# 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	SALT FLAT CTB TRAIN 1 CHECK (FMP)
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	11-30-2023
Meter Number	18721C
Air temperature	82
Flow Rate (MCF/Day)	155556.36
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	SALT FLAT CTB TRAIN 1 CHECK (FMP)
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	WEST
FLOC	OP-L2116-BT002
Sample Sub Type	GAS LIFT
Sample Name Type	WELL
Vendor	AKM MEASUREMENT
Cylinder #	5565
Sampled by	LUIS JIMENEZ
Sample date	11-21-2023
Analyzed date	12-2-2023
Method Name	C9
Injection Date	2023-12-02 12:37:54
Report Date	2023-12-02 12:41:23
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	2224b3ab-5b91-40a7-ba7c-878a9ad59783
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	39257.6	2.2350	0.00005693	2.2430	0.0	0.02169	0.248	
Methane	1023303.0	74.6272	0.00007293	74.8951	758.2	0.41484	12.742	
CO2	70455.8	3.3418	0.00004743	3.3538	0.0	0.05096	0.574	
Ethane	221198.0	10.1712	0.00004598	10.2077	181.1	0.10598	2.740	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	152804.8	4.9951	0.00003269	5.0130	126.4	0.07632	1.386	
iso-butane	59880.2	0.6653	0.00001111	0.6677	21.8	0.01340	0.219	
n-Butane	153261.1	1.6911	0.00001103	1.6972	55.5	0.03406	0.537	
iso-pentane	48760.5	0.4796	0.00000984	0.4813	19.3	0.01199	0.177	
n-Pentane	60478.1	0.5713	0.00000945	0.5733	23.0	0.01428	0.209	
hexanes	53280.0	0.5251	0.00000986	0.5270	25.1	0.01568	0.217	
heptanes	42025.0	0.2546	0.00000606	0.2555	14.1	0.00884	0.118	
octanes	14982.0	0.0811	0.00000541	0.0814	5.1	0.00321	0.042	
nonanes+	1092.0	0.0039	0.00000360	0.0040	0.3	0.00018	0.002	
Total:		99.6424		100.0000	1229.9	0.77144	19.211	

# **Results Summary**

	Result	Dry	Sat.	
	Total Un-Normalized Mole%	99.6424		
	Pressure Base (psia)	14.730		
	Temperature Base (Deg. F)	60.00		
Rele	ased to Temperature 1Deb/2024 6:58:37 P	<i>M</i> 71.2		

Received by OCD: 1/31/2024 6:39:58 PM	Dry	Sat.	
Flowing Pressure (psia)	94.9		
Gross Heating Value (BTU / Ideal cu.ft.)	1229.9	1208.5	
Gross Heating Value (BTU / Real cu.ft.)	1234.6	1213.6	
Relative Density (G), Real	0.7741	0.7718	

# **Monitored Parameter Report**

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.6424	97.0000	103.0000	Pass	

# **UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Salt Flat CTB Flare Date: 01/16/2024

**Duration of Event:** 13 Hours 40 Minutes **MCF Flared:** 100

Start Time: 03:20 AM End Time: 05:00 PM

**Cause:** Emergency Flare > Extreme Freezing Temperature and Weather Conditions > 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, extreme freezing temperature and weather conditions affected the Salt Flat CTB 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. 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, extreme freezing temperature and weather conditions affected the Salt Flat CTB 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. 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.

District I
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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 310206

### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	310206
	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 310206

Phone:(505) 476-3470 Fax:(505) 476-3462			
Q	UESTIONS		
Operator: OXY USA INC		OGRID: 16696	
P.O. Box 4294		Action Number:	
Houston, TX 772104294		310206	
		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 w	ith the rest of the questions.	
Incident Well	Unavailable.		
Incident Facility	[fAPP2126563666] SALT F	ELAT CTB	
Determination of Reporting Requirements			
Answer all questions that apply. The Reason(s) statements are calculated based on your answers as		a.	
Was this vent or flare caused by an emergency or malfunction  Did this vent or flare last eight hours or more cumulatively within any 24-hour	Yes		
period from a single event	Yes		
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 v	renting and/or flaring that is or ma	y 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 <b>ANY</b> 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 > Extrem	ne Freezing Temperature and Weather Conditions > Equipment	
Representative Compositional Analysis of Vented or Flared Natural Gas			
Please provide the mole percent for the percentage questions in this group.	T ==		
Methane (CH4) percentage	75		
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	3		
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	cifications 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.		

Not answered.

Oxygen (02) percentage quality requirement

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QUESTIONS, Page 2

Action 310206

<b>QUESTIONS</b>	(continued)
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Operator:	OGRID:
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Houston, TX 772104294	310206
	Action Type:
	[C-129] Venting and/or Flaring (C-129)
OUESTIONS	

#### 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	03:20 AM	
Time vent or flare was terminated	05:00 PM	
Cumulative hours during this event	14	

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: 100 Mcf   Recovered: 0 Mcf   Lost: 100 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, extreme freezing temperature and weather conditions affected the Salt Flat CTB 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. 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, extreme freezing temperature and weather conditions affected the Salt Flat CTB 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. As soon as flaring occurred, the facility's well

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ACKNOWLEDGMENTS

Action 310206

### **ACKNOWLEDGMENTS**

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### **ACKNOWLEDGMENTS**

V	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.
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.

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CONDITIONS

Action 310206

# **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	310206
	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