


**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 27-28 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 27-28 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 #	38590
Sampled by	JONATHAN ALDRICH
Sample date	1-18-2024
Analyzed date	1-23-2024
Method Name	C9
Injection Date	2024-01-23 13:47:20
Report Date	2024-01-23 13:48:24
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	00c6290d-6478-440d-81e2-a6909499643e
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	42092.5	2.4248	0.00005761	2.4324	0.0	0.02353	0.269	
Methane	983946.9	71.4685	0.00007263	71.6937	725.8	0.39711	12.199	
CO2	75407.8	3.5796	0.00004747	3.5909	0.0	0.05456	0.615	
Ethane	256372.0	11.7733	0.00004592	11.8104	209.5	0.12262	3.170	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	193894.6	6.3385	0.00003269	6.3585	160.4	0.09681	1.758	
iso-butane	70582.3	0.7814	0.00001107	0.7839	25.6	0.01573	0.257	
n-Butane	175181.1	1.9273	0.00001100	1.9334	63.2	0.03880	0.612	
iso-pentane	41341.5	0.4042	0.00000978	0.4055	16.3	0.01010	0.149	
n-Pentane	45093.2	0.4231	0.00000938	0.4245	17.1	0.01057	0.154	
hexanes	30670.0	0.3012	0.00000982	0.3022	14.4	0.00899	0.125	
heptanes	30747.0	0.1828	0.00000595	0.1834	10.1	0.00635	0.085	
octanes	14695.0	0.0763	0.00000519	0.0766	4.8	0.00302	0.039	
nonanes+	1799.0	0.0045	0.00000253	0.0046	0.3	0.00020	0.003	
Total:		99.6856		100.0000	1247.4	0.78839	19.436	

**Results Summary**

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.6856		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	70.0		

Result	Dry	Sat.	
Flowing Pressure (psia)	95.0		
Gross Heating Value (BTU / Ideal cu.ft.)	1247.4	1225.6	
Gross Heating Value (BTU / Real cu.ft.)	1252.3	1231.0	
Relative Density (G), Real	0.7912	0.7886	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.6856	97.0000	103.0000	Pass	

**UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM****Facility:** Red Tank 27-28 CTB**Vent Date:** 04/08/2024**Duration of Event:** 24 Hours**MCF Vented:** 84**Start Time:** 12:00 AM**End Time:** 11:59 PM**Cause:** Equipment Malfunction > Production Separator > Water Dump**Method of Vented Gas Measurement:** Estimated Vent Calculations

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**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 could not have been avoided by good design, operation, and maintenance practices. Notwithstanding common facility design and operations, emergencies and malfunctions, can occur without warning, be sudden, unforeseeable and unavoidable. It is OXY's policy to route all gas to a flare, rather than vent, during an unforeseen and unavoidable emergency or malfunction, to minimize emissions as much as possible, yet there are circumstances when flaring is not possible, and venting shall occur. In this case, the production separator water dump washed out, which in turn, sent excess fluids to the facility's gun barrel, which then triggered intermittent venting to occur. Once the production tech was able to determine the cause of the excess fluids being sent to the gun barrel, which was the production separator, the production tech was able to isolate the production separator and attempt to determine an exact cause of the equipment malfunction. The production tech determined the water dump needed to be replaced. Once the water dump was replaced, which took time to retrieve and install, the excess fluids were prevented from flowing to the gun barrel and venting was terminated.

**2. Steps Taken to limit duration and magnitude of venting or flaring:**

In this case, the production separator water dump washed out, which in turn, sent excess fluids to the facility's gun barrel, which then triggered intermittent venting to occur. Once the production tech was able to determine the cause of the excess fluids being sent to the gun barrel, which was the production separator, the production tech was able to isolate the production separator and attempt to determine an exact cause of the equipment malfunction. The production tech determined the water dump needed to be replaced. Once the water dump was replaced, which took time to retrieve and install, the excess fluids were prevented from flowing to the gun barrel and venting was terminated.

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

Oxy is limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of production separator malfunctions as notwithstanding production separator design and operations, separators are inherently dynamic and even the smallest type of malfunctions, false or true, can be sudden, reasonably unforeseeable and unexpected which can cause equipment malfunctions to occur and cause a process flow to be interrupted or redirected to other facility equipment, unknowingly, which in turn can cause venting to occur. OXY makes every effort to control and minimize emissions as much as possible. The actions that Oxy and its field personnel will continue to perform is its daily inspections of its equipment.

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1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
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Phone:(575) 748-1283 Fax:(575) 748-9720  
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Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
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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

Action 336669

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 336669
	Action Type: [C-129] Venting and/or Flaring (C-129)

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: <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul>
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QUESTIONS

Action 336669

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:	16696
	Action Number:	336669
	Action Type:	[C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b> 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 Well	Unavailable.
Incident Facility	[fAPP2127030589] RED TANK 27-28 CTB

<b>Determination of Reporting Requirements</b> Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional 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	Yes
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

<b>Equipment Involved</b>	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Equipment Malfunction > Production Separator > Water Dump

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b> Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	72
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	4
Oxygen (O2) 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 (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 336669

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 336669
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	04/08/2024
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	24

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Vented   Released: 84 Mcf   Recovered: 0 Mcf   Lost: 84 Mcf.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Estimated Vent Calculations
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	Not answered.
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	<p>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 could not have been avoided by good design, operation, and maintenance practices.</p> <p>Notwithstanding common facility design and operations, emergencies and malfunctions, can occur without warning, be sudden, unforeseeable and unavoidable. It is OXY's policy to route all gas to a flare, rather than vent, during an unforeseen and unavoidable emergency or malfunction, to minimize emissions as much as possible, yet there are circumstances when flaring is not possible, and venting shall occur. In this case, the production separator water dump washed out , which in turn, sent excess fluids to the facility's gun barrel, which then triggered intermittent venting to occur. Once the production tech was able to determine the cause of the excess fluids being sent to the gun barrel, which was the production separator, the production tech was able to isolate the production separator and attempt to determine an exact cause of the equipment malfunction. The production tech determined the water dump needed to be replaced. Once the water dump was replaced, which took time to retrieve and install, the excess fluids were prevented from flowing to the gun barrel and venting was terminated.</p>
	<p>In this case, the production separator water dump washed out , which in turn, sent excess fluids to the facility's gun barrel, which then triggered intermittent venting to occur. Once the production tech was able to determine the cause of the excess fluids being sent to the gun</p>

Steps taken to limit the duration and magnitude of vent or flare	barrel, which was the production separator, the production tech was able to isolate the production separator and attempt to determine an exact cause of the equipment malfunction. The production tech determined the water dump needed to be replaced. Once the water dump was replaced, which took time to retrieve and install, the excess fluids were prevented from flowing to the gun barrel and venting was terminated.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of production separator malfunctions as notwithstanding production separator design and operations, separators are inherently dynamic and even the smallest type of malfunctions, false or true, can be sudden, reasonably unforeseeable and unexpected which can cause equipment malfunctions to occur and cause a process flow to be interrupted or redirected to other facility equipment, unknowingly, which in turn can cause venting to occur. OXY makes every effort to control and minimize emissions as much as possible. The actions that Oxy and its field personnel will continue to perform is its daily inspections of its equipment.

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ACKNOWLEDGMENTS  
  
Action 336669

ACKNOWLEDGMENTS

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	Action Number: 336669
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
<input checked="" type="checkbox"/>	I hereby certify the statements in this 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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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: 336669
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
shelbyschoepf	If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	4/23/2024