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	LOST TANK 18 FACILITY PROD 2
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	12-15-2023
Meter Number	16412P
Air temperature	59
Flow Rate (MCF/Day)	19315
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	LOST TANK 18 FACILITY PROD 2
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	LOST TANK
FLOC	OP-DELNE-BT010
Sample Sub Type	CTB
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	38967
Sampled by	SCOTT
Sample date	12-11-2023
Analyzed date	12-19-2023
Method Name	C9
Injection Date	2023-12-19 17:22:49
Report Date	2023-12-19 17:24:34
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	c9df624d-557a-4940-b08e-304ec2186c4a
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	33914.5	1.9299	0.00005691	1.9234	0.0	0.01860	0.212	
Methane	970996.0	70.7503	0.00007286	70.5121	713.8	0.39057	12.003	
CO2	27471.0	1.3080	0.00004761	1.3036	0.0	0.01981	0.223	
Ethane	291718.9	13.4465	0.00004609	13.4012	237.7	0.13913	3.599	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	234132.9	7.6719	0.00003277	7.6461	192.8	0.11641	2.115	
iso-butane	91468.0	1.0116	0.00001106	1.0082	32.9	0.02023	0.331	
n-Butane	233710.5	2.5698	0.00001100	2.5611	83.7	0.05140	0.811	
iso-pentane	50142.9	0.4900	0.00000977	0.4883	19.6	0.01216	0.179	
n-Pentane	56869.7	0.5337	0.00000938	0.5319	21.4	0.01325	0.194	
hexanes	36640.0	0.3612	0.00000986	0.3600	17.2	0.01071	0.149	
heptanes	31543.0	0.1905	0.00000604	0.1899	10.5	0.00657	0.088	
octanes	12956.0	0.0696	0.00000537	0.0694	4.3	0.00274	0.036	
nonanes+	1475.0	0.0048	0.00000326	0.0048	0.3	0.00021	0.003	
Total:		100.3379		100.0000	1334.2	0.80179	19.943	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	100.3379		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	83.3		

Result	Dry	Sat.
Flowing Pressure (psia)	100.2	
Gross Heating Value (BTU / Ideal cu.ft.)	1334.2	1311.0
Gross Heating Value (BTU / Real cu.ft.)	1340.0	1317.3
Relative Density (G), Real	0.8049	0.8022

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status
Total un-normalized amount	100.3379	97.0000	103.0000	Pass

UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Lost Tank 5 CPF

Vent Date: 07/05/2024

Duration of Event: 7 Hours

MCF Vent: 320

Start Time: 12:00 AM

End Time: 07:00 AM

Cause: Venting > Equipment Malfunction > VRU > VFD Fault > Blown Fuse

Method of Flared Gas Measurement: Gas Flare Meter

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

The emissions were caused by the sudden, 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 maintenance practices. Internal Oxy procedures ensure that upon a sudden and unexpected flaring event, production techs are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. In this case, the facility's VRU suddenly and unexpectedly malfunctioned on a VFD fault caused by a blown fuse inside the PLC panel. This event is out of OXY's control. OXY made every effort to control and minimize emissions as much as possible.

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, 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, the facility's VRU suddenly and unexpectedly malfunctioned on a VFD fault caused by a blown fuse inside the PLC panel. Oxy production techs who responded to the malfunction alarms were unable to resolve the VRU malfunction as the VFD fault would not clear. Production techs were able to utilize the backup VRU, but the backup VRU was not able to keep up with the emissions on its own. Oxy production techs called for an automation tech to be dispatched to repair the blown fuse. The facility's optimizer was able to lower rates until the malfunctioning VRU could be worked on and brought back on line. This event is out of OXY's control. 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 limited in its corrective actions to eliminate the cause and potential reoccurrence of a malfunctioning VRU, as notwithstanding proper VRU, design and operation, whether low- or high-pressure, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause equipment malfunctions to occur without warning or advance notice. OXY makes every effort to control and minimize emissions as much as possible during these circumstances. The limited actions that Oxy can do in this circumstance is to submit a work order for repair, work with its automation team to have the issue resolved in a timely manner and continue monitoring the equipment until its repair and restoration to normal operations is complete.

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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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 368917
	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 368917

QUESTIONS

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	Action Number: 368917
	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	**[fAPP2410600153] Lost Tank 5 Tankless CPF**
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, 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

Equipment Involved	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Venting > Equipment Malfunction > VRU > VFD Fault > Blown Fuse

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	71
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	1
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)

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	Action Number: 368917
	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	07/05/2024
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	07:00 AM
Cumulative hours during this event	7

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Other | Other (Specify) | Natural Gas Vented | Released: 320 Mcf | Recovered: 0 Mcf | Lost: 320 Mcf.
Natural Gas Flared (Mcf) Details	*Not answered.*
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	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	*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 were caused by the sudden, 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 maintenance practices. Internal Oxy procedures ensure that upon a sudden and unexpected flaring event, production techs are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. In this case, the facility's VRU suddenly and unexpectedly malfunctioned on a VFD fault caused by a blown fuse inside the PLC panel. This event is out of OXY's control. OXY made every effort to control and minimize emissions as much as possible.
Steps taken to limit the duration and magnitude of vent or flare	It is OXY's policy to route all 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, the facility's VRU suddenly and unexpectedly malfunctioned on a VFD fault caused by a blown fuse inside the PLC panel. Oxy production techs who responded to the malfunction alarms were unable to resolve the VRU malfunction as the VFD fault would not clear. Production techs were able to utilize the backup VRU, but the backup VRU was not able to keep up with the emissions on its own. Oxy production techs called for an automation tech to be dispatched to repair the blown fuse. The facility's optimizer was able to lower rates until the malfunctioning VRU could be worked on and

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ACKNOWLEDGMENTS

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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

Action 368917

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	Action Number: 368917
	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.	7/31/2024