AKM Measurement Services, LLC
Carlsbad, New Mexico

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 2 SOUTH STATION INLET
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	11-03-2023
Meter Number	NA
Air temperature	63
Flow Rate (MCF/Day)	
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	CORRAL 2 SOUTH STATION INLET
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	RANCH
FLOC	OP-L2100-CS005
Sample Sub Type	COMP STATION
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	38905
Sampled by	CHANDLER MONTGOMERY
Sample date	11-1-2023
Analyzed date	11-03-2023
Method Name	C9
Injection Date	2023-11-03 11:59:19
Report Date	2023-11-03 12:01:14
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	661cfdda-b53d-4ae9-a028-b52f2b3db2d4
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	16421.8	0.9478	0.00005772	0.9428	0.0	0.00912	0.104	
Methane	975051.0	71.3657	0.00007319	70.9859	718.6	0.39319	12.090	
CO2	2427.5	0.1159	0.00004774	0.1153	0.0	0.00175	0.020	
Ethane	291974.2	13.4774	0.00004616	13.4057	237.8	0.13918	3.602	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	229342.5	7.5131	0.00003276	7.4731	188.5	0.11378	2.068	
iso-butane	104612.2	1.1718	0.00001120	1.1656	38.0	0.02339	0.383	
n-Butane	254085.4	2.8254	0.00001112	2.8104	91.9	0.05640	0.890	
iso-pentane	73025.7	0.7231	0.00000990	0.7193	28.8	0.01792	0.264	
n-Pentane	95662.5	0.9104	0.00000952	0.9055	36.4	0.02256	0.330	
hexanes	87528.0	0.8740	0.00000999	0.8693	41.4	0.02587	0.359	
heptanes	71956.0	0.4426	0.00000615	0.4403	24.3	0.01523	0.204	
octanes	28646.0	0.1573	0.00000549	0.1565	9.8	0.00617	0.081	
nonanes+	3123.0	0.0104	0.00000332	0.0103	0.7	0.00046	0.006	
Total:		100.5349		100.0000	1416.2	0.82501	20.401	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	100.5349		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	0.0		

Result	Dry	Sat.
Flowing Pressure (psia)	49.3	
Gross Heating Value (BTU / Ideal cu.ft.)	1416.2	1391.6
Gross Heating Value (BTU / Real cu.ft.)	1423.2	1399.0
Relative Density (G), Real	0.8287	0.8255

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status
Total un-normalized amount	100.5349	97.0000	103.0000	Pass

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Corral 2S CS

Flare Date: 12/01/2024

Duration of Event: 12 Hours

MCF Flared: 2246

Start Time: 02:00 AM

End Time: 02:00 PM

Cause: Emergency Flare > Downstream Activity > ETC > Equipment Issues

Method of Flared Gas Measurement: Gas Flare Meter

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

The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction, or complete shut-in of a gas pipeline by a third-party pipeline compressor station operator, which impacted Oxy's ability to send gas to them. This interruption, restriction, or complete shut-in of the gas pipeline by a third-party pipeline compression station operator is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. In this case, ETC, third party downstream operator, had equipment issues on their end, which in turn caused them to restrict their intake gas service capacity, suddenly and unexpectedly to Oxy, which in turn caused Oxy to have trouble with gas takeaway, which then triggered a flaring event to occur when gas backed up. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning from ETC Gas Control or their 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, 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. In this case, ETC, third party downstream operator, had equipment issues on their end, which in turn caused them to restrict their intake gas service capacity, suddenly and unexpectedly to Oxy, which in turn caused Oxy to have trouble with gas takeaway, which then triggered a flaring event to occur when gas backed up. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and quickly had the optimizer cut injection rates to wells. Once pressure stayed below the facility's flare trigger setpoints, did flaring cease. To mitigate the risks associated with overpressure and to ensure the safety of our operations, we have had to resort to controlled and safety flaring. This process allows us to safely burn off the excess gas, thereby preventing potential hazards such as equipment damage, leaks, or even explosions. While flaring is not Oxy's preferred method of handling excess gas, it is a necessary step under these exceptional circumstances to maintain the integrity and safety of our operations. This flaring situation was beyond OXY's control, but Oxy took all possible measures to reduce emissions effectively.

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

Oxy is unable to take any corrective actions to eliminate the cause and potential reoccurrence of a downstream third-party owned and operated gas plant's issues, as this is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. When ETC has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, ETC then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the Enterprise gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to continually communicate with ETC personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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: 413507
	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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QUESTIONS

Action 413507

QUESTIONS

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	Action Number: 413507
	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 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	**[fAPP2126640958] CORRAL #2 SOUTH COMP STATION**
Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) 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 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	Yes
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 > Downstream Activity > ETC > Equipment Issues

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	71
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 (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	0
Nitrogen (N2) percentage quality requirement	0
Hydrogen Sufide (H2S) PPM quality requirement	0
Carbon Dioxide (C02) percentage quality requirement	0
Oxygen (02) percentage quality requirement	0

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
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	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	12/01/2024
Time vent or flare was discovered or commenced	02:00 AM
Time vent or flare was terminated	02:00 PM
Cumulative hours during this event	12

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: 2,246 MCF | Recovered: 0 MCF | Lost: 2,246 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	Yes
Was notification of downstream activity received by this operator	No
Downstream OGRID that should have notified this operator	[267255] ENERGY TRANSFER PARTNERS, LP
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	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable interruption, restriction, or complete shut-in of a gas pipeline by a third-party pipeline compressor station operator, which impacted Oxy's ability to send gas to them. This interruption, restriction, or complete shut-in of the gas pipeline by a third-party pipeline compression station operator is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid or prevent from happening and did not stem from any of Oxy's upstream facility activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. In this case, ETC, third party downstream operator, had equipment issues on their end, which in turn caused them to restrict their intake gas service capacity, suddenly and unexpectedly to Oxy, which in turn caused Oxy to have trouble with gas takeaway, which then triggered a flaring event to occur when gas backed up. This event could not have been foreseen, avoided, or prevented from happening as this event occurred with no advance notice or warning from ETC Gas Control or their field personnel.
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Steps taken to limit the duration and magnitude of vent or flare	takeaway, which then triggered a flaring event to occur when gas backed up. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and quickly had the optimizer cut injection rates to wells. Once pressure stayed below the facility's flare trigger setpoints, did flaring cease. To mitigate the risks associated with overpressure and to ensure the safety of our operations, we have had to resort to controlled and safety flaring. This process allows us to safely burn off the excess gas, thereby preventing potential hazards such as equipment damage, leaks, or even explosions. While flaring is not Oxy's preferred method of handling excess gas, it is a necessary step under these exceptional circumstances to maintain the integrity and safety of our operations. This flaring situation was beyond OXY's control, but Oxy took all possible measures to reduce emissions effectively.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is unable to take any corrective actions to eliminate the cause and potential reoccurrence of a downstream third-party owned and operated gas plant's issues, as this is downstream of Oxy's custody transfer point and out of Oxy's control to foresee, avoid, prevent from happening or reoccur. When ETC has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, ETC then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the Enterprise gas pipeline, to flare. OXY makes every effort to control and minimize emissions as much as possible. The only actions that Oxy can take and handle that is within its control, is to continually communicate with ETC personnel, who own and operate the sales gas pipeline, when possible, during these types of circumstances.

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ACKNOWLEDGMENTS

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ACKNOWLEDGMENTS

☑	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.
☑	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.
☑	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.
☑	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

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	Action Number: 413507
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

CONDITIONS

Created By	Condition	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.	12/18/2024