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

	Sample Information
Sample Name	CYPRESS 34 CTB A TEST 1 - CYPRESS 34 FED 243H
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	02-01-2023
Meter Number	18901T
Air temperature	55
Flow Rate (MCF/Day)	1685.7
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	CYPRESS 34 CTB A TEST 1 - CYPRESS 34 FED 243H
Sampling Method	fill and empty
Operator	AKM MEASUREMENT
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	WEST
FLOC	OP-L3819-BT001
Sample Sub Type	CTB
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	3984
Sampled by	JONATHAN ALDRICH
Sample date	2-9-2023
Analyzed date	2-13-2023
Method Name	C9
Injection Date	2023-02-13 19:29:59
Report Date	2023-02-13 19:36:38
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	708f9de9-5dab-4833-8015-2371dd0368fc
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	35394.0	1.9948	0.00005636	2.0024	0.0	0.01937	0.221	
Methane	1110768.8	81.3813	0.00007327	81.6922	827.0	0.45249	13.891	
CO2	3573.8	0.1689	0.00004726	0.1695	0.0	0.00258	0.029	
Ethane	205704.0	9.3609	0.00004551	9.3967	166.7	0.09756	2.521	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	110098.5	3.6078	0.00003277	3.6215	91.3	0.05514	1.001	
iso-butane	55678.3	0.6188	0.00001111	0.6212	20.2	0.01247	0.204	
n-Butane	108517.8	1.1920	0.00001098	1.1965	39.1	0.02401	0.378	
iso-pentane	35444.2	0.3443	0.00000971	0.3456	13.9	0.00861	0.127	
n-Pentane	39296.6	0.3721	0.00000947	0.3735	15.0	0.00930	0.136	
hexanes	38304.0	0.2910	0.00000760	0.2921	13.9	0.00869	0.120	
heptanes	29529.0	0.1844	0.00000624	0.1851	10.2	0.00640	0.086	
octanes	16071.0	0.0896	0.00000558	0.0900	5.6	0.00355	0.046	
nonanes+	2209.0	0.0137	0.00000619	0.0137	1.0	0.00061	0.008	
Total:		99.6196		100.0000	1204.0	0.70077	18.767	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.6196		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	73.0		
Flowing Pressure (psig)	90.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1204.0	1183.0	
Gross Heating Value (BTU / Real cu.ft.)	1207.9	1187.4	
Relative Density (G), Real	0.7028	0.7017	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.6196	97.0000	103.0000	Pass	

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Cypress 34A CTB

Flare Date: 08/28/2023

Duration of event: 2 Hours 44 Minutes

MCF Flared: 312

Start Time: 12:01 AM

End Time: 02:45 AM

Cause: Emergency Flare > High O2 > VRU

Method of Flared Gas Measurement: Gas Flare Meter

Comments:

1. Reason why this event was beyond Operator's control:

This event was caused by the sudden, 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 maintenance practices. In this case Salt Creek Midstream, third-party pipeline operator, shut in their sales gas pipeline when high O2 was detected and their ESD valve slammed shut, which in turn, triggered a flaring event to occur. Oxy production techs can see flaring in the field and upon noticing flaring at the facility, they drove over to determine cause. Oxy personnel determined the cause of the high O2 in the sales gas line was the result of an unexpected malfunctioning VRU. Oxy production techs shutdown the VRU to resolve the issue. Notwithstanding VRU design and operation, sensors and transmitters are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable, and unexpected which can cause unexpected malfunctions to occur. Once the VRU was cleared and restarted, did Oxy technicians began purging the O2 from the line. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel.

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, which 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. 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. This facility is unmanned, except when Oxy production techs are gathering data daily or conducting daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. Internal OXY procedures ensure that upon a sudden and unexpected flaring event, production techs are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. . In this case Salt Creek Midstream, third-party pipeline operator, shut in their sales gas pipeline when high O2 was detected and their ESD valve slammed shut, which in turn, triggered a flaring event to occur. Oxy production techs can see flaring in the field and upon noticing flaring at the facility, they drove over to determine cause. Oxy personnel determined the cause of the high O2 in the sales gas line was the result of an unexpected malfunctioning VRU. Oxy production techs shutdown the VRU to resolve the issue. Notwithstanding VRU design and operation, sensors and transmitters are inherently

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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 VRU design and operation, sensors and transmitters are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable, and unexpected which can cause unexpected malfunctions to occur without warning or advance notice. 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. 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 continue with its equipment preventative maintenance program for all its facilities.

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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

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 264631
	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:

- 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 264631

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 264631
	Action Type: [C-129] Venting and/or Flaring (C-129)

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 Well	*Unavailable.*
Incident Facility	**[fAPP2317028683] Cypress 34A CTB**

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, 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

Equipment Involved	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > High O2 > VRU

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	82
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	0
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: 264631
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	08/28/2023
Time vent or flare was discovered or commenced	12:01 AM
Time vent or flare was terminated	02:45 AM
Cumulative hours during this event	3

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: 312 Mcf | Recovered: 0 Mcf | Lost: 312 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	*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	This event was caused by the sudden, 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 maintenance practices. In this case Salt Creek Midstream, third-party pipeline operator, shut in their sales gas pipeline when high O2 was detected and their ESD valve slammed shut, which in turn, triggered a flaring event to occur. Oxy production techs can see flaring in the field and upon noticing flaring at the facility, they drove over to determine cause. Oxy personnel determined the cause of the high O2 in the sales gas line was the result of an unexpected malfunctioning VRU. Oxy production techs shutdown the VRU to resolve the issue. Notwithstanding VRU design and operation, sensors and transmitters are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable, and unexpected which can cause unexpected malfunctions to occur. Once the VRU was cleared and restarted, did Oxy technicians began purging the O2 from the line. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel.
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Steps taken to limit the duration and magnitude of vent or flare	unmanned, except when Oxy production techs are gathering data daily or conducting daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. Internal OXY procedures ensure that upon a sudden and unexpected flaring event, production techs are promptly notified, and are instructed to assess the issue as soon as possible to take prompt corrective action and minimize emissions. . In this case Salt Creek Midstream, third-party pipeline operator, shut in their sales gas pipeline when high O2 was detected and their ESD valve slammed shut, which in turn, triggered a flaring event to occur. Oxy production techs can see flaring in the field and upon noticing flaring at the facility, they drove over to determine cause. Oxy personnel determined the cause of the high O2 in the sales gas line was the result of an unexpected malfunctioning VRU. Oxy production techs shutdown the VRU to resolve the issue. Notwithstanding VRU design and operation, sensors and transmitters are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable, and unexpected which can cause unexpected malfunctions to occur. Once the VRU was cleared and restarted, did Oxy technicians began purging the O2 from the line. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning to Oxy and its field personnel.
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ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 264631
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

☑	I acknowledge that I am authorized to submit a *Venting and/or Flaring* (C-129) report on behalf of this operator and understand that this report can be **a complete** C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
☑	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.
☑	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.
☑	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: 264631
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
marialuna2	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.	9/12/2023