# 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	CEDAR CANYON LP TO ENTERPRISE CHECK
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	10-12-2023
Meter Number	10-12-2023 14809C
	81
Air temperature	
Flow Rate (MCF/Day)	37650
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	CEDAR CANYON LP TO ENTERPRISE CHECK
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM, OXY USA INC
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	CEDAR CANYON
FLOC	OP-L0967-BT001
Sample Sub Type	CDP
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	38597
Sampled by	CHANDLER MONTGOMERY
Sample date	10-11-2023
Analyzed date	10-17-2023
Method Name	C9
Injection Date	2023-10-17 10:24:14
Report Date	2023-10-17 10:27:08
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	3d5671d3-979a-41a0-b42a-5ce30553f2d2
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	63352.9	3.6169	0.00005709	3.6167	0.0	0.03498	0.400	
Methane	986394.7	72.1838	0.00007318	72.1801	730.7	0.39981	12.293	
CO2	9995.4	0.4762	0.00004764	0.4761	0.0	0.00723	0.082	
Ethane	233063.8	10.6598	0.00004574	10.6592	189.1	0.11066	2.864	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	161991.9	5.1276	0.00003165	5.1273	129.3	0.07806	1.419	
iso-butane	85831.4	0.9588	0.00001117	0.9588	31.3	0.01924	0.315	
n-Butane	214276.2	2.3728	0.00001107	2.3727	77.6	0.04762	0.751	
iso-pentane	90071.0	0.8787	0.00000976	0.8787	35.2	0.02189	0.323	
n-Pentane	120170.0	1.1453	0.00000953	1.1452	46.0	0.02853	0.417	
hexanes	129659.0	0.9838	0.00000759	0.9837	46.9	0.02927	0.406	
heptanes	129472.0	0.9161	0.00000708	0.9160	50.5	0.03169	0.425	
octanes	79358.0	0.5703	0.00000719	0.5703	35.7	0.02249	0.294	
nonanes+	9981.0	0.1152	0.00001154	0.1152	8.1	0.00510	0.065	
Total:		100.0053		100.0000	1380.4	0.83658	20.053	

# **Results Summary**

Result	Dry	Sat.
Total Un-Normalized Mole%	100.0053	
Pressure Base (psia)	14.730	
Temperature Base (Deg. F)	60.00	
Releasive Tempeintyre3D49/2024 9:42:57 P	M 90.5	

Rec	Result eived by OCD: 3/10/2024 9:25:44 PM	Dry	Sat.	Page 2	2 of
	Flowing Pressure (psia)	79.8		8	-
	Gross Heating Value (BTU / Ideal cu.ft.)	1380.4	1356.4		
	Gross Heating Value (BTU / Real cu.ft.)	1387.1	1363.5		
	Relative Density (G), Real	0.8403	0.8369		

# **Monitored Parameter Report**

Parameter		Value	Lower Limit	Upper Limit	Status	
Total un-normalized am	ount	100.0053	97.0000	103.0000	Pass	

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

Facility: Cedar Canyon CDP Flare Date: 01/04/2024

**Duration of Event:** 1 Hour 10 Minutes **MCF Flared:** 405.

Start Time: 10:50 AM End Time: 12:00 PM

**Cause:** Emergency Flare > Third Party Downstream Activity > San Mateo > 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, San Mateo, third party operated downstream pipeline operator, suddenly and unexpectedly restricted their gas flow intake from OXY due to equipment issues on their end, which in turn caused high line pressure to occur, which then triggered a flaring event. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning.

## 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, San Mateo, third party operated downstream pipeline operator, suddenly and unexpectedly restricted their gas flow intake from OXY due to equipment issues on their end, which in turn caused high line pressure to occur, which then triggered a flaring event. This event could not have been foreseen, avoided or prevented from happening as each flaring instance which occurred, did so with no advance notice or warning. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assisted with ensuring field area's mitigation optimizers cut injection rates to wells in the field to reduce injection and sales gas across the area. 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 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. San Mateo will have issues which may reoccur from time to time and may trigger a spike in the gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When San Mateo has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, San Mateo then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the San Mateo's 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 San Mateo personnel, who operate the sales gas pipeline, when possible, during these types of circumstances.

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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 321948

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	321948
	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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Phone:(505) 334-6178 Fax:(505) 334-6170 <u>District IV</u> 1220 S. St Francis Dr., Santa Fe, NM 87505

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

QUESTIONS

Action 321948

Phone:(505) 476-3470 Fax:(505) 476-3462			
O	UESTIONS		
Operator: OXY USA INC	SECTIONS	OGRID: 16696	
P.O. Box 4294 Houston, TX 772104294		Action Number: 321948	
		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	[fAPP2126642013] CEDAR	CANOYN GAS GATHERING	
Determination of Reporting Requirements			
Answer all questions that apply. The Reason(s) statements are calculated based on your answers a  Was this vent or flare caused by an emergency or malfunction	Yes	9.	
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	r flaring of natural gas.	
An appropriate shall file a form C 444 instead of a form C 410 for a valence that includes liquid during			
An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during was there at least 50 MCF of natural gas vented and/or flared during this event	Yes	y be a major or minor release under 19.15.29.7 NMAC.	
Did this vent or flare result in the release of <b>ANY</b> liquids (not fully and/or completely	Tes		
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 > Third F	Party Downstream Activity > San Mateo > 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	72		
Nitrogen (N2) percentage, if greater than one percent	4		
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	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 321948

QUESTIONS (continued)	QL	<b>JEST</b>	IONS	(continued)
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Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	321948
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### QUESTIONS

Date(s) and Time(s)		
Date vent or flare was discovered or commenced	01/10/2024	
Time vent or flare was discovered or commenced	10:50 AM	
Time vent or flare was terminated	12:00 PM	
Cumulative hours during this event	1	

Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 405 Mcf   Recovered: 0 Mcf   Lost: 405 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	[329461] San Mateo Black River Oil Pipeline, LLC		
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	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, San Mateo, third party operated downstream pipeline operator, suddenly and unexpectedly restricted their gas flow intake from OXY due to equipment issues on their end, which in turn caused high line pressure to occur, which then triggered a flaring event. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning.
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Steps taken to limit the duration and magnitude of vent or flare	equipment issues on their end, which in turn caused high line pressure to occur, which then triggered a flaring event. This event could not have been foreseen, avoided or prevented from happening as each flaring instance which occurred, did so with no advance notice or warning. As soon as flaring was triggered, field personnel engaged in Oxy's third party pipeline operation curtailment reactive stratagems and assisted with ensuring field area's mitigation optimizers cut injection rates to wells in the field to reduce injection and sales gas across the area. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
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. San Mateo will have issues which may reoccur from time to time and may trigger a spike in the gas line pressure, which in turn, directly impacts Oxy's ability to send gas to them. When San Mateo has equipment issues or greatly struggles to handle the volume of gas being sent to them by Oxy, San Mateo then restricts Oxy's ability to send gas, which then prompts Oxy to route all its stranded gas not pushed into the San Mateo's 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 San Mateo personnel, who operate the sales gas pipeline, when possible, during these types of circumstances.

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ACKNOWLEDGMENTS

Action 321948

### **ACKNOWLEDGMENTS**

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Houston, TX 772104294	321948
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### **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 321948

### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	321948
	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.	3/10/2024