



## Certificate of Analysis

Number: 6030-25010237-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

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

Field:	PERMIAN_RESOURCES	Report Date:	01/19/2025
Station Name:	Sand Dunes CTB Check	Sampled By:	CG
Station Number:	17000C	Sample Of:	Gas
Station Location:	OP-L0901-BT002	Sample Type:	Spot
Sample Point:	Meter	Sample Conditions:	125 psig, @ 62 °F Ambient: 43 °F
Property ID:	FMP/LSE NM40659	Sample Date:	01/13/2025 01:45
Formation:	NEW_MEXICO	Received Date:	01/14/2025
County:		Login Date:	01/14/2025
Well Name:	CTB	Effective Date:	01/01/2025
Type of Sample :	Spot-Cylinder	Flow Rate:	34819 MSCFD
Sampling Company:	SPL - OXY	Sampling Method:	Purge/Fill Vacuum
Heat Trace Used:	N/A	Heating Method:	
Last Inst. Cal.:	01/13/2025 08:04:58	Method:	GPA-2261M
Analyzed:	01/15/2025 11:37:09 by CDW	Cylinder No:	9999-005126
		Instrument:	70142339 (Inficon GC-MicroFusion)

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.0000	0.0000	0.0000		GPM TOTAL C2+	6.669
Nitrogen	1.2226	1.2114	1.5246		GPM TOTAL C3+	3.389
Methane	75.4281	74.7368	53.8641		GPM TOTAL iC5+	0.655
Carbon Dioxide	0.6516	0.6456	1.2764			
Ethane	12.3989	12.2852	16.5957	3.280		
Propane	6.3610	6.3027	12.4858	1.733		
Iso-butane	0.9604	0.9516	2.4848	0.311		
n-Butane	2.2123	2.1920	5.7237	0.690		
Iso-pentane	0.5013	0.4967	1.6100	0.181		
n-Pentane	0.5305	0.5256	1.7036	0.190		
Hexanes Plus	0.6584	0.6524	2.7313	0.284		
	100.9251	100.0000	100.0000	6.669		

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.7714	3.2176
Calculated Molecular Weight	22.26	93.19
Compressibility Factor	0.9960	
<b>GPA 2172 Calculation:</b>		
<b>Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia &amp; 60°F</b>		
Real Gas Dry BTU	1309	5113
Water Sat. Gas Base BTU	1287	5024
Ideal, Gross HV - Dry at 14.65 psia	1303.6	5113.2
Ideal, Gross HV - Wet	1280.8	5023.7
Net BTU Dry Gas - real gas	1189	
Net BTU Wet Gas - real gas	1169	

**Comments:** H2S Field Content: 0 %

*Mostafa Ahmmed*

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated. The test results apply to the sample as received.

**UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM****Facility Id#** fAPP2127048458**Facility:** Sand Dunes South Corridor CTB**Duration of Event:** 24 Hours**Start Time:** 12:00 AM**Cause:** Venting Leak > Underground Pipeline > Corrosion**Method of Vented Gas Measurement:** Allocated Vent Calculation**Comments:** Flyover Finding as of July 15, 2025**Operator:** OXY USA, Inc.**Vent Date:** 07/07/2025**MCF Vented:** 82**End Time:** 11:59 PM**1. Reason why this event was beyond Operator's control:**

This emissions event was caused by the unforeseen, unexpected, sudden, and 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 preventative maintenance practices. This facility is unmanned, except when OXY production techs are gathering data daily or conduct daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. OXY recently received a flyover observation report indicating that, during an internal flyover conducted on July 5, 2025, evidence suggested venting from the gas injection line may have begun on or around that date.

This exceedance of NMOCD's threshold of 50 MCF/D was not known to OXY and its operations personnel until an internal flyover report was received on July 15, 2025. This submittal is in response to the findings provided to Oxy during the July 05<sup>th</sup>, 2025 flyover. As soon as OXY's Operations team were made aware of the flyover venting leak detected, an OXY emissions technician was dispatched to physically verify the finding with a FLIR camera and found that the gas injection line was indeed venting, from underground. The venting leak was located underground at the 45-degree angle of the injection line from outlet of meter run piping. The affected section of the gas injection line was then isolated, and the appropriate wells were shut down to facilitate immediate repairs. It was determined that the sudden, unforeseen failure of the underground gas injection line was more than likely due to a combination of erosion and corrosion of the piping, which caused venting to occur. The venting leak was isolated, repaired, and thoroughly tested to ensure it did not recur. This venting circumstance was beyond OXY's control, yet, OXY took all possible measures to reduce emissions effectively.

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

This emissions event was caused by the unforeseen, unexpected, sudden, and 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 preventative maintenance practices. This facility is unmanned, except when OXY production techs are gathering data daily or conduct daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. OXY recently received a flyover observation report indicating that, during an internal flyover conducted on July 5, 2025, evidence suggested venting from the gas injection line may have begun on or around that date.

This exceedance of NMOCD's threshold of 50 MCF/D was not known to OXY and its operations personnel until an internal flyover report was received on July 15, 2025. This submittal is in response to the findings provided to Oxy during the July 05<sup>th</sup>, 2025 flyover. As soon as OXY's Operations team were made aware of the flyover venting leak

detected, an OXY emissions technician was dispatched to physically verify the finding with a FLIR camera and found that the gas injection line was indeed venting, from underground. The venting leak was located underground at the 45-degree angle of the injection line from outlet of meter run piping. The affected section of the gas injection line was then isolated, and the appropriate wells were shut down to facilitate immediate repairs. It was determined that the sudden, unforeseen failure of the underground gas injection line was more than likely due to a combination of erosion and corrosion of the piping, which caused venting to occur. The venting leak was isolated, repaired, and thoroughly tested to ensure it did not recur. This venting circumstance was beyond OXY's control, yet, OXY took all possible measures to reduce emissions effectively.

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

OXY's ability to address and prevent recurrence of vent leaks from injection lines due to corrosion is limited as these types of vent leaks can be sudden, unpredictable, and happen without any prior warning. OXY cannot predict or foresee when vent leaks will occur in underground gas injection pipelines, but OXY is committed to detecting, isolating, and halting such vent emissions whenever possible and when identified. The limited actions that OXY can do in these types of circumstances is to resolve the vent leak issues, should they occur in a timely manner and continue with its area flyover surveying as part of its overall positive operation and maintenance programs.

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 490628

DEFINITIONS

Operator:  OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:  16696
	Action Number:  490628
	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>
---

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**

QUESTIONS

Action 490628

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 490628
	Action Type: [C-129] Venting and/or Flaring (C-129)

**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 Well	Unavailable.
Incident Facility	[fAPP2127048458] Sand Dunes South Corridor CTB

<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	Yes
Is this considered a submission for a vent or flare event	Yes, minor 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	Venting Leak > Underground Pipeline > Corrosion

<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	75
Nitrogen (N2) percentage, if greater than one percent	1
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
<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 Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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**

QUESTIONS, Page 2

Action 490628

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 490628
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	07/07/2025
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: 82 Mcf   Recovered: 0 Mcf   Lost: 82 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Allocated Vent Calculation
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	<p>This emissions event was caused by the unforeseen, unexpected, sudden, and 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 preventative maintenance practices. This facility is unmanned, except when OXY production techs are gathering data daily or conduct daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. OXY recently received a flyover observation report indicating that, during an internal flyover conducted on July 5, 2025, evidence suggested venting from the gas injection line may have begun on or around that date. This exceedance of NMOCD's threshold of 50 MCF/D was not known to OXY and its operations personnel until an internal flyover report was received on July 15, 2025. This submittal is in response to the findings provided to Oxy during the July 5th, 2025 flyover. As soon as OXY's Operations team were made aware of the flyover venting leak detected, an OXY emissions technician was dispatched to physically verify the finding with a FLIR camera and found that the gas injection line was indeed venting, from underground. The venting leak was located underground at the 45-degree angle of the injection line from outlet of meter run piping. The affected section of the gas injection line was then isolated, and the appropriate wells were shut down to facilitate immediate repairs. It was determined that the sudden, unforeseen failure of the underground gas injection line was more than likely due to a combination of erosion and corrosion of the piping, which caused venting to occur. The venting leak was isolated, repaired, and thoroughly tested to ensure it did not recur. This venting circumstance was</p>

<p>Steps taken to limit the duration and magnitude of vent or flare</p>	<p>beyond OXY's control, yet, OXY took all possible measures to reduce emissions effectively.</p> <p>This emissions event was caused by the unforeseen, unexpected, sudden, and 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 preventative maintenance practices. This facility is unmanned, except when OXY production techs are gathering data daily or conduct daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. OXY recently received a flyover observation report indicating that, during an internal flyover conducted on July 5, 2025, evidence suggested venting from the gas injection line may have begun on or around that date. This exceedance of NMOCD's threshold of 50 MCF/D was not known to OXY and its operations personnel until an internal flyover report was received on July 15, 2025. This submittal is in response to the findings provided to Oxy during the July 5th, 2025 flyover. As soon as OXY's Operations team were made aware of the flyover venting leak detected, an OXY emissions technician was dispatched to physically verify the finding with a FLIR camera and found that the gas injection line was indeed venting, from underground. The venting leak was located underground at the 45-degree angle of the injection line from outlet of meter run piping. The affected section of the gas injection line was then isolated, and the appropriate wells were shut down to facilitate immediate repairs. It was determined that the sudden, unforeseen failure of the underground gas injection line was more than likely due to a combination of erosion and corrosion of the piping, which caused venting to occur. The venting leak was isolated, repaired, and thoroughly tested to ensure it did not recur. This venting circumstance was beyond OXY's control, yet, OXY took all possible measures to reduce emissions effectively.</p>
<p>Corrective actions taken to eliminate the cause and reoccurrence of vent or flare</p>	<p>OXY's ability to address and prevent recurrence of vent leaks from injection lines due to corrosion is limited as these types of vent leaks can be sudden, unpredictable, and happen without any prior warning. OXY cannot predict or foresee when vent leaks will occur in underground gas injection pipelines, but OXY is committed to detecting, isolating, and halting such vent emissions whenever possible and when identified. The limited actions that OXY can do in these types of circumstances is to resolve the vent leak issues, should they occur in a timely manner and continue with its area flyover surveying as part of its overall positive operation and maintenance programs.</p>

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**

ACKNOWLEDGMENTS

Action 490628

**ACKNOWLEDGMENTS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 490628
	Action Type: [C-129] Venting and/or Flaring (C-129)

**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.

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

CONDITIONS

Action 490628

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 490628
	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.	7/30/2025