



## Natural Gas Analysis Report

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

	Sample Information
Sample Name	DIMENSIONS CTB TRAIN 1 CHECK (FMP)
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	02-15-2023
Meter Number	18521C
Air temperature	35
Flow Rate (MCF/Day)	47657.8
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	DIMENSIONS CTB TRAIN 1 CHECK (FMP)
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	WEST
FLOC	NA
Sample Sub Type	CTB
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	5115
Sampled by	JONATHAN ALDRICH
Sample date	2-15-2023
Analyzed date	2-20-2023
Method Name	C9
Injection Date	2023-02-20 11:06:56
Report Date	2023-02-20 11:13:58
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	0d03f5dc-7762-49dd-a83f-2b80c2c014d8
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	34565.8	1.9481	0.00005636	1.9654	0.0	0.01901	0.217	
Methane	1070619.4	78.4398	0.00007327	79.1360	801.1	0.43833	13.459	
CO2	8569.6	0.4050	0.00004726	0.4086	0.0	0.00621	0.070	
Ethane	229966.2	10.4650	0.00004551	10.5579	187.3	0.10961	2.833	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	132885.1	4.3544	0.00003277	4.3931	110.8	0.06688	1.214	
iso-butane	62337.1	0.6928	0.00001111	0.6990	22.8	0.01403	0.229	
n-Butane	128957.8	1.4165	0.00001098	1.4291	46.7	0.02868	0.452	
iso-pentane	39386.4	0.3826	0.00000971	0.3860	15.5	0.00962	0.142	
n-Pentane	43294.1	0.4099	0.00000947	0.4136	16.6	0.01030	0.150	
hexanes	40004.0	0.3039	0.00000760	0.3066	14.6	0.00912	0.126	
heptanes	31463.0	0.1965	0.00000624	0.1982	10.9	0.00686	0.092	
octanes	15856.0	0.0884	0.00000558	0.0892	5.6	0.00352	0.046	
nonanes+	2772.0	0.0172	0.00000619	0.0173	1.2	0.00077	0.010	
Total:		99.1202		100.0000	1233.1	0.72294	19.041	

## Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.1202		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	78.0		
Flowing Temperature (Deg. F)	30.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1233.1	1211.7	
Gross Heating Value (BTU / Real cu.ft.)	1237.5	1216.4	
Relative Density (G), Real	0.7252	0.7237	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.1202	97.0000	103.0000	Pass	

**UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM****Facility:** Dimension 6 CTB**Flare Date:** 05/31/2023**Duration of event:** 1 Hour 40 Minutes**MCF Flared:** 410**Start Time:** 05:20 PM**End Time:** 07:00 PM**Cause:** Emergency Flare > Third Party Downstream Activity > San Mateo Gas Plant > Weather-Related Power Outage > Equipment Issues**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, San Mateo Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to severe weather affecting the area and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning.

**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 to lessen emissions as much as possible. In this case, San Mateo Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to severe weather affecting the area and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assist 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, as soon as flaring alarms were received by field personnel, they began to shut-in several wells across the area to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the gas gathering system to cease flaring, which took some time to do. 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 plant's 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. San Mateo's gas plant 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 San Mateo's gas plant has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, San Mateo then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the San Mateo 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 San Mateo personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.

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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

Action 229571

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 229571
	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>
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QUESTIONS

Action 229571

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 229571
	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	[fAPP2126637631] DIMENSION 6 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 > Third Party Downstream Activity > San Mateo Gas Plant > Weather-Related Power Outage > 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	79
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	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, Page 2

Action 229571

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:
	16696
	Action Number: 229571
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	05/31/2023
Time vent or flare was discovered or commenced	05:20 PM
Time vent or flare was terminated	07:00 PM
Cumulative hours during this event	2

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: 410 Mcf   Recovered: 0 Mcf   Lost: 410 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	[329461] San Mateo Black River Oil 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, San Mateo Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to severe weather affecting the area and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning.
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Steps taken to limit the duration and magnitude of vent or flare	and causing power outages, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at a gas gathering system flare. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assist 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, as soon as flaring alarms were received by field personnel, they began to shut-in several wells across the area to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the gas gathering system to cease flaring, which took some time to do. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is unable to take any corrective actions to eliminate the cause and potential reoccurrence of a downstream third-party owned and operated gas plant's 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. San Mateo's gas plant 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 San Mateo's gas plant has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, San Mateo then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the San Mateo 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 San Mateo personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.



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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  
  
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Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 229571
	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.	6/17/2023