Natural Gas Analysis Report GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

Sample Information
RED TANK 27 28 CTB CHECK
ANTHONY DOMINGUEZ
INFICON MICRO GC
03-16-2023
16200C
66
HEATED HOSE & GASIFIER
RED TANK 27 28 CTB CHECK
FILL & EMPTY
OCCIDENTAL PETROLEUM
NEW MEXICO
PERMIAN_RESOURCES
NEW MEXICO
EAST
OP-L2152-BT002
PRODUCTION
WELL
AKM MEASUREMENT
7407
JONATHAN ALDRICH
3-15-2023
3-16-2023
C9
2023-03-16 09:27:07
2023-03-16 09:32:14
1-16-2023 OXY GPA C9+ H2S #2.cfgx
79256edd-11d1-456e-a9c1-97fd3ac7df68
GPA Standard 2145-16 (FPS)
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	35532.0	2.0156	0.00005673	2.0029	0.0	0.01937	0.221	
Methane	966210.5	70.8521	0.00007333	70.4042	712.7	0.38997	11.984	
CO2	49879.7	2.2948	0.00004601	2.2803	0.0	0.03465	0.391	
Ethane	283286.3	12.9892	0.00004585	12.9071	228.9	0.13400	3.466	
H2S	0.0	0.0003	0.00000000	0.0003	0.0	0.00000	0.000	
Propane	228205.6	7.4381	0.00003259	7.3910	186.4	0.11253	2.044	
iso-butane	84437.5	0.9377	0.00001111	0.9318	30.4	0.01870	0.306	
n-Butane	218974.4	2.4123	0.00001102	2.3970	78.4	0.04810	0.759	
iso-pentane	50277.3	0.4887	0.00000972	0.4856	19.5	0.01210	0.178	
n-Pentane	56698.4	0.5395	0.00000952	0.5361	21.5	0.01335	0.195	
hexanes	38745.0	0.2982	0.00000770	0.2963	14.1	0.00882	0.122	
heptanes	36786.0	0.2359	0.00000641	0.2344	12.9	0.00811	0.109	
octanes	18648.0	0.1094	0.00000587	0.1087	6.8	0.00429	0.056	
nonanes+	3967.0	0.0245	0.00000617	0.0243	1.7	0.00108	0.014	
Total:		100.6365		100.0000	1313.4	0.80507	19.845	

Results Summary

Result	Dry	Sat.
Total Un-Normalized Mole%	100.6365	
Pressure Base (psia)	14.730	
Temperature Base (Deg. F)	60.00	
Flowing Temperature (Deg. F)	83.6	
Released to Preseing (psid/8/2023 9:20:40	<i>PM</i> 121.0	

Received by OCD: 1868/3023 9:15:49 PM	Dry	Sat.	Page 2 of
Gross Heating Value (BTU / Ideal cu.ft.)	1313.4	1290.5	
Gross Heating Value (BTU / Real cu.ft.)	1319.1	1296.7	
Relative Density (G), Real	0.8082	0.8053	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	100.6365	97.0000	103.0000	Pass	

UPSET FLARE EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Red Tank 27-28 CTB Flare Date: 08/07/2023

Duration of event: 1 Hour 47 Minutes **MCF Flared:** 220

Start Time: 10:12 PM End Time: 11:59 PM

Cause: Emergency Flare > Severe Weather > Lighting > Third Party Power Provider > Substation Power

Outage > Facility Power Outage > Emergency Shut Down

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, this was a sudden and unexpected emergency shutdown of the facility due to a third-party provider power outage caused by a severe weather and lightning storm in the area, which triggered flaring to occur, when Xcel's power substation lost power as a result of the severe weather conditions affecting the area. This event could not have been avoided or prevented from happening as Oxy takes every preventative measure necessary to weather-protect its equipment and facility as much as possible, but power outages are out of Oxy's control. This event is out of OXY's control yet, OXY made every effort to control and minimize emissions as much as possible during a power outage.

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 in order to lessen emissions as much as possible. In this case, this was a sudden and unexpected emergency shutdown of the facility due to a third-party provider power outage caused by a severe weather and lightning storm in the area, which triggered flaring to occur, when Xcel's power substation lost power as a result of the severe weather conditions affecting the area. This event could not have been avoided or prevented from happening as Oxy takes every preventative measure necessary to weather-protect its equipment and facility as much as possible, but power outages are out of Oxy's control. Oxy production techs, who were in the area, quickly noticed flaring occurring and immediately began communication with additional field personnel to manually shut-in high producing wells to cease flaring. This event is out of OXY's control yet, OXY made every effort to control and minimize emissions as much as possible during a power outage. The facility was running and operating normally without issues prior to the power outage occurring. All Oxy field personnel during this event worked diligently to ensure the facility was returned to normal operations once power restored.

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 from sudden and unexpected weather-related power outages as even with the best planning, unforeseen problems can arise during severe weather conditions, which can and will be beyond Oxy's ability to control. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its weather-related preventive measures for this facility, accordingly.

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 273544

DEFINITIONS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	273544
	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.

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**

QUESTIONS

Action 273544

	QUESTIONS		
Operator:	QUEU 110110	OGRID:	
OXY USA INC		16696	
P.O. Box 4294 Houston, TX 772104294		Action Number: 273544	
		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 resolv	ve these issues before con	tinuing with the rest of the questions.	
Incident Operator	[16696] OXY USA	INC	
Incident Type	Flare		
Incident Status	Closure Approved	ı	
Incident Well	Unavailable.		
Incident Facility	[fAPP2127030589]	RED TANK 27-28 CTB	
Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details see	ction) 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	s 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	g 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	a venting and/or flaring tha	t 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 fee			
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		> Severe Weather > Lighting > Third Party Power Provider > Substation acility Power Outage > Emergency Shut Down	
Representative Compositional Analysis of Vented or Flared Natural Gas			
Please provide the mole percent for the percentage questions in this group.			
Methane (CH4) percentage	70		
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	2		
Oxygen (02) percentage, if greater than one percent	0		
Oxygen (02) percentage, if greater than one percent If you are venting and/or flaring because of Pipeline Specification, please provide the required sp			
Methane (CH4) percentage quality requirement	0		
Nitrogen (N2) percentage quality requirement	0		
Hydrogen Sufide (H2S) PPM quality requirement	0		
Carbon Dioxide (CO2) percentage quality requirement	0		
L Caracir Dioxido (OCE) porcomago quanty rogalionioni	· •		

0

Oxygen (02) percentage quality requirement

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**

QUESTIONS, Page 2

Action 273544

QUESTIONS	(continued)
QUESTIONS!	(COHUHUCU)

Operator:	OGRID:				
OXY USA INC	16696				
P.O. Box 4294	Action Number:				
Houston, TX 772104294	273544				
	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	08/07/2023		
Time vent or flare was discovered or commenced	10:12 PM		
Time vent or flare was terminated	11:59 PM		
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: Lightning Other (Specify) Natural Gas Flared Released: 220 MCF Recovered: 0 MCF Lost: 220 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	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	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, this was a sudden and unexpected emergency shutdown of the facility due to a third-party provider power outage caused by a severe weather and lightning storm in the area, which triggered flaring to occur, when Xcel's power substation lost power as a result of the severe weather conditions affecting the area. This event could not have been avoided or prevented from happening as Oxy takes every preventative measure necessary to weather-protect its equipment and facility as much as possible, but power outages are out of Oxy's control. This event is out of OXY's control yet, OXY made every effort to control and minimize emissions as much as possible during a power outage.
	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 in order to lessen emissions as much as possible. In this case, this was a sudden and unexpected emergency shutdown of the facility due to a third-party provider power outage caused by a

Steps taken to limit the duration and magnitude of vent or flare	severe weather and lightning storm in the area, which triggered flaring to occur, when Xcel's power substation lost power as a result of the severe weather conditions affecting the area. This event could not have been avoided or prevented from happening as Oxy takes every preventative measure necessary to weather-protect its equipment and facility as much as possible, but power outages are out of Oxy's control. Oxy production techs, who were in the area, quickly noticed flaring occurring and immediately began communication with additional field personnel to manually shut-in high producing wells to cease flaring. This event is out of OXY's control yet, OXY made every effort to control and minimize emissions as much as possible during a power outage. The facility was running and operating normally without issues prior to the power outage occurring. All Oxy field personnel during this event worked diligently to ensure the facility was returned to normal operations once power restored.
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 from sudden and unexpected weather-related power outages as even with the best planning, unforeseen problems can arise during severe weather conditions, which can and will be beyond Oxy's ability to control. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to keep continue with its weather-related preventive measures for this facility, accordingly.

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**

ACKNOWLEDGMENTS

Action 273544

ACKNOWLEDGMENTS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	273544
	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.
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.

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**

CONDITIONS

Action 273544

CONDITIONS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	273544
	Action Type:
	[C-129] Amend Venting and/or Flaring (C-129A)

CONDITIONS

Created By		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.	10/8/2023