

**Volumetrics Inc.**

3710 East Rio Grande St, Victoria, TX-77901
Phone: 361-827-4024

Company: OXY USA INC
Field/Location : NMSW
Station Name : CEDAR CANYON TO ENTERPRISE
Station Number : NA
Sample Date: 3/10/22 2:40 PM
Analysis Date: 3/17/22 8:30 PM
Instrument: INFICON
Calibration/Verification Date: 3/17/2022
Heat Trace used: YES

Work Order: 4000535215
Sampled by: OXY/JE
Sample Type : SPOT-CYLINDER
Sample Temperature (F): NA
Sample Pressure (PSIG): 1237
Flow rate (MCF/Day): NA
Ambient Temperature (F): 50
Sampling method: FILL & EMPTY
Cylinder Number: 27772

NATURAL GAS ANALYSIS: GPA 2261

Components	Un-Normalized Mol%	Normalized Mol%	GPM 14.650	GPM 14.730	GPM 15.025
Hydrogen Sulfide	0.0000	0.0000			
Nitrogen	1.4010	1.4329			
Methane	73.2835	74.9537			
Carbon Dioxide	0.1272	0.1301			
Ethane	12.0004	12.2739	3.277	3.295	3.361
Propane	6.1002	6.2392	1.716	1.726	1.760
Isobutane	0.8643	0.8840	0.289	0.290	0.296
N-butane	2.1629	2.2122	0.696	0.700	0.714
Isopentane	0.5139	0.5256	0.192	0.193	0.197
N-Pentane	0.5755	0.5886	0.213	0.214	0.218
Hexanes(C6's)	0.3556	0.3637	0.149	0.150	0.153
Heptanes (C7's)	0.2741	0.2804	0.129	0.130	0.132
Octanes (C8's)	0.1001	0.1024	0.052	0.053	0.054
Nonanes Plus (C9+)	0.0130	0.0133	0.007	0.008	0.008
Total	97.7718	100.0000			

Physical Properties (Calculated)

	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.721	6.758	6.893
Total GPM Iso-Pentane+	0.743	0.747	0.762
Compressibility (Z)	0.9959	0.9959	0.9958
Specific Gravity (Air=1) @ 60 °F	0.7713	0.7713	0.7714
Molecular Weight	22.257	22.257	22.257

Gross Heating Value

	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft ³)	1318.1	1325.3	1352.0
Wet, Real (BTU/Ft ³)	1295.0	1302.1	1328.3
Dry, Ideal (BTU/Ft ³)	1312.7	1319.9	1346.3
Wet, Ideal (BTU/Ft ³)	1289.7	1296.8	1322.7

Temperature base 60 °F

Comment: FIELD H2S =0 PPM

Verified by

Mostaq Ahammad
Petroleum Chemist

Approved by

Deann Friend

Deann Friend
Laboratory Manager

UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**Facility:** Cedar Canyon CPD**Flare Date:** 09/13/2023**Duration of Event:** 14 Hours 29 Minutes**MCF Flared:** 1296**Start Time:** 09:30 AM**End Time:** 11:59 PM**Cause:** Emergency Flare > Third Party Downstream Activity > San Mateo Gas Plants > Weather > Power Outage > 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 Midstream, third party owned and operated downstream operator, had three (3) of their gas plants unexpectedly shutdown due to severe weather in the area causing a power outage, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at the Cedar Canyon CPD. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.

The Cedar Canyon CPD is a gas gathering flare system for multiple tank batteries across Oxy's defined Cedar Canyon area. Oxy made every effort to shut in as much of production/wells as possible, yet it was absolutely critical to Oxy's operational safety and start up procedures to allow some production to occur across the area, as it was necessary to maintain a minimal amount of gas flow to restart the compression equipment, specifically the gas lift compressors, across the Cedar Canyon area, when San Mateo was ready and able to start taking full volume of gas. The minimal amount of gas flow allowed to be produced and flare was done out of necessity to protect personnel and equipment as a safeguard against potential issues that could occur when restarting production across the Cedar Canyon area.

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 Midstream, third party owned and operated downstream operator, had three (3) of their gas plants unexpectedly

shutdown due to severe weather in the area causing a power outage, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at the Cedar Canyon CPD. This event could not have been foreseen, avoided or prevented from happening as this event occurred 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. In addition, as soon as flaring alarms were received by field personnel, they began to shut-in several wells across the area to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the gas gathering system to cease flaring, which took some time to do. 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's gas plant 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's gas plant 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 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 own and 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 270383

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 270383
	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: <ul style="list-style-type: none">• 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 270383

QUESTIONS

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	Action Number: 270383
	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 Operator	[16696] OXY USA INC
Incident Type	Flare
Incident Status	Closure Not Approved
Incident Well	Unavailable.
Incident Facility	[fAPP2126642013] CEDAR CANOYN GAS GATHERING
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 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	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 within 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 Party Downstream Activity > San Mateo Gas Plants > Weather > Power Outage > 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	75
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) 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 Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 270383

QUESTIONS (continued)

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	Action Number: 270383
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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	09/13/2023
Time vent or flare was discovered or commenced	09:30 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	15

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: 1,296 Mcf Recovered: 0 Mcf Lost: 1,296 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	
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 Midstream, third party owned and operated downstream operator, had three (3) of their gas plants unexpectedly shutdown due to severe weather in the area causing a power outage, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at the Cedar Canyon CPD. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible. The Cedar Canyon CPD is a gas gathering flare system for multiple tank batteries across Oxy's defined Cedar Canyon area. Oxy made every effort to shut in as much of production/wells as possible, yet it was absolutely critical to Oxy's operational safety and start up procedures to allow some production to occur across the area, as it was necessary to maintain a minimal amount of gas flow to restart the compression equipment, specifically the gas lift compressors, across

	the Cedar Canyon area, when San Mateo was ready and able to start taking full volume of gas.
Steps taken to limit the duration and magnitude of vent or flare	<p>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 Midstream, third party owned and operated downstream operator, had three (3) of their gas plants unexpectedly shutdown due to severe weather in the area causing a power outage, which in turn caused high line pressure to occur, which then prompted the field to pressure up automatically and trigger flaring to occur at the Cedar Canyon CPD. This event could not have been foreseen, avoided or prevented from happening as this event occurred 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. In addition, as soon as flaring alarms were received by field personnel, they began to shut-in several wells across the area to assist with reducing field pressure so that it would stay below the flare trigger setpoints of the gas gathering system to cease flaring, which took some time to do. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.</p>
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	<p>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's gas plant 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's gas plant 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 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 own and operate the sales gas pipeline, when possible, during these types of circumstances.</p>

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ACKNOWLEDGMENTS

Action 270383

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

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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 270383

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	Action Number: 270383
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

CONDITIONS

Created By	Condition	Condition Date
marialuna2	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.	9/28/2023