# 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	СТВ
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	
Released to Tempeiatyre 1D&D/26024 8:34:	55 PM 83.3	

Received by OCD: 11/2/2/024 8:23:38 PM	Dry	Sat.	Page
Flowing Pressure (psia)	100.2		g
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: 10/18/2024

**Duration of Event:** 37 Minutes **MCF Flared:** 582

Start Time: 10:43 AM End Time: 11:20 AM

Cause: Emergency Flare > Downstream Activity > MPLX > Operational Issues > Extreme Reduction in Gas

Flow Intake

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, the Lost Tank 18 CPF automatically increased pressure when USA Compression's Lost Tank 13 Boo compressor station was limited in pushing its sales gas forward due to a sudden and unexpected drastic reduction in MPLX sales gas intake flow rates through their control valve, which in turn lead to a flaring event to occur. MPLX's sudden and unexpected sales gas flow intake curtailment was due to continuing operational issues at their Preakness Plant. When MPLX experiences problems with their gas plants, it impacts the Lost Tank 13 Boo compressor station, which is owned and operated by USA Compression. This issue hampers Oxy's ability to deliver gas to the Lost Tank 13 Boo compression station. Due to the lack of advance notice from MPLX to OXY about the decreased intake rates for sales gas, the on-site field team at OXY was unable to promptly reroute the gas and minimize flaring. To mitigate the risks associated with overpressure and to ensure the safety of our operations, we have had to resort to controlled and safety flaring. This process allows us to safely burn off the excess gas, thereby preventing potential hazards such as equipment damage, leaks, or even explosions. While flaring is not our preferred method of handling excess gas, it is a necessary step under these exceptional circumstances to maintain the integrity and safety of our operations. Lost Tank 13 Boo compressor station is the first stopping point for Oxy's facility sales gas, before it is pushed further down the pipeline for further processing at MPLX, a downstream gathering system. This flaring situation was beyond OXY's control, but Oxy took all possible measures to reduce emissions effectively.

#### 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, the Lost Tank 18 CPF automatically increased pressure when USA Compression's Lost Tank 13 Boo compressor station was limited in pushing its sales gas forward due to a sudden and unexpected drastic reduction in MPLX sales gas intake flow rates through their control valve, which in turn lead to a flaring event to occur. MPLX's sudden and unexpected sales gas flow intake curtailment was due to continuing operational issues at their Preakness Plant. When MPLX experiences problems with their gas plants, it impacts the Lost Tank 13 Boo compressor station, which is owned and operated by USA Compression. This issue hampers Oxy's ability to deliver gas to the Lost Tank 13 Boo compression station. Due to the lack of advance notice from MPLX to OXY about the decreased

intake rates for sales gas, the on-site field team at OXY was unable to promptly reroute the gas and minimize flaring. Once flaring was triggered, field personnel began storage process procedures on storage wells and choked back several wells to mitigate flaring. All OXY operations and facility equipment were running at maximized optimization prior to each instance of intermittent 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 an MPLX gas flow pipeline restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid, prevent from happening or reoccurring. MPLX's downstream facilities and associated gas plants and/or operators, will or may have equipment issues which will reoccur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When MPLX has downstream activity issues or greatly struggles to handle the volume of gas being sent to them by Oxy, MPLX then restricts Oxy's ability to send gas, which then prompts Oxy to route all of its stranded gas not pushed into the 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 keep continually communicate with MPLX and/or USA Compression personnel during these types of situations.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 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 398359

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	398359
	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 398359

### **QUESTIONS**

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OXY USA INC	16696
P.O. Box 4294	Action Number:
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#### 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 <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 > Downstream Activity > MPLX > Operational Issues > Extreme Reduction in Gas Flow Intake		

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 re	equired 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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Energy, Minerals and Natural Resources
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QUESTIONS, Page 2

Action 398359

<b>QUESTIONS</b>	(continued)
QUESTIONS!	COHUHU <del>C</del> U

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	398359
	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	10/18/2024	
Time vent or flare was discovered or commenced	10:43 AM	
Time vent or flare was terminated	11:20 AM	
Cumulative hours during this event	1	

Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 582 Mcf   Recovered: 0 Mcf Lost: 582 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	[14035] MARATHON OIL CO
Date notified of downstream activity requiring this vent or flare	
Time notified of downstream activity requiring this vent or flare	Not answered.

Time notified of downstream activity requiring this vent of 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	
	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	

Please explain reason for why this event was beyond this operator's control

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, the Lost Tank 18 CPF automatically increased pressure when USA Compression's Lost Tank 13 Boo compressor station was limited in pushing its sales gas forward due to a sudden and unexpected drastic reduction in MPLX sales gas intake flow rates through their control valve, which in turn lead to a flaring event to occur. MPLX's sudden and unexpected sales gas flow intake curtailment was due to continuing operational issues at their Preakness Plant. When MPLX experiences problems with their gas plants, it impacts the Lost Tank 13 Boo compressor station, which is owned and operated by USA Compression. This issue hampers Oxy's ability to deliver gas to the Lost Tank 13 Boo compression station. Due to the lack of advance notice from MPLX to OXY about the decreased intake rates for sales gas, the on-site field team at OXY was unable to promptly reroute the gas and minimize flaring. To mitigate the risks associated with overpressure and to ensure the safety of our operations, we have had to resort to controlled and safety flaring. This process allows us to safely burn off the excess gas, thereby preventing potential hazards such as equipment damage, leaks, or even explosions. While flaring is not our preferred method of handling excess gas, it is a necessary step under these exceptional circumstances to maintain the integrity and safety of

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	our operations. Lost Tank 13 Boo compressor station is the first stopping point for Oxy's facility sales gas, before it is pushed further down the pipeline for further processing at MPLX,
Steps taken to limit the duration and magnitude of vent or flare	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, the Lost Tank 18 CPF automatically increased pressure when USA Compression's Lost Tank 13 Boo compressor station was limited in pushing its sales gas forward due to a sudden and unexpected drastic reduction in MPLX sales gas intake flow rates through their control valve, which in turn lead to a flaring event to occur. MPLX's sudden and unexpected sales gas flow intake curtailment was due to continuing operational issues at their Preakness Plant. When MPLX experiences problems with their gas plants, it impacts the Lost Tank 13 Boo compressor station, which is owned and operated by USA Compression. This issue hampers Oxy's ability to deliver gas to the Lost Tank 13 Boo compression station. Due to the lack of advance notice from MPLX to OXY about the decreased intake rates for sales gas, the on-site field team at OXY was unable to promptly reroute the gas and minimize flaring. Once flaring was triggered, field personnel began storage process procedures on storage wells and choked back several wells to mitigate flaring. All OXY operations and facility equipment were running at maximized optimization prior to each instance of intermittent 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 an MPLX gas flow pipeline restriction or shut-in, as this control issue is downstream of Oxy's custody transfer point and out of Oxy's control to avoid, prevent from happening or reoccurring. MPLX's downstream facilities and associated gas plants and/or operators, will or may have equipment issues which will reoccur from time to time and may trigger a spike in their gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When MPLX has downstream activity issues or greatly struggles to handle the volume of gas being sent to them by Oxy, MPLX then restricts Oxy's ability to send gas, which then prompts Oxy to route all of its stranded gas not pushed into the 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 keep continually communicate with MPLX and/or USA Compression personnel during these types of situations.

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ACKNOWLEDGMENTS

Action 398359

#### **ACKNOWLEDGMENTS**

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P.O. Box 4294	Action Number:
Houston, TX 772104294	398359
	Action Type:
	[C-129] Amend Venting and/or Flaring (C-129A)

#### **ACKNOWLEDGMENTS**

V	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.
V	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.
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

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	[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.	11/2/2024