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 (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 FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Lost Tank 18 CPF **Flare Date:** 01/14/2024

Duration of Event: 1 Hour 16 Minutes **MCF Flared:** 672

Start Time: 11:27 AM **End Time:** 12:43 AM

Cause: Emergency Flare > Third Party > USA Compression > Lost Tank 13 BOO > Compression 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 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 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, Lost Tank Boo 13 compressor station, third party owned and operated by USA Compression, had one or more gas compressors shut down due to compression issues, which in turn resulted in a sudden and unexpected restriction of gas flow intake by Lost Tank Boo 13 CS, which then caused Oxy's Lost Tank 18 Central Processing Facility to pressure up automatically and trigger intermittent flaring events to occur. This event could not have been foreseen, avoided or prevented from happening as each flaring instance occurred with no advance notice or warning to Oxy and its field personnel from USA Compression personnel. Lost Tank Boo 13 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, 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. In this case, Lost Tank Boo 13 compressor station, third party owned and operated by USA Compression, had one or more gas compressors shut down due to compression issues, which in turn resulted in a sudden and unexpected restriction of gas flow intake by Lost Tank Boo 13 CS, which then caused Oxy's Lost Tank 18 Central Processing Facility to pressure up automatically and trigger intermittent flaring events to occur. The Oxy production tech, who was on-site, continually kept in touch with additional Oxy field personnel to make adjustments to injection rate changes, to minimize emissions during USA Compressions' attempts to resolve their equipment issues, which took longer than usual to resolve due to their own mechanics were busy at other locations. 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 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, 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. The only actions that Oxy can take and handle that is within its control, is to continually communicate with USA Compression personnel, who operate the Lost Tank Boo 13 Compressor Station, when possible, during these types of circumstances.

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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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 309278
	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 309278

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 309278
	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	**[fAPP2226965761] Lost Tank 18 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, 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 > Third Party > USA Compression > Lost Tank 13 BOO > Compression Issues

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	*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 (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 309278
	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	01/14/2024
Time vent or flare was discovered or commenced	11:27 AM
Time vent or flare was terminated	12:43 PM
Cumulative hours during this event	1

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: 672 Mcf | Recovered: 0 Mcf | Lost: 672 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	
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 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 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, Lost Tank Boo 13 compressor station, third party owned and operated by USA Compression, had one or more gas compressors shut down due to compression issues, which in turn resulted in a sudden and unexpected restriction of gas flow intake by Lost Tank Boo 13 CS, which then caused Oxy's Lost Tank 18 Central Processing Facility to pressure up automatically and trigger intermittent flaring events to occur. This event could not have been foreseen, avoided or prevented from happening as each flaring instance occurred with no advance notice or warning to Oxy and its field personnel from USA Compression personnel. Lost Tank Boo 13 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, 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

Steps taken to limit the duration and magnitude of vent or flare	minimize emissions as much as possible as part of the overall steps taken to limit duration and magnitude of flaring. In this case, Lost Tank Boo 13 compressor station, third party owned and operated by USA Compression, had one or more gas compressors shut down due to compression issues, which in turn resulted in a sudden and unexpected restriction of gas flow intake by Lost Tank Boo 13 CS, which then caused Oxy's Lost Tank 18 Central Processing Facility to pressure up automatically and trigger intermittent flaring events to occur. The Oxy production tech, who was on-site, continually kept in touch with additional Oxy field personnel to make adjustments to injection rate changes, to minimize emissions during USA Compressions' attempts to resolve their equipment issues, which took longer than usual to resolve due to their own mechanics were busy at other locations. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
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ACKNOWLEDGMENTS

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	Action Number: 309278
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 309278
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

CONDITIONS

Created By	Condition	Condition Date
marialuna2	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.	1/29/2024