AKM Measurement Services, LLC
Carlsbad, New Mexico



**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 | LOST TANK 5 CPF PRODUCTION 1 |
| Technician | ANTHONY DOMINGUEZ |
| Analyzer Make & Model | INFICON MICRO GC |
| Last Calibration/Validation Date | 05-14-2024 |
| Meter Number | 118610 |
| Air temperature | 86 |
| Flow Rate (MCF/Day) | 18398 |
| Heat Tracing | HEATED HOSE & GASIFIER |
| Sample description/mtr name | LOST TANK 5 CPF PRODUCTION 1 |
| Sampling Method | FILL & EMPTY |
| Operator | OCCIDENTAL PETROLEUM, OXY USA INC |
| State | NEW MEXICO |
| Region Name | PERMIAN_RESOURCES |
| Asset | NEW MEXICO |
| System | GOLD LOG |
| FLOC | OP-DELNE-BT011 |
| Sample Sub Type | CTB |
| Sample Name Type | METER |
| Vendor | AKM MEASUREMENT |
| Cylinder # | 005153 |
| Sampled by | SCOTT |
| Sample date | 5-8-2024 |
| Analyzed date | 5-16-2024 |
| Method Name | C9 |
| Injection Date | 2024-05-16 09:30:10 |
| Report Date | 2024-05-16 09:48:43 |
| EZReporter Configuration File | 1-16-2023 OXY GPA C9+ H2S #2.cfgx |
| Source Data File | e393afe2-09b5-4406-a3d0-061d007a58c6 |
| 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 | 31553.6 | 1.8134 | 0.00005747 | 1.8077 | 0.0 | 0.01748 | 0.200 | |
| Methane | 946787.9 | 68.7129 | 0.00007257 | 68.4947 | 693.4 | 0.37939 | 11.668 | |
| CO2 | 3918.6 | 0.1863 | 0.00004754 | 0.1857 | 0.0 | 0.00282 | 0.032 | |
| Ethane | 310560.6 | 14.3199 | 0.00004611 | 14.2745 | 253.2 | 0.14820 | 3.836 | |
| H2S | 0.0 | 0.0000 | 0.00000000 | 0.0000 | 0.0 | 0.00000 | 0.000 | |
| Propane | 237031.2 | 7.7279 | 0.00003260 | 7.7034 | 194.3 | 0.11728 | 2.133 | |
| iso-butane | 90753.1 | 1.0103 | 0.00001113 | 1.0071 | 32.8 | 0.02021 | 0.331 | |
| n-Butane | 253628.9 | 2.8085 | 0.00001107 | 2.7996 | 91.5 | 0.05618 | 0.887 | |
| iso-pentane | 85196.1 | 0.8413 | 0.00000987 | 0.8386 | 33.6 | 0.02089 | 0.308 | |
| n-Pentane | 113493.3 | 1.0762 | 0.00000948 | 1.0728 | 43.1 | 0.02672 | 0.391 | |
| hexanes | 115435.0 | 1.1481 | 0.00000995 | 1.1445 | 54.6 | 0.03405 | 0.473 | |
| heptanes | 92413.0 | 0.5631 | 0.00000609 | 0.5613 | 31.0 | 0.01942 | 0.260 | |
| octanes | 20131.0 | 0.1083 | 0.00000538 | 0.1080 | 6.8 | 0.00426 | 0.056 | |
| nonanes+ | 724.0 | 0.0021 | 0.00000291 | 0.0021 | 0.1 | 0.00009 | 0.001 | |
| Total: | | 100.3183 | | 100.0000 | 1434.4 | 0.84701 | 20.576 | |

## Results Summary

| Result | Dry | Sat. | |
|---|---|---|---|
| Total Un-Normalized Mole% | 100.3183 | | |
| Pressure Base (psia) | 14.730 | | |
| Temperature Base (Deg. F) | 60.00 | | |
| Flowing Temperature (Deg. F) | 115.0 | | |

| Result | Dry | Sat. |
|---|---|---|
| Flowing Pressure (psia) | 95.6 | |
| Gross Heating Value (BTU / Ideal cu.ft.) | 1434.4 | 1409.4 |
| Gross Heating Value (BTU / Real cu.ft.) | 1441.7 | 1417.3 |
| Relative Density (G), Real | 0.8510 | 0.8474 |

## Monitored Parameter Report

| Parameter | Value | Lower Limit | Upper Limit | Status |
|---|---|---|---|---|
| Total un-normalized amount | 100.3183 | 97.0000 | 103.0000 | Pass |

# UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

**Facility:** Lost Tank 5 CPF

**Flare Date:** 01/18/2025

**Duration of Event:** 30 Minutes

**MCF Flared:** 240

**Start Time:** 10:30 PM

**End Time:** 11:00 PM

**Cause:** Emergency Flare > Power Outage > Power Surge

**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, during extreme frigid weather conditions, Lost tank 5 CPF suddenly and unexpectedly experienced a power surge, which caused a complete shutdown of all pumps and then caused the facility water VRT to achieve a Hihi level due to the pumps being down. This ultimately caused a COC of the Facility, which also shut down all the compression equipment on the Lost Tank 5 CGL side. 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, during extreme frigid weather conditions, Lost tank 5 CPF suddenly and unexpectedly experienced a power surge, which caused a complete shutdown of all pumps and then caused the facility water VRT to achieve a Hihi level due to the pumps being down. This ultimately caused a COC of the Facility, which also shut down all the compression equipment on the Lost Tank 5 CGL side. When power came back everything started to get reset at both the Lost Tank 5 CPF and the Lost Tank 5 CGL, in order to reduce the pressure to both facilities. 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 limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of sudden and unpredictable power surges. When the power unpredictably goes out or surges suddenly, various operational equipment such as pumps, valves, and compressors may stop working, leading to overpressure in certain units, which can lead to an unforeseen flaring event. If overpressure builds up in critical equipment, it could lead to ruptures or explosions, which is why Oxy, in an effort to mitigate those circumstances, and to ensure the safety of its operations and personnel, resorts to controlled and safety flaring, when necessary. This process allows us to safely burn off the excess gas, thereby preventing potential hazards such as equipment damage, leaks, or even explosions. While flaring is not our preferred method of handling excess gas, it is a necessary step under these exceptional circumstances to maintain the integrity and safety of our operations. 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.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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



## DEFINITIONS

| | |
|---|---|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696 |
| | Action Number:<br>427354 |
| | Action Type:<br>[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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QUESTIONS

Action 427354

## QUESTIONS

| | |
|---|---|
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**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 Well | *Unavailable.* |
| Incident Facility | **[fAPP2410600153] Lost Tank 5 Tankless CPF** |

| **Determination of Reporting Requirements** | |
|---|---|
| *Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide addional 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 | No |
| 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 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 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 > Power Outage > Power Surge |

| **Representative Compositional Analysis of Vented or Flared Natural Gas** | |
|---|---|
| *Please provide the mole percent for the percentage questions in this group.* | |
| Methane (CH4) percentage | 68 |
| 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 | 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 | *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.* |
| Oxygen (02) percentage quality requirement | *Not answered.* |

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## QUESTIONS (continued)

| | |
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| | Action Number:<br>427354 |
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**QUESTIONS**

| **Date(s) and Time(s)** | |
|---|---|
| Date vent or flare was discovered or commenced | 01/18/2025 |
| Time vent or flare was discovered or commenced | 10:30 PM |
| Time vent or flare was terminated | 11:00 PM |
| Cumulative hours during this event | 1 |

| **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: 240 Mcf \| Recovered: 0 Mcf \| Lost: 240 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, during extreme frigid weather conditions, Lost tank 5 CPF suddenly and unexpectedly experienced a power surge, which caused a complete shutdown of all pumps and then caused the facility water VRT to achieve a Hihi level due to the pumps being down. This ultimately caused a COC of the Facility, which also shut down all the compression equipment on the Lost Tank 5 CGL side. 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, during extreme frigid weather conditions, Lost tank 5 CPF suddenly and unexpectedly experienced a power surge, which caused a complete shutdown of all pumps and then caused the facility water VRT to achieve a Hihi level due to the pumps being down. This ultimately caused a COC of the Facility, which also |

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|---|---|
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## ACKNOWLEDGMENTS

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**ACKNOWLEDGMENTS**

| | |
|---|---|
| ☑ | 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. |
| ☑ | 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. |
| ☑ | 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. |
| ☑ | 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

| | |
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**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. | 2/2/2025 |