

#### 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 28 COMP STA FUEL INLET

98.1730

Station Number: NA

 Sample Date:
 5/6/22 12:20 PM

 Analysis Date:
 5/9/22 1:00 PM

 Instrument:
 INFICON

 Calibration/Verification Date:
 5/9/2022

 Heat Trace used:
 YES

Work Order: 4000595140
Sampled by: OXY/JE

Sample Type: SPOT-CYLINDER
Sample Temperature (F): NA
Sample Pressure (PSIG): 65

Sample Pressure (PSIG):65Flow rate (MCF/Day):NAAmbient Temperature (F):92

Sampling method: FILL & EMPTY

Cylinder Number: 27765

| NATURAL GAS ANALYSIS: GPA 2261 |                       |                    |               |               |               |
|--------------------------------|-----------------------|--------------------|---------------|---------------|---------------|
| Components                     | Un-Normalized<br>Mol% | Normalized<br>Mol% | GPM<br>14.650 | GPM<br>14.730 | GPM<br>15.025 |
| Hydrogen Sulfide               | 0.0000                | 0.0000             |               |               |               |
| Nitrogen                       | 1.3966                | 1.4225             |               |               |               |
| Methane                        | 73.8165               | 75.1904            |               |               |               |
| Carbon Dioxide                 | 0.2787                | 0.2839             |               |               |               |
| Ethane                         | 11.7436               | 11.9622            | 3.194         | 3.212         | 3.276         |
| Propane                        | 5.8394                | 5.9481             | 1.636         | 1.645         | 1.678         |
| Isobutane                      | 0.7746                | 0.7890             | 0.258         | 0.259         | 0.264         |
| N-butane                       | 1.9443                | 1.9804             | 0.623         | 0.627         | 0.639         |
| Isopentane                     | 0.4841                | 0.4931             | 0.180         | 0.181         | 0.185         |
| N-Pentane                      | 0.5569                | 0.5672             | 0.205         | 0.206         | 0.211         |
| Hexanes(C6's)                  | 0.3958                | 0.4031             | 0.166         | 0.166         | 0.170         |
| Heptanes (C7's)                | 0.4035                | 0.4110             | 0.189         | 0.190         | 0.194         |
| Octanes (C8's)                 | 0.3339                | 0.3401             | 0.174         | 0.175         | 0.178         |
| Nonanes Plus (C9+)             | 0.2052                | 0.2090             | 0.117         | 0.118         | 0.120         |

100.0000

14.650 psia 14.730 psia **Physical Properties (Calculated)** 15.025 psia Total GPM Ethane+ 6.742 6.780 6.916 Total GPM Iso-Pentane+ 1.031 1.037 1.059 Compressibility (Z) 0.9958 0.9957 0.9956 Specific Gravity (Air=1) @ 60 °F 0.7832 0.7832 0.7833 Molecular Weight 22.596 22.596 22.596 **Gross Heating Value** 14.650 psia 14.730 psia 15.025 psia Dry, Real (BTU/Ft3) 1332.6 1340.0 1367.0 Wet, Real (BTU/Ft3) 1309.3 1316.6 1343.1 Dry, Ideal (BTU/Ft3) 1334.2 1361.0 1327.0 Wet, Ideal (BTU/Ft3) 1303.8 1310.9 1337.2

Temperature base 60 °F

Total

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 28-4 CTB Flare Date: 06/22/2023

**Duration of event:** 1 Hour 45 Minutes **MCF Flared:** 307

Start Time: 04:00 AM End Time: 05:45 AM

Cause: Emergency Flare > Third Party Downstream Activity > San Mateo Gas Plant > 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 Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to a power outage, which in turn caused high line pressure to occur, which then triggered a flaring event to occur. 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 Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to a power outage, which in turn caused high line pressure to occur, which then triggered a flaring event to occur. 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. 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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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 288156

#### **DEFINITIONS**

| Operator:             | OGRID:  |
|-----------------------|---|
| OXY USA INC           | 16696   |
| P.O. Box 4294         | Action Number:                                |
| Houston, TX 772104294 | 288156  |
|                       | 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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environment or fresh water

existence

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

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

QUESTIONS

Action 288156

## **QUESTIONS**

| Operator:   | (                                | OGRID:  |
|---|----------------------------------|---|
| OXY USA INC   | (                                | 16696   |
| P.O. Box 4294   | 1                                | Action Number:  |
| Houston, TX 772104294   |                                  | 288156  |
|   | A                                | 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 continui     | ing with the rest of the questions.                             |
| Incident Operator   | [16696] OXY USA INC              | :   |
| Incident Type   | Flare                            |   |
| Incident Status   | Closure Approved                 |   |
| Incident Well   | Unavailable.                     |   |
| Incident Facility   | [fAB1901048503] CED              | DAR CANYON 28-4 CTB   |
| Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section  | on) that are assigned to you     | r 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 a  | nd may provide addional gui      | dance.  |
| 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  | No                               |   |
| Is this considered a submission for a vent or flare event   | Yes, minor venting ar            | nd/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 o | 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 <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 | No                               |   |

| Equipment Involved  |   |  |
|---|---|--|
| Primary Equipment Involved                                | Other (Specify)   |  |
| Additional details for Equipment Involved. Please specify | Emergency Flare > Third Party Downstream Activity > San Mateo Gas Plant > 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 (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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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 2

Action 288156

| QUESTIONS (continued) |
|-----------------------|
|-----------------------|

| Operator:             | OGRID:  |
|-----------------------|---|
| OXY USA INC           | 16696   |
| P.O. Box 4294         | Action Number:                                |
| Houston, TX 772104294 | 288156  |
|                       | 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 | 06/22/2023 |  |
| Time vent or flare was discovered or commenced | 04:00 AM   |  |
| Time vent or flare was terminated              | 05:45 AM   |  |
| Cumulative hours during this event             | 2          |  |

| Natural Gas Vented (Mcf) Details  | Not answered.  |
|---|--|
| Natural Gas Flared (Mcf) Details  | Cause: Other   Other (Specify)   Natural Gas Flared   Released: 307 MCF   Recovered: 0 MC   Lost: 307 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 Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to a power outage, which in turn caused high line pressure to occur, which then triggered a flaring event to occur. This event could not have been foreseen, avoided or prevented from happening as this event occurred with no advance notice or warning. |
| 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, San Mateo Gas Plant, third party owned and operated downstream plant, shut in their gas plant due to a power outage, which in turn caused high line pressure to occur, which then triggered a flaring event to occur. 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. 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'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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ACKNOWLEDGMENTS

Action 288156

## **ACKNOWLEDGMENTS**

| Operator:             | OGRID:  |  |
|-----------------------|---|--|
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| P.O. Box 4294         | Action Number:                                |  |
| Houston, TX 772104294 | 288156  |  |
|                       | Action Type:                                  |  |
|                       | [C-129] Amend Venting and/or Flaring (C-129A) |  |

### **ACKNOWLEDGMENTS**

| V | 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 NI   |  |
|---|---|--|
| V | 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.   |  |
| V | 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.   |  |
| 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. |  |
| ✓ | 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 288156

## **CONDITIONS**

| Operator:             | OGRID:  |
|-----------------------|---|
| OXY USA INC           | 16696   |
| P.O. Box 4294         | Action Number:                                |
| Houston, TX 772104294 | 288156  |
|                       | 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. | 11/26/2023     |