# AKM MEASUREMENT SERVICES,LLC. Natural Gas Analysis Report GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

	Sample Information
Sample Name	RED TANK 19 TRAIN 1 CHECK
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	11-30-2023
Meter Number	15621C
Air temperature	49
Flow Rate (MCF/Day)	32366
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	RED TANK 19 TRAIN 1 CHECK
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	RED TANK
FLOC	OP-L2151-BT001
Sample Sub Type	СТВ
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	38941
Sampled by	SCOTT
Sample date	11-28-2023
Analyzed date	12-5-2023
Method Name	C9
Injection Date	2023-12-05 18:37:39
Report Date	2023-12-05 18:38:54
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	9dfaa108-0bff-4ae0-adaf-99715e055520
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	37137.5	2.1143	0.00005693	2.1096	0.0	0.02040	0.233	
Methane	998952.1	72.8514	0.00007293	72.6904	735.9	0.40263	12.368	
CO2	62419.4	2.9606	0.00004743	2.9541	0.0	0.04489	0.506	
Ethane	264187.4	12.1480	0.00004598	12.1212	215.0	0.12584	3.253	
H2S	0.0	0.0010	0.00000000	0.0010	0.0	0.00001	0.000	
Propane	195769.5	6.3996	0.00003269	6.3854	161.0	0.09722	1.766	
iso-butane	67992.2	0.7554	0.00001111	0.7538	24.6	0.01513	0.248	
n-Butane	165592.6	1.8272	0.00001103	1.8232	59.6	0.03659	0.577	
iso-pentane	35506.8	0.3492	0.00000984	0.3485	14.0	0.00868	0.128	
n-Pentane	38457.7	0.3633	0.00000945	0.3625	14.6	0.00903	0.132	
hexanes	25756.0	0.2539	0.00000986	0.2533	12.1	0.00754	0.105	
heptanes	23951.0	0.1451	0.00000606	0.1448	8.0	0.00501	0.067	
octanes	9287.0	0.0503	0.00000541	0.0501	3.1	0.00198	0.026	
nonanes+	573.0	0.0021	0.00000360	0.0021	0.1	0.00009	0.001	
Total:		100.2213		100.0000	1248.0	0.77504	19.409	

# **Results Summary**

Result	Dry	Sat.
Total Un-Normalized Mole%	100.2213	
Pressure Base (psia)	14.730	
Temperature Base (Deg. F)	60.00	
Releasived to Tempe in the 1994 7:09:28 P	<i>M</i> 75.5	

Received by OCD: 3/10/2024 7:02:59 PM	Dry	Sat.	Page
Flowing Pressure (psia)	129.7		
Gross Heating Value (BTU / Ideal cu.ft.)	1248.0	1226.3	
Gross Heating Value (BTU / Real cu.ft.)	1252.8	1231.5	
Relative Density (G), Real	0.7777	0.7754	

# **Monitored Parameter Report**

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	100.2213	97.0000	103.0000	Pass	

### **UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Red Tank 19 CTB Flare Date: 01/19/2024

**Duration of Event:** 20 Minutes **MCF Flared:** 238

Start Time: 11:50 AM End Time: 12:10 PM

Cause: Emergency Flare > Downstream Activity > Third Party Operator > RT 26 BOO > Compression Equipment

Method of Flared Gas Measurement: Gas Flare Meter

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

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, Red Tank 26 Boo station compressor gas lift station had compression equipment issues on their end, which in turn, prompted their compression equipment to shut down, which then caused Oxy's Red Tank 19 CTB to pressure up automatically and trigger a flaring event to occur. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel from USA Compression. OXY made every effort to control and minimize emissions as much as possible during this event. Red Tank 26 Boo compressor station is the first stopping point, where OXY sends its sales gas from its facility, before it is pushed further down the pipeline for further processing at Mark West (MPLX), a downstream gathering system facility, which is downstream of Oxy's control.

### 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, Red Tank 26 Boo station compressor gas lift station had compression equipment issues on their end, which in turn, prompted their compression equipment to shut down, which then caused Oxy's Red Tank 19 CTB to pressure up automatically and trigger a flaring event to occur. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel. Steps were immediately taken by the OXY Operator to reduce and mitigate the volume of gas being sent to the flare by reducing injection to the Avogato wells. All OXY operations and facility equipment were running at maximized optimization prior USA Compressions facility having equipment issues, which affected Oxy's ability to prevent flaring. 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 cannot take any corrective actions to eliminate the cause and potential reoccurrence of a third-party owned and operated compressor station's sudden and unexpected gas flow intake restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. Third-party downstream compression station owner operators may have equipment issues, or additional downstream third-party gas plant issues, which will reoccur from time to time, which in turn, directly impacts Oxy's ability to send its sales gas to them, and potentially triggering a flaring event. OXY makes every effort to control and minimize emissions as much as possible.

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1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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 321913

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	321913
	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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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 321913

Phone: (505) 476-3470 Fax: (505) 476-3462			
C	QUESTIONS		
Operator:		OGRID:	
OXY USA INC		16696	
P.O. Box 4294 Houston, TX 772104294		Action Number: 321913	
		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 v	with the rest of the questions.	
Incident Well	Unavailable.		
Incident Facility	[fAPP2127031815] RED T	ANK 19 CTB	
Determination of Reporting Requirements			
Answer all questions that apply. The Reason(s) statements are calculated based on your answers a	and may provide addional guidand	ce.	
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/o	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	<u> </u>		
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 <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		
Equipment Involved			
Primary Equipment Involved	Other (Specify)		
Additional details for Equipment Involved. Please specify	Emergency Flare > Down Equipment	stream Activity > Third Party Operator > RT 26 BOO > Compression	
Description Commonitional Analysis of Vented on Flored Natural Co.			
Representative Compositional Analysis of Vented or Flared Natural Gas  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	10		
Carbon Dioxide (C02) percentage, if greater than one percent			
Oxygen (02) percentage, if greater than one percent	3		
Oxygen (02) percentage, ii greater trian one percent	U		
If you are venting and/or flaring because of Pipeline Specification, please provide the required spe	cifications 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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# **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 321913

QUESTIONS	(continued	)
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Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	321913
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### QUESTIONS

Date(s) and Time(s)		
Date vent or flare was discovered or commenced	01/19/2024	
Time vent or flare was discovered or commenced	11:50 AM	
Time vent or flare was terminated	12:10 PM	
Cumulative hours during this event	0	

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: 238 Mcf   Recovered: 0 Mcf   Lost: 238 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 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, Red Tank 26 Boo station compressor gas lift station had compression equipment issues on their end, which in turn, prompted their compression equipment to shut down, which then caused Oxy's Red Tank 19 CTB to pressure up automatically and trigger a flaring event to occur. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel from USA Compression. OXY made every effort to control and minimize emissions as much as possible during this event. Red Tank 26 Boo compressor station is the first stopping point, where OXY sends its sales gas from its facility, before it is pushed further down the pipeline for further processing at Mark West (MPLX), a downstream gathering system facility, which is downstream of Oxy's control.
	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, Red Tank 26 Boo station compressor gas lift

Steps taken to limit the duration and magnitude of vent or flare	station had compression equipment issues on their end, which in turn, prompted their compression equipment to shut down, which then caused Oxy's Red Tank 19 CTB to pressure up automatically and trigger a flaring event to occur. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel. Steps were immediately taken by the OXY Operator to reduce and mitigate the volume of gas being sent to the flare by reducing injection to the Avogato wells. All OXY operations and facility equipment were running at maximized optimization prior USA Compressions facility having equipment issues, which affected Oxy's ability to prevent flaring. 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.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of a third-party owned and operated compressor station's sudden and unexpected gas flow intake restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. Third-party downstream compression station owner operators may have equipment issues, or additional downstream third-party gas plant issues, which will reoccur from time to time, which in turn, directly impacts Oxy's ability to send its sales gas to them, and potentially triggering a flaring event. OXY makes every effort to control and minimize emissions as much as possible.

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ACKNOWLEDGMENTS

Action 321913

#### **ACKNOWLEDGMENTS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	321913
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### **ACKNOWLEDGMENTS**

V	I acknowledge that I am authorized to submit a Venting and/or Flaring (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.
V	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.
V	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.
V	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.
V	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 321913

### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	321913
	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.	3/10/2024