AKM Measurement Services, LLC
Carlsbad, New Mexico

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 CTB FUEL GAS
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	01-18-2024
Meter Number	
Air temperature	64
Flow Rate (MCF/Day)	
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	RED TANK 19 CTB FUEL GAS
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	
Sample Sub Type	FUEL GAS
Sample Name Type	FUEL GAS
Vendor	AKM MEASUREMENT
Cylinder #	30949
Sampled by	JONATHAN ALDRICH
Sample date	1-18-2024
Analyzed date	1-23-2024
Method Name	C9
Injection Date	2024-01-23 11:49:52
Report Date	2024-01-23 11:50:33
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	99bd35c8-8311-478c-8a2f-99adff044d3f
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	37266.5	2.1468	0.00005761	2.1489	0.0	0.02078	0.237	
Methane	990810.1	71.9670	0.00007263	72.0384	729.3	0.39902	12.258	
CO2	69868.6	3.3166	0.00004747	3.3199	0.0	0.05045	0.569	
Ethane	260884.5	11.9805	0.00004592	11.9924	212.7	0.12451	3.219	
H2S	0.0	0.0008	0.00000000	0.0008	0.0	0.00001	0.000	
Propane	194828.6	6.3691	0.00003269	6.3754	160.8	0.09707	1.763	
iso-butane	69862.7	0.7735	0.00001107	0.7742	25.2	0.01554	0.254	
n-Butane	172320.8	1.8958	0.00001100	1.8977	62.1	0.03808	0.601	
iso-pentane	42870.9	0.4192	0.00000978	0.4196	16.8	0.01045	0.154	
n-Pentane	48040.3	0.4508	0.00000938	0.4512	18.1	0.01124	0.164	
hexanes	33494.0	0.3289	0.00000982	0.3293	15.7	0.00980	0.136	
heptanes	32128.0	0.1910	0.00000595	0.1912	10.5	0.00661	0.089	
octanes	11379.0	0.0591	0.00000519	0.0592	3.7	0.00233	0.030	
nonanes+	725.0	0.0018	0.00000253	0.0018	0.1	0.00008	0.001	
Total:		99.9009		100.0000	1255.1	0.78597	19.475	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.9009		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	73.0		

Result	Dry	Sat.
Flowing Pressure (psia)	130.0	
Gross Heating Value (BTU / Ideal cu.ft.)	1255.1	1233.3
Gross Heating Value (BTU / Real cu.ft.)	1260.1	1238.7
Relative Density (G), Real	0.7888	0.7862

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status
Total un-normalized amount	99.9009	97.0000	103.0000	Pass

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Red Tank 19 CTB

Flare Date: 11/02/2024

Duration of Event: 2 Hours 20 Minutes

MCF Flared: 1790

Start Time: 02:50 PM

End Time: 05:10 PM

Cause: Emergency Flare > Extreme Weather Conditions > Red Tank Area > Red Tank 19 CGL

Method of Flared Gas Measurement: Gas Flare Meter

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. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. In this instance, severe weather conditions, including heavy rain and hail, led to an unexpected area-wide power disruption. This power disruption subsequently impacted the Red Tank area, which in turn affected the Red Tank 19 CGL and its gas compression equipment. As a result, high field pressure occurred, when the Red Tank 19 CGL compression equipment automatically shut down and triggered a flaring event to occur at the Red Tank 19 CTB. The occurrence of this event was beyond OXY's control. OXY took all possible measures to manage and reduce emissions to the greatest extent.

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 instance, severe weather conditions, including heavy rain and hail, led to an unexpected area-wide power disruption. This power disruption subsequently impacted the Red Tank area, which in turn affected the Red Tank 19 CGL and its gas compression equipment. As a result, high field pressure occurred, when the Red Tank 19 CGL compression equipment automatically shut down and triggered a flaring event to occur at the Red Tank 19 CTB. Upon the occurrence of flaring, field personnel promptly initiated the manual shut-in of wells to mitigate and ultimately cease the flaring. This process required a certain amount of time to complete. The occurrence of this event was beyond OXY's control. OXY took all possible measures to manage and reduce emissions to the greatest extent.

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

Oxy has limited capacity to implement corrective measures to prevent flaring due to power disruptions from third-party providers during extreme weather conditions. Despite the diversity in equipment designs and operations, numerous mechanical or technical issues can arise abruptly and without prior notice, resulting in malfunctions. Oxy continually strives to maintain and operate all its equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and manage within its control are to continue its equipment preventive maintenance program.

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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 413634
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

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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QUESTIONS

Action 413634

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 413634
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Prerequisites	
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 ID (n#)	*Unavailable.*
Incident Name	*Unavailable.*
Incident Type	**Flare**
Incident Status	*Unavailable.*
Incident Facility	**[fAPP2127031815] RED TANK 19 CTB**
Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.	

Determination of Reporting Requirements	
Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide addional 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, major 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

Equipment Involved	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > Extreme Weather Conditions > Red Tank Area > Red Tank 19 CGL

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	4
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	0
Nitrogen (N2) percentage quality requirement	0
Hydrogen Sufide (H2S) PPM quality requirement	0
Carbon Dioxide (C02) percentage quality requirement	0
Oxygen (02) percentage quality requirement	0

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 413634
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	11/02/2024
Time vent or flare was discovered or commenced	02:50 PM
Time vent or flare was terminated	05:10 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: Power Failure | Other (Specify) | Natural Gas Flared | Released: 1,790 MCF | Recovered: 0 MCF | Lost: 1,790 MCF.
Other Released Details	*Not answered.*
Additional details for Measured or Estimated Volume(s). Please specify	Gas 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	No
Downstream OGRID that should have notified this operator	0
Date notified of downstream activity requiring this vent or flare	
Time notified of downstream activity requiring this vent or flare	12:00 AM

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 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. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. In this instance, severe weather conditions, including heavy rain and hail, led to an unexpected area-wide power disruption. This power disruption subsequently impacted the Red Tank area, which in turn affected the Red Tank 19 CGL and its gas compression equipment. As a result, high field pressure occurred, when the Red Tank 19 CGL compression equipment automatically shut down and triggered a flaring event to occur at the Red Tank 19 CTB. The occurrence of this event was beyond OXY's control. OXY took all possible measures to manage and reduce emissions to the greatest extent.
	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 instance, severe weather conditions, including heavy rain and hail, led to an unexpected area-wide power disruption. This power disruption

Steps taken to limit the duration and magnitude of vent or flare	subsequently impacted the Red Tank area, which in turn affected the Red Tank 19 CGL and its gas compression equipment. As a result, high field pressure occurred, when the Red Tank 19 CGL compression equipment automatically shut down and triggered a flaring event to occur at the Red Tank 19 CTB. Upon the occurrence of flaring, field personnel promptly initiated the manual shut-in of wells to mitigate and ultimately cease the flaring. This process required a certain amount of time to complete. The occurrence of this event was beyond OXY's control. OXY took all possible measures to manage and reduce emissions to the greatest extent.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy has limited capacity to implement corrective measures to prevent flaring due to power disruptions from third-party providers during extreme weather conditions. Despite the diversity in equipment designs and operations, numerous mechanical or technical issues can arise abruptly and without prior notice, resulting in malfunctions. Oxy continually strives to maintain and operate all its equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and manage within its control are to continue its equipment preventive maintenance program.

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ACKNOWLEDGMENTS

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	Action Number: 413634
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ACKNOWLEDGMENTS

☑	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
☑	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
☑	I hereby certify the statements in this amending 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.
☑	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.
☑	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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	Action Number: 413634
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

CONDITIONS

Created By	Condition	Condition Date
shelbyschoepf	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	12/18/2024