# 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	TURKEY TRACK CTB DCP CHECK
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	01-25-2024
Meter Number	14699C
Air temperature	50
Flow Rate (MCF/Day)	1985
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	TURKEY TRACK CTB DCP CHECK
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	TURKEY TRACK
FLOC	OP-L1364-BT001
Sample Sub Type	CTB
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	38901
Sampled by	SCOTT
Sample date	1-24-2024
Analyzed date	1-25-2024
Method Name	C9
Injection Date	2024-01-25 16:04:11
Report Date	2024-01-25 16:06:23
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	8d6bdaf5-f87f-4706-b1e7-2b74f6497a04
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	36247.1	2.0936	0.00005776	2.1006	0.0	0.02032	0.232	
Methane	1052995.6	76.5995	0.00007274	76.8551	778.0	0.42570	13.076	
CO2	5778.6	0.2753	0.00004763	0.2762	0.0	0.00420	0.047	
Ethane	242409.0	11.1570	0.00004603	11.1942	198.6	0.11622	3.004	
H2S	0.0	0.0003	0.00000000	0.0003	0.0	0.00000	0.000	
Propane	155789.8	5.1105	0.00003280	5.1275	129.3	0.07807	1.418	
iso-butane	62638.1	0.6935	0.00001107	0.6958	22.7	0.01396	0.229	
n-Butane	155477.6	1.7105	0.00001100	1.7162	56.1	0.03444	0.543	
iso-pentane	53484.4	0.5233	0.00000979	0.5251	21.1	0.01308	0.193	
n-Pentane	60502.2	0.5685	0.00000940	0.5704	22.9	0.01421	0.208	
hexanes	54106.0	0.5324	0.00000984	0.5342	25.5	0.01589	0.220	
heptanes	53696.0	0.3208	0.00000597	0.3219	17.8	0.01114	0.149	
octanes	15223.0	0.0795	0.00000522	0.0798	5.0	0.00315	0.041	
nonanes+	987.0	0.0027	0.00000277	0.0027	0.2	0.00012	0.002	
Total:		99.6674		100.0000	1277.1	0.75049	19.361	

## **Results Summary**

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.6674		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Released to Temperature 725-2024 11:55:23 P	<i>M</i> 59.0		

Received by OCD: 7/5/2024 11:49:10 PM	Dry	Sat.	
Flowing Pressure (psia)	65.1		
Gross Heating Value (BTU / Ideal cu.ft.)	1277.1	1254.9	
Gross Heating Value (BTU / Real cu.ft.)	1282.0	1260.2	
Relative Density (G), Real	0.7530	0.7511	

# **Monitored Parameter Report**

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.6674	97.0000	103.0000	Pass	

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

Flare Date: 05/23/2024

**Duration of Event:** 2 Hours 20 Minutes **MCF Flared:** 705

Start Time: 01:30 AM End Time: 03:50 AM

**Cause:** Emergency Flare > Equipment Malfunction > Flare Valves > Air Supply Lines

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 case, there was a sudden and unexpected failure on the flare valves due to air supply lines going to valves being full of liquid causing controller on the valves to malfunction, then swing open, which in turn triggered a flaring event. 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 its stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, there was a sudden and unexpected failure on the flare valves due to air supply lines going to valves being full of liquid causing controller on the valves to malfunction, then swing open, which in turn triggered a flaring event. Oxy production technicians received alarms that compression equipment had shutdown and that the production separator began to drop pressure. Oxy production technicians, manning the route, were able to arrive and manually control the flare valves to cease flaring. In addition, automation techs were called out to troubleshoot and resolve the issue. The automation techs were able to change out the flare valve controllers and relocated supply air lines keep moisture out of the lines. 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 is limited in the corrective actions to eliminate this type of cause and potential reoccurrence of flaring as notwithstanding flare valve design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected. Oxy continually strives to maintain and operate all its facility locations equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events.

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

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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

Action 361356

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	361356
	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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1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170 **District IV** 

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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 361356

Q	UESTIONS	
Operator:	00	SRID:
OXY USA INC P.O. Box 4294	Δα:	16696 tion Number:
Houston, TX 772104294		361356
	Ac	tion 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	[fAB1829628786] TURK	EY TRACK CTB
Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section	on) that are assigned to your c	urrent 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 at	1	nce.
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 v	enting 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 > Equ	ipment Malfunction > Flare Valves > Air Supply Lines
Representative Compositional Analysis of Vented or Flared Natural Gas		
Please provide the mole percent for the percentage questions in this group.		
Methane (CH4) percentage	77	
Nitrogen (N2) percentage, if greater than one percent	2	
Hydrogen Sulfide (H2S) PPM, rounded up	3	
Carbon Dioxide (C02) percentage, if greater than one percent	0	
Oxygen (02) percentage, if greater than one percent	0	
- 70 (/ E	<u> </u>	
If you are venting and/or flaring because of Pipeline Specification, please provide the required spec	ifications 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.	

Not answered.

Not answered.

Oxygen (02) percentage quality requirement

Carbon Dioxide (C02) percentage quality requirement

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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 361356

QUESTIONS (continued)		
	OGRID:	
		16606

Operator: OXY USA INC P.O. Box 4294 Action Number: Houston, TX 772104294 361356 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	05/23/2024	
Time vent or flare was discovered or commenced	01:30 AM	
Time vent or flare was terminated	03:50 AM	
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: Other   Other (Specify)   Natural Gas Flared   Released: 705 Mcf   Recovered: 0 Mcf   Lost: 705 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.	

For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control	True
and it was beyond this operator's control	
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 facilit equipment preventative maintenance program. In this case, there was a sudden and unexpected failure on the flare valves due to air supply lines going to valves being full of liqui causing controller on the valves to malfunction, then swing open, which in turn triggered a flaring event. 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 its stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, as the part of the overall process or steps to take to limit duration and magnitude of flaring. Oxy personnel are in the field 24/7 and can physically see when we are flaring which in turn are communicated to additional Oxy field personnel. Internal OXY procedures ensure that upon notice of flaring, malfunction gas compressor unit and/or multiple unit shutdown alarms, increased sensor line pressure alarms, etc., field production technician personnel are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. Oxy production technicians must assess whether the issue or circumstance is due to damage and repair is needed, or whether there are other reasons for its cause. In this case, there was a sudden and unexpected failure on the flare valves due to air supply lines going to valves being full of

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Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in the corrective actions to eliminate this type of cause and potential reoccurrence of flaring as notwithstanding flare valve design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected. Oxy continually strives to maintain and operate all its facility locations equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events.

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ACKNOWLEDGMENTS

Action 361356

#### **ACKNOWLEDGMENTS**

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	OXY USA INC	16696	
	P.O. Box 4294	Action Number:	
	Houston, TX 772104294	361356	
		Action Type:	
		[C-129] Amend Venting and/or Flaring (C-129A)	

#### **ACKNOWLEDGMENTS**

$\checkmark$	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.
V	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.
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 361356

### **CONDITIONS**

No contract the contract to th		
Operator:	OGRID:	
OXY USA INC	16696	
P.O. Box 4294	Action Number:	
Houston, TX 772104294	361356	
· I	Action Type:	
· I	[C-129] Amend Venting and/or Flaring (C-129A)	

#### CONDITIONS

Created By		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.	7/5/2024