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

	Sample Information
Sample Name	8. CORRAL 2N COMPRESSOR STATION AFTER FUEL SKID
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	03-02-2023
Meter Number	NA
Air temperature	64
Flow Rate (MCF/Day)	NA
Heat Tracing	Heated Hose & Gasifier
Sample description/mtr name	8. CORRAL 2N COMPRESSOR STATION AFTER FUEL SKID
Sampling Method	fill and empty
Operator	OCCIDENTAL PETROLEUM
State	New Mexico
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	NA
FLOC	NA
Sample Sub Type	NA
Sample Name Type	NA
Vendor	AKM MEASUREMENT
Cylinder #	AKM-4
Sampled by	JONATHAN ALDRICH
Sample date	3-1-2023
Analyzed date	3-2-2023
Method Name	C9
Injection Date	2023-03-02 11:01:47
Report Date	2023-03-02 11:05:23
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	454164ab-9c70-4a26-9a81-475679206b40
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	19900.4	1.1216	0.00005636	1.1210	0.0	0.01084	0.124	
Methane	1048827.2	76.8431	0.00007327	76.8014	777.5	0.42540	13.064	
CO2	3240.1	0.1531	0.00004726	0.1530	0.0	0.00232	0.026	
Ethane	273459.1	12.4443	0.00004551	12.4375	220.6	0.12913	3.338	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	193142.1	6.3290	0.00003277	6.3256	159.5	0.09631	1.749	
iso-butane	69923.5	0.7771	0.00001111	0.7767	25.3	0.01559	0.255	
n-Butane	155310.4	1.7060	0.00001098	1.7051	55.8	0.03422	0.539	
iso-pentane	29200.4	0.2836	0.00000971	0.2835	11.4	0.00706	0.104	
n-Pentane	29465.3	0.2790	0.00000947	0.2789	11.2	0.00695	0.101	
hexanes	10415.0	0.0791	0.00000760	0.0791	3.8	0.00235	0.033	
heptanes	4902.0	0.0306	0.00000624	0.0306	1.7	0.00106	0.014	
octanes	1200.0	0.0067	0.00000558	0.0067	0.4	0.00026	0.003	
nonanes+	141.0	0.0009	0.00000619	0.0009	0.1	0.00004	0.001	
Total:		100.0541		100.0000	1267.2	0.73153	19.351	

### **Results Summary**

	Result	Dry	
	Total Un-Normalized Mole%	100.0541	
	Pressure Base (psia)	14.730	
	Temperature Base (Deg. F)	60.00	
	Flowing Temperature (Deg. F)	0.0	
le	astering Preserre (p1/3)1/2024 9:10:18	<i>PM</i> 125.0	

Received	by OCD: 1431/1924 8:50:45 PM	Dry	Sat.	Page 2	of
Gross	s Heating Value (BTU / Ideal cu.ft.)	1267.2	1245.2		
Gross	s Heating Value (BTU / Real cu.ft.)	1271.8	1250.2		
Relat	tive Density (G), Real	0.7339	0.7323		

# **Monitored Parameter Report**

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	100.0541	97.0000	103.0000	Pass	

#### **UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Corral 2N CS Flare Date: 01/16/2024

**Duration of Event:** 12 Hours 20 Minutes **MCF Flared:** 1116

Start Time: 01:00 AM End Time: 01:20 PM

Cause: Emergency Flare > Extreme Temperature and Weather Conditions > Compression Equipment Issues

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, another day of extreme freezing temperature and weather conditions affected the Corral 2N compressor station gas compression equipment, prompting several instances of sudden and unexpected malfunctions to occur within a 24-hour period, which in turn, then prompted high field pressure to occur, which then triggered various intermittent flaring instances to occur throughout the day and night. This event is out of OXY's control yet OXY made every effort to control and minimize emissions as much as possible.

## 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 to lessen emissions as much as possible. In this case, another day of extreme freezing temperature and weather conditions affected the Corral 2N compressor station gas compression equipment, prompting several instances of sudden and unexpected malfunctions to occur within a 24-hour period, which in turn, then prompted high field pressure to occur, which then triggered various intermittent flaring instances to occur throughout the day and night. As soon as flaring occurred, the facility's well optimizer adjusted injection rates and field personnel manually shut-in wells to mitigate and subsequently cease flaring during each occurrence. 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 and its winterization protocols and processes.

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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

Action 310210

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	310210
	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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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 310210

Phone:(505) 476-3470 Fax:(505) 476-3462				
Q	UESTIONS			
Operator:		OGRID:		
OXY USA INC P.O. Box 4294		16696 Action Number:		
Houston, TX 772104294		310210		
		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 wi	th the rest of the questions.		
Incident Well	Unavailable.			
Incident Facility	[fAPP2126641235] CORRA	LL #2 NORTH COMP STATION		
Determination of Reporting Requirements				
Answer all questions that apply. The Reason(s) statements are calculated based on your answers as	nd may provide addional quidance			
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 v	renting and/or flaring that is or may	v 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	and a major of minor rotate and a rotate.		
Did this vent or flare result in the release of <b>ANY</b> liquids (not fully and/or completely				
flared) that reached (or has a chance of reaching) the ground, a surface, a	No			
watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water				
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	No			
existence				
Equipment Involved				
Primary Equipment Involved	Other (Specify)			
Timary Equipmont involved	Other (Opecity)			
Additional details for Equipment Involved. Please specify		ne Temperature and Weather Conditions > Compression		
	Equipment Issues			
Described Comments of the Indian Comments of				
Representative Compositional Analysis of Vented or Flared Natural Gas				
Please provide the mole percent for the percentage questions in this group.  Methane (CH4) percentage	77			
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 spec				
Methane (CH4) percentage quality requirement	Not answered.			
Nitrogen (N2) percentage quality requirement	Not answered.			
Hydrogen Sufide (H2S) PPM quality requirement  Carbon Dioxide (C02) percentage quality requirement	Not answered.	Not answered.		

Not answered.

Oxygen (02) percentage quality requirement

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QUESTIONS, Page 2

Action 310210

<b>QUESTIONS</b>	(continued)
QUESTIONS!	(COHUHUCU)

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	310210
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### QUESTIONS

Date(s) and Time(s)		
Date vent or flare was discovered or commenced	01/16/2024	
Time vent or flare was discovered or commenced	01:00 AM	
Time vent or flare was terminated	01:20 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: 1,116 Mcf   Recovered: 0 Mcf   Lost: 1,116 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, another day of extreme freezing temperature and weather conditions affected the Corral 2N compressor station gas compression equipment, prompting several instances of sudden and unexpected malfunctions to occur within a 24-hour period, which in turn, then prompted high field pressure to occur, which then triggered various intermittent flaring instances to occur throughout the day and night. This event is out of OXY's control yet OXY made every effort to control and minimize emissions as much as possible.
Steps taken to limit the duration and magnitude of vent or flare	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 to lessen emissions as much as possible. In this case, another day of extreme freezing temperature and weather conditions affected the Corral 2N compressor station gas compression equipment, prompting several instances of sudden and unexpected malfunctions to occur within a 24-hour period, which in turn, then prompted high field pressure to occur, which then

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ACKNOWLEDGMENTS

Action 310210

#### **ACKNOWLEDGMENTS**

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

#### **ACKNOWLEDGMENTS**

<b>&gt;</b>	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.
V	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.
V	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.
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.
<b>~</b>	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 310210

### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	310210
	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.	1/31/2024