


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	CORRAL 1 COMP STATION ENERGY TRANSFER CHECK
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	12-22-2023
Meter Number	18000C
Air temperature	75
Flow Rate (MCF/Day)	10994.4
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	CORRAL 1 COMP STATION ENERGY TRANSFER CHECK
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	WEST
FLOC	OP-L2100-CS002
Sample Sub Type	CDP
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	38558
Sampled by	LUIS JIMENEZ
Sample date	12-19-2023
Analyzed date	12-27-2023
Method Name	C9
Injection Date	2023-12-27 13:25:54
Report Date	2023-12-27 13:40:34
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	4ffff345-bc68-4db2-8147-c637303310dc
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	18464.5	1.0507	0.00005691	1.0477	0.0	0.01013	0.116
Methane	1004683.5	73.2049	0.00007286	72.9925	738.9	0.40431	12.423
CO2	2884.6	0.1373	0.00004761	0.1369	0.0	0.00208	0.023
Ethane	294823.4	13.5896	0.00004609	13.5501	240.4	0.14068	3.638
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000
Propane	232845.8	7.6298	0.00003277	7.6076	191.9	0.11583	2.104
iso-butane	90764.2	1.0038	0.00001106	1.0009	32.6	0.02009	0.329
n-Butane	216339.3	2.3788	0.00001100	2.3719	77.6	0.04760	0.751
iso-pentane	44794.4	0.4377	0.00000977	0.4364	17.5	0.01087	0.160
n-Pentane	48472.9	0.4549	0.00000938	0.4536	18.2	0.01130	0.165
hexanes	24895.0	0.2454	0.00000986	0.2447	11.7	0.00728	0.101
heptanes	18668.0	0.1128	0.00000604	0.1124	6.2	0.00389	0.052
octanes	7975.0	0.0428	0.00000537	0.0427	2.7	0.00168	0.022
nonanes+	797.0	0.0026	0.00000326	0.0026	0.2	0.00012	0.001
Total:		100.2912		100.0000	1337.8	0.77585	19.886

Results Summary

Result	Dry	Sat.
Total Un-Normalized Mole%	100.2912	
Pressure Base (psia)	14.730	
Temperature Base (Deg. F)	60.00	
Flow to Impinger (SCF)	110.8	

Result	Dry	Sat.	
Flowing Pressure (psia)	1288.3		
Gross Heating Value (BTU / Ideal cu.ft.)	1337.8	1314.5	
Gross Heating Value (BTU / Real cu.ft.)	1343.4	1320.6	
Relative Density (G), Real	0.7788	0.7764	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	100.2912	97.0000	103.0000	Pass	

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**Facility:** Corral 1S CS**Flare Date:** 06/27/2024**Duration of Event:** 2 Hours 55 Minutes**MCF Flared:** 513**Start Time:** 02:35 PM**End Time:** 05:30 PM**Cause:** Emergency Flare > Multiple Compression Equipment Malfunctions > Various Compressor Stations**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, because of the extreme heat temperatures and weather conditions in the area, sudden and unexpected malfunctions occurred with the compression equipment at multiple facilities within the area, several times within a 24-hour period. Notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Compressor engines are designed to operate in a precise manner, such as certain operating temperatures, maximum speeds, sensor alarms and/or pressure capacity, and when malfunctions occur, it disrupts the gas compressor's operating manner and cuts off engine power, which in turn, prompts an automatic shutdown of the unit to avoid both catastrophic and long-term damage to the compressor units. Compression malfunctions occur without warning and therefore, Oxy is unable to predict, avoid or prevent this type of equipment malfunction from occurring. This malfunctioning event is out of OXY's control. OXY made every effort to control and minimize emissions as much as possible. Though sudden and unexpected malfunctioning compressor issues occurred at several facilities within the area, OXY routed the overflow of stranded gas to flare at Corral 1S compressor station in an effort to mitigate emissions for this event as the flare at this location can accommodate a moderate volume of gas and in an effort to protect equipment, environment, and personnel. The duration and volume of this flaring event is a combination of multiple intermittent flaring instances within a 24-hour period.

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, because of the extreme heat temperatures and weather conditions in the area, sudden and unexpected

malfunctions occurred with the compression equipment at multiple facilities within the area, several times within a 24-hour period. OXY production techs diligently worked throughout the day to consistently restart the gas compressors, at their respective facilities, each time a compression unit shut down. As soon as flaring was triggered during each sudden and unexpected compression malfunction, the area's mitigation optimizer cut rates to wells to reduce injection and sales gas across the area so that field pressure would stay below the flare trigger setpoints of the Corral 1S compressor station to cease flaring. Though sudden and unexpected malfunctioning compressor issues occurred at multiple Oxy compressor stations, OXY routed the overflow of stranded gas from those facilities to flare at Corral 1S compressor station in an effort to mitigate emissions overall as the flare at this location can accommodate a higher volume of gas and in an effort to protect equipment, environment, and personnel. This event is out of OXY's control yet OXY made every effort to control and minimize emissions as much as possible.

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

Oxy is very limited in the corrective actions to eliminate this type of cause and potential reoccurrence of flaring, caused by extreme freezing weather conditions, as notwithstanding various equipment design and operation, countless forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate all its 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.

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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 363715

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 363715
	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 363715

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 363715
	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	[fAPP2126641362] CORRAL #1 COMP STATION

Determination of Reporting Requirements 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	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 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 > Multiple Compression Equipment Malfunctions > Various Compressor Stations

Representative Compositional Analysis of Vented or Flared Natural Gas Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	73
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (C02) percentage, if greater than one percent	0
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 363715

QUESTIONS (continued)

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	16696
	Action Number:
	363715
Action Type:	
[C-129] Venting and/or Flaring (C-129)	

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	06/27/2024
Time vent or flare was discovered or commenced	02:35 PM
Time vent or flare was terminated	05:30 PM
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: 513 Mcf Recovered: 0 Mcf Lost: 513 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 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, because of the extreme heat temperatures and weather conditions in the area, sudden and unexpected malfunctions occurred with the compression equipment at multiple facilities within the area, several times within a 24-hour period. Notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable, and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Compressor engines are designed to operate in a precise manner, such as certain operating temperatures, maximum speeds, sensor alarms and/or pressure capacity, and when malfunctions occur, it disrupts the gas compressor's operating manner and cuts off engine power, which in turn, prompts an automatic shutdown of the unit to avoid both catastrophic and long-term damage to the compressor units. Compression malfunctions occur without warning and therefore, Oxy is unable to predict, avoid or prevent this type of equipment malfunction from occurring. This malfunctioning event is out of OXY's control. OXY made every effort to control and minimize emissions as much as possible. Though sudden and unexpected malfunctioning compressor issues occurred at several facilities within the

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ACKNOWLEDGMENTS

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ACKNOWLEDGMENTS

☒	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 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

Action 363715

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	Action Number: 363715
	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.	7/12/2024