**Natural Gas Analysis Report**

GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

| | Sample Information |
|---|---|
| Sample Name | lost tank 18 facility production 1 (fmp) v-1010 |
| Technician | Danny J |
| Analyzer Make & Model | INFICON MICRO GC |
| Last Calibration/Validation Date | 3-8-2023 |
| Meter Number | 16411p |
| Air temperature | 71 |
| Flow Rate (MCF/Day) | 25435 |
| Heat Tracing | Heated Hose & Gasifier |
| Sample description/mtr name | lost tank 18 facility production 1 (fmp) v-1010 |
| Sampling Method | fill and empty |
| Operator | AKM MEASUREMENT |
| State | New Mexico |
| Region Name | Permian Resources |
| Asset | new mexico |
| System | east |
| FLOC | op-delne-bt010 |
| Sample Sub Type | meter |
| Sample Name Type | ctb |
| Vendor | akm |
| Cylinder # | 27798 |
| Sampled by | jonathan aldrich |
| Sample date | 3-7-2023 |
| Analyzed date | 3-8-2023 |
| Method Name | C9 |
| Injection Date | 2023-03-08 14:09:13 |
| Report Date | 2023-03-08 14:07:12 |
| EZReporter Configuration File | 1-16-2023 OXY GPA C9+ H2S #2.cfgx |
| Source Data File | 80135ddf-b144-4dfd-b24e-da86f97ecc64 |
| 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 | 23176.5 | 1.5087 | 0.00006510 | 1.4924 | 0.0 | 0.01443 | 0.165 | |
| Methane | 789907.9 | 71.7938 | 0.00009089 | 71.0166 | 718.9 | 0.39336 | 12.091 | |
| CO2 | 4248.3 | 0.2447 | 0.00005760 | 0.2420 | 0.0 | 0.00368 | 0.041 | |
| Ethane | 253314.9 | 14.0709 | 0.00005555 | 13.9185 | 246.9 | 0.14450 | 3.738 | |
| H2S | 0.0 | 0.0000 | 0.00000000 | 0.0000 | 0.0 | 0.00000 | 0.000 | |
| Propane | 187121.2 | 7.6655 | 0.00004097 | 7.5825 | 191.2 | 0.11544 | 2.098 | |
| iso-butane | 58320.5 | 1.0090 | 0.00001730 | 0.9981 | 32.5 | 0.02003 | 0.328 | |
| n-Butane | 154085.2 | 2.6453 | 0.00001717 | 2.6166 | 85.6 | 0.05251 | 0.828 | |
| iso-pentane | 38587.0 | 0.5807 | 0.00001505 | 0.5744 | 23.0 | 0.01431 | 0.211 | |
| n-Pentane | 46221.7 | 0.6830 | 0.00001478 | 0.6756 | 27.1 | 0.01683 | 0.246 | |
| hexanes | 36033.0 | 0.4207 | 0.00001168 | 0.4162 | 19.8 | 0.01238 | 0.172 | |
| heptanes | 36586.0 | 0.3379 | 0.00000924 | 0.3342 | 18.4 | 0.01156 | 0.155 | |
| octanes | 17386.0 | 0.1325 | 0.00000762 | 0.1311 | 8.2 | 0.00517 | 0.067 | |
| nonanes+ | 2822.0 | 0.0018 | 0.00000063 | 0.0018 | 0.1 | 0.00008 | 0.001 | |
| Total: | | 101.0945 | | 100.0000 | 1371.9 | 0.80429 | 20.142 | |

## Results Summary

| Result | Dry | Sat. | |
|---|---|---|---|
| Total Un-Normalized Mole% | 101.0945 | | |
| Pressure Base (psia) | 14.730 | | |
| Temperature Base (Deg. F) | 60.00 | | |
| Flowing Temperature (Deg. F) | 98.0 | | |
| Flowing Pressure (psia) | 117.0 | | |
| Gross Heating Value (BTU / Ideal cu.ft.) | 1371.9 | 1348.0 | |
| Gross Heating Value (BTU / Real cu.ft.) | 1378.1 | 1354.7 | |

# Monitored Parameter Report



| Parameter | Value | Lower Limit | Upper Limit | Status | |
|---|---|---|---|---|---|
| Total un-normalized amount | 101.0945 | 97.0000 | 103.0000 | Pass | |

# UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

**Facility:** Lost Tank 18 CPF

**Flare Date:** 09/07/2023

**Duration of Event:** 1 Hour 50 Minutes

**MCF Flared:** 182

**Start Time:** 02:00 PM

**End Time:** 03:50 PM

**Cause:** Emergency Flare > Well Surges

**Method of Flared Gas Measurement:** Gas Flare Meter

---

## 1. Reason why this event was beyond Operator's control:

Gas had to be flared rather than be compressed due to several wells flowing to the facility began surging more gas than the compressors engines could handle, which led OXY to route the overflow of sales gas to a flare in order to minimize emissions as much as possible. This type of flaring is unforeseeable and unanticipated as wells surge from time to time, which are out of OXY's control to avoid or prevent from happening, yet OXY made every effort to control and minimize emissions as much as possible. OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible.

## 2. Steps Taken to limit duration and magnitude of venting or flaring:

The steps taken to limit the duration of this flaring event was as soon as the wells began surging Oxy production techs began taking the immediate steps to adjust the facility’s optimizers to shut in wells in an effort to reduce flaring, Additional production techs would slowly start choking back several wells in the area with the pressure control valves on the flowlines until the flaring incident was minimized and stopped. OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible. This type of flaring is unforeseeable and unanticipated as wells surge from time to time, which are out of OXY's control to avoid or prevent from happening, 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:

This flaring event was unforeseeable and unanticipated as wells surge from time to time, which is out of OXY's control to avoid or prevent from happening. OXY made every effort to control and minimize emissions as much as possible. Constant communication and adjustments by and between OXY production techs to the compression equipment are not immediate, as it takes time for the compressors to speed up, just like any engines on a vehicle, they don't go from 0 to 100 mph immediately. Adjustments were already being made and as the compression sped up to handle the well surges and/or wells were adjusted to cut back so that each instance of intermittent flaring was minimal.

**District I**
1625 N. French Dr., Hobbs, NM 88240
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
**District IV**
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

| | |
|---|---|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696 |
| | Action Number:<br>266499 |
| | 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.

**District I**
1625 N. French Dr., Hobbs, NM 88240
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
**District IV**
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

QUESTIONS

Action 266499

## QUESTIONS

| | |
|---|---|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696 |
| | Action Number:<br>266499 |
| | Action Type:<br>[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 with the rest of the questions.* | |
| Incident Well | *Unavailable.* |
| Incident Facility | **[fAPP2226965761] Lost Tank 18 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 > Well Surges |

| **Representative Compositional Analysis of Vented or Flared Natural Gas** | |
|---|---|
| *Please provide the mole percent for the percentage questions in this group.* | |
| Methane (CH4) percentage | 71 |
| 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 | *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.* |

**District I**
1625 N. French Dr., Hobbs, NM 88240
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
**District IV**
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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696 |
| | Action Number:<br>266499 |
| | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS**

| **Date(s) and Time(s)** | |
|---|---|
| Date vent or flare was discovered or commenced | 09/07/2023 |
| Time vent or flare was discovered or commenced | 02:00 PM |
| Time vent or flare was terminated | 03:50 PM |
| Cumulative hours during this event | 2 |

| **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: 182 Mcf \| Recovered: 0 Mcf \| Lost: 182 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 | Gas had to be flared rather than be compressed due to several wells flowing to the facility began surging more gas than the compressors engines could handle, which led OXY to route the overflow of sales gas to a flare in order to minimize emissions as much as possible. This type of flaring is unforeseeable and unanticipated as wells surge from time to time, which are out of OXY's control to avoid or prevent from happening, yet OXY made every effort to control and minimize emissions as much as possible. OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible. |
| Steps taken to limit the duration and magnitude of vent or flare | The steps taken to limit the duration of this flaring event was as soon as the wells began surging Oxy production techs began taking the immediate steps to adjust the facility's optimizers to shut in wells in an effort to reduce flaring, Additional production techs would slowly start choking back several wells in the area with the pressure control valves on the flowlines until the flaring incident was minimized and stopped. OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to minimize emissions as much as possible. This type of flaring is unforeseeable and unanticipated as wells surge from time to time, which are out of OXY's control to avoid or prevent from happening, yet OXY made every effort to control and minimize emissions as much as possible. |
| | This flaring event was unforeseeable and unanticipated as wells surge from time to time, which is out of OXY's control to avoid or prevent from happening. OXY made every effort to |

| | |
|---|---|
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare | control and minimize emissions as much as possible. Constant communication and adjustments by and between OXY production techs to the compression equipment are not immediate, as it takes time for the compressors to speed up, just like any engines on a vehicle, they don't go from 0 to 100 mph immediately. Adjustments were already being made and as the compression sped up to handle the well surges and/or wells were adjusted to cut back so that each instance of intermittent flaring was minimal. |

**District I**
1625 N. French Dr., Hobbs, NM 88240
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
**District IV**
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



## ACKNOWLEDGMENTS

| | |
|---|---|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696 |
| | Action Number:<br>266499 |
| | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**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. |

**District I**
1625 N. French Dr., Hobbs, NM 88240
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
**District IV**
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

CONDITIONS

Action 266499

## CONDITIONS

| | |
|---|---|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696 |
| | Action Number:<br>266499 |
| | Action Type:<br>[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. | 9/25/2023 |