



## Natural Gas Analysis Report

GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

	Sample Information
Sample Name	MESA VERDE WEST CGL FUEL INLET
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	03-02-2023
Meter Number	NA
Air temperature	60
Flow Rate (MCF/Day)	0
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	MESA VERDE WEST CGL FUEL INLET
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	NA
Sample Sub Type	NA
Sample Name Type	NA
Vendor	AKM MEASUREMENT
Cylinder #	2283
Sampled by	JONATHAN ALDRICH
Sample date	3-2-2023
Analyzed date	3-7-2023
Method Name	C9
Injection Date	2023-03-07 12:33:09
Report Date	2023-03-07 12:37:19
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	fcda66e9-c1ef-4a8f-ae9-ea6de38c05d8
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

## Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	30907.4	1.7419	0.00005636	1.7389	0.0	0.01682	0.192	
Methane	1000235.4	73.2830	0.00007327	73.1558	740.6	0.40521	12.446	
CO2	108850.0	5.1443	0.00004726	5.1354	0.0	0.07803	0.880	
Ethane	229751.6	10.4553	0.00004551	10.4371	185.1	0.10836	2.801	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	174120.4	5.7057	0.00003277	5.6958	143.6	0.08672	1.575	
iso-butane	71399.0	0.7935	0.00001111	0.7921	25.8	0.01590	0.260	
n-Butane	169558.3	1.8625	0.00001098	1.8593	60.8	0.03731	0.588	
iso-pentane	43430.7	0.4219	0.00000971	0.4211	16.9	0.01049	0.155	
n-Pentane	46265.0	0.4381	0.00000947	0.4373	17.6	0.01089	0.159	
hexanes	26114.0	0.1984	0.00000760	0.1981	9.4	0.00589	0.082	
heptanes	15853.0	0.0990	0.00000624	0.0988	5.4	0.00342	0.046	
octanes	4915.0	0.0274	0.00000558	0.0274	1.7	0.00108	0.014	
nonanes+	466.0	0.0029	0.00000619	0.0029	0.2	0.00013	0.002	
Total:		100.1739		100.0000	1207.2	0.78025	19.199	

## Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	100.1739		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	0.0		
Flowing Temperature (Deg. F)	1178.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1207.2	1186.2	
Gross Heating Value (BTU / Real cu.ft.)	1211.8	1191.2	
Relative Density (G), Real	0.7829	0.7804	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	100.1739	97.0000	103.0000	Pass	

**UPSET FLARE EVENT SPECIFIC JUSTIFICATIONS FORM****Facility:** Mesa Verde 18 CTB**Flare Date:** 05/25/2023**Duration of event:** 3 Hours**MCF Flared:** 233**Start Time:** 03:20 PM**End Time:** 06:10 PM**Cause:** Emergency Flare > Downstream Activity > Enlink > Shut In > Equipment Issues**Method of Flared Gas Measurement:** Gas Flare Meter**Comments:**

---

**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 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. Third-party pipeline operator, Enlink, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline operations due to their downstream facility having equipment issues, which instigated an unexpected shutdown, which in turn instigated high sales line pressure to occur and triggering a flare event at the Mesa Verde 18 CTB. This flaring event occurred because of Enlink's inability to take Oxy's volume of gas and with no gas takeaway occurring, field psi increased until set psi levels were reached which triggered flaring at Oxy's facility, as a safety measure for operations, facility equipment, and personnel.

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

It is OXY's policy to route all 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. This facility is a manned site. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible in order 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, Enlink, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline operations due to their downstream facility having equipment issues, which instigated an unexpected shutdown, which in turn instigated high sales line pressure to occur and triggering a flare event at the Mesa Verde 18 CTB. This flaring event occurred because of Enlink's inability to take Oxy's volume of gas and with no gas takeaway occurring, field psi increased until set psi levels were reached which triggered flaring at Oxy's facility, as a safety measure for operations, facility equipment, and

personnel. The facility was manned by two Oxy production techs, who immediately upon noticing flaring occurring, made calls to Enlink personnel to determine cause and then began making adjustments to the facility's well optimizer to shut in several high GOR wells. All OXY operations and facility equipment were running at maximized optimization prior to the shutdown of Enlink's downstream facility and their inability to take Oxy's volume of gas. This incident was completely out of Oxy's control to prevent from happening yet OXY made every effort to control and minimize emissions as much as possible during this event.

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

Oxy is limited in the corrective actions to eliminate the cause and potential reoccurrence of an Enlink 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, prevent from happening or reoccurring. Enlink's downstream facilities and associated facilities, may have issues which 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 Enlink has downstream activity issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enlink then restricts Oxy's ability to send gas, which then prompts Oxy to route all of its stranded gas not pushed into the Enlink 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 keep continually communicate with Enlink personnel regarding these types of situations and when possible, engage in emergency alternative compression reaction strategies.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
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 226022

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 226022
	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: <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>
--

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
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**

QUESTIONS

Action 226022

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:	16696
	Action Number:	226022
	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	[fAPP2126659618] MESA VERDE 18 CTB

<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 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

<b>Equipment Involved</b>	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > Downstream Activity > Enlink > Shut In > Equipment Issues

<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	73
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	5
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 (C02) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
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**

QUESTIONS, Page 2

Action 226022

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:
	16696
	Action Number:
	226022
Action Type:	
[C-129] Venting and/or Flaring (C-129)	

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	05/25/2023
Time vent or flare was discovered or commenced	03:20 PM
Time vent or flare was terminated	06:10 PM
Cumulative hours during this event	3

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: 233 Mcf   Recovered: 0 Mcf   Lost: 233 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	[320009] ENLINK MIDSTREAM OPERATING, 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	<p>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 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. Third-party pipeline operator, Enlink, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline operations due to their downstream facility having equipment issues, which instigated an unexpected shutdown, which in turn instigated high sales line pressure to occur and triggering a flare event at the Mesa Verde 18 CTB. This flaring event occurred because of Enlink's inability to take Oxy's volume of gas and with no gas takeaway occurring, field psi increased until set psi levels were reached which triggered flaring at Oxy's facility, as a safety measure for operations, facility equipment, and personnel.</p> <p>It is OXY's policy to route all 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</p>

Steps taken to limit the duration and magnitude of vent or flare	<p>are flaring which in turn are communicated to additional Oxy field personnel. This facility is a manned site. Internal OXY procedures ensure that upon gas compressor unit and/or multiple unit shutdown, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible in order 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, Enlink, who owns and operates the gas pipeline, did not provide advance notice of the disruption to their gas pipeline operations due to their downstream facility having equipment issues, which instigated an unexpected shutdown, which in turn instigated high sales line pressure to occur and triggering a flare event at the Mesa Verde 18 CTB. This flaring event occurred because of Enlink's inability to take Oxy's volume of gas and with no gas takeaway occurring, field psi increased until set psi levels were reached which triggered flaring at Oxy's facility, as a safety measure for operations, facility equipment, and personnel.</p>
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	<p>Oxy is limited in the corrective actions to eliminate the cause and potential reoccurrence of an Enlink 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, prevent from happening or reoccurring. Enlink 's downstream facilities and associated facilities, may have issues which 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 Enlink has downstream activity issues or greatly struggles to handle the volume of gas being sent to them by Oxy, Enlink then restricts Oxy's ability to send gas, which then prompts Oxy to route all of its stranded gas not pushed into the Enlink 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 keep continually communicate with Enlink personnel regarding these types of situations and when possible, engage in emergency alternative compression reaction strategies.</p>



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
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**

ACKNOWLEDGMENTS  
  
Action 226022

**ACKNOWLEDGMENTS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 226022
	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.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
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**

CONDITIONS

Action 226022

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 226022
	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.	6/9/2023