: 12/01/2021 14:47:44 by ERG

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	NIL	NIL	NIL	
Nitrogen	1.720	1.73503	2.237	
Carbon Dioxide	1.746	1.76105	3.568	
Methane	75.250	75.89815	56.047	
Ethane	11.338	11.43562	15.828	3.052
Propane	5.503	5.55083	11.267	1.526
Iso-Butane	0.699	0.70513	1.887	0.230
n-Butane	1.672	1.68661	4.512	0.531
Iso-Pentane	0.353	0.35584	1.182	0.130
n-Pentane	0.377	0.38035	1.263	0.138
Hexanes	0.214	0.21574	0.856	0.089
Heptanes	0.170	0.17177	0.792	0.079
Octanes	0.080	0.08109	0.426	0.041
Nonanes Plus	0.023	0.02279	0.135	0.013
	99.145	100.0000	100.000	5.829

## Calculated Physical Properties

Calculated Molecular Weight	Total	C9+
Compressibility Factor	21.72	128.26
Relative Density Real Gas	0.9963	
	0.7526	4.4283

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia & 60°F

Real Gas Dry BTU	1243.1	6974.4
Water Sat. Gas Base BTU	1221.9	6852.4
Ideal, Gross HV - Dry at 14.65 psia	1238.5	6974.4
Ideal, Gross HV - Wet	1216.9	6852.4

Comments: H2S Field Content 0 ppm  
Mcf/day 24561.39

*Jesus Escobedo*

*Carly Retana*

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:** Silver 33 CTB**Flare Date:** 12/02/2024**Duration of event:** 1 Hour 24 Minutes**MCF Flared:** 52**Start Time:** 09:51 PM**End Time:** 11:15 PM**Cause:** Emergency Flare > Third Party Downstream Activity > Enterprise > Central Station > Emergency Shutdown**Method of Flared Gas Measurement:** Gas Flare Meter

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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, Enterprise, had continuing equipment issues on their end at their Central Station, which in turn caused them to restrict their intake gas service capacity, suddenly and unexpectedly to Oxy, which in turn caused Oxy to have trouble with gas takeaway, which then triggered a flaring event to occur when gas backed up. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning from Enterprise Gas Control or their field personnel regarding issues at their Central Station facility. This flaring situation was beyond OXY's control, but Oxy took all possible measures to reduce emissions effectively.

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

This facility is unmanned, except when Oxy production techs are gathering data daily or conducting daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. 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, Enterprise, had continuing equipment issues on their end at their Central Station, which in turn caused them to restrict their intake gas service capacity, suddenly and unexpectedly to Oxy, which in turn caused Oxy to have trouble with gas takeaway, which then triggered a flaring event to occur when gas backed up. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning from Enterprise Gas Control or their field personnel regarding issues at their Central Station facility. Oxy personnel received a high-pressure alarm from the flare, before flaring was immediately triggered. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assisted with ensuring field area's mitigation optimizers cut injection rates to wells in the field to reduce injection and sales gas across the area. In addition, several high GOR wells, were choked back to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the Silver 33 CTB. 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 is unable to take any corrective actions to eliminate the cause and potential reoccurrence of a downstream third-party owned and operated gas plants and/or associated downstream facility issues, as this is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. Enterprise will have issues which may reoccur from time to time and may trigger a spike in the gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When Enterprise's facilities and/or gas plants has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enterprise then restricts Oxy's ability to send gas, which then prompts Oxy to route all 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. The only actions that Oxy can take and handle that is within its control, is to continually communicate with Enterprise personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

DEFINITIONS

Action 413719

DEFINITIONS

Operator:  OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:  16696
	Action Number:  413719
	Action Type:  [C-129] Venting and/or Flaring (C-129)

DEFINITIONS

<p>For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application:</p> <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 413719

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 413719
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

<b>Prerequisites</b> 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	[fAPP2213360538] SILVER NC 33 & 26 OGS

<b>Determination of Reporting Requirements</b> 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 <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 Downstream Activity > Enterprise > Central Station > Emergency Shutdown

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b> Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	76
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	2
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 413719

**QUESTIONS (continued)**

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

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	12/02/2024
Time vent or flare was discovered or commenced	09:51 PM
Time vent or flare was terminated	11:15 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: 52 Mcf   Recovered: 0 Mcf   Lost: 52 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	[713731] Enterprise Crude Pipeline LLC
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, Enterprise, had continuing equipment issues on their end at their Central Station, which in turn caused them to restrict their intake gas service capacity, suddenly and unexpectedly to Oxy, which in turn caused Oxy to have trouble with gas takeaway, which then triggered a flaring event to occur when gas backed up. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning from Enterprise Gas Control or their field personnel regarding issues at their Central Station facility. This flaring situation was beyond OXY's control, but Oxy took all possible measures to reduce emissions effectively.
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Steps taken to limit the duration and magnitude of vent or flare	<p>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, Enterprise, had continuing equipment issues on their end at their Central Station, which in turn caused them to restrict their intake gas service capacity, suddenly and unexpectedly to Oxy, which in turn caused Oxy to have trouble with gas takeaway, which then triggered a flaring event to occur when gas backed up. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning from Enterprise Gas Control or their field personnel regarding issues at their Central Station facility. Oxy personnel received a high-pressure alarm from the flare, before flaring was immediately triggered. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assisted with ensuring field area's mitigation optimizers cut injection rates to wells in the field to reduce injection and sales gas across the area. In addition, several high GOR wells, were choked back to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the Silver 33 CTB. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.</p>
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	<p>Oxy is unable to take any corrective actions to eliminate the cause and potential reoccurrence of a downstream third-party owned and operated gas plants and/or associated downstream facility issues, as this is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. Enterprise will have issues which may reoccur from time to time and may trigger a spike in the gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When Enterprise's facilities and/or gas plants has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enterprise then restricts Oxy's ability to send gas, which then prompts Oxy to route all 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. The only actions that Oxy can take and handle that is within its control, is to continually communicate with Enterprise personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.</p>

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ACKNOWLEDGMENTS

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**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	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 <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<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 413719

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	Action Number: 413719
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
shelbyschoepf	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.	12/18/2024