



## Certificate of Analysis

Number: 5030-22090053-001A

Midland Laboratory

2200 East I-20

Midland, TX 79706

Phone 432-689-7252

Samanntha Avarello  
MorningStar Partners LLC/Cross Timbers Energy LLC  
400 W 7th St  
Fort Worth, TX 76102

Sep. 14, 2022

Station Name: CENTRAL VACUUM UNIT BATTERY

Method: GPA 2286

Cylinder No: 5030-02288

Analyzed: 09/06/2022 19:39:57 by DMA

Sampled By: RONNIE RICHARD

Sample Of: Gas Spot

Sample Date: 08/31/2022 12:35

Sample Conditions: 132.2 psig, @ 97.4 °F

## Analytical Data

| Components             | Mol. %  | Wt. %   | GPM at<br>14.696 psia |               |
|------------------------|---------|---------|-----------------------|---------------|
| Hydrogen Sulfide       | 0.000   | 0.000   |                       | GPM TOTAL C2+ |
| Carbon Dioxide         | 87.589  | 87.095  |                       | 3.122         |
| Nitrogen               | 0.376   | 0.238   |                       |               |
| Methane                | 1.953   | 0.708   |                       |               |
| Ethane                 | 2.731   | 1.855   | 0.734                 |               |
| Propane                | 2.725   | 2.715   | 0.754                 |               |
| Iso-Butane             | 0.531   | 0.697   | 0.175                 |               |
| n-Butane               | 1.599   | 2.100   | 0.506                 |               |
| Iso-Pentane            | 0.566   | 0.923   | 0.208                 |               |
| n-Pentane              | 0.610   | 0.994   | 0.222                 |               |
| Cyclopentane           | 0.047   | 0.075   | 0.014                 |               |
| n-Hexane               | 0.213   | 0.409   | 0.087                 |               |
| Cyclohexane            | 0.134   | 0.256   | 0.046                 |               |
| Other Hexanes          | 0.348   | 0.680   | 0.145                 |               |
| Heptanes               | 0.316   | 0.665   | 0.130                 |               |
| Methylcyclohexane      | 0.066   | 0.147   | 0.027                 |               |
| 2,2,4-Trimethylpentane | 0.002   | 0.006   | 0.001                 |               |
| Benzene                | 0.067   | 0.120   | 0.019                 |               |
| Toluene                | 0.051   | 0.106   | 0.017                 |               |
| Ethylbenzene           | 0.005   | 0.013   | 0.002                 |               |
| Xylenes                | 0.005   | 0.010   | 0.002                 |               |
| Octanes Plus           | 0.066   | 0.188   | 0.033                 |               |
|                        | 100.000 | 100.000 | 3.122                 |               |

## Calculated Physical Properties

|                             | Total  | C8+    |
|-----------------------------|--------|--------|
| Relative Density Real Gas   | 1.5378 | 3.5192 |
| Calculated Molecular Weight | 44.26  | 101.92 |
| Compressibility Factor      | 0.9932 |        |

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.696 psia & 60°F

|                         |       |        |
|-------------------------|-------|--------|
| Real Gas Dry BTU        | 318.4 | 5336.0 |
| Water Sat. Gas Base BTU | 312.9 | 5207.0 |

Comments: H2S Field Content 0 ppm

Data reviewed by: Marco Barrientos

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

**CVU BTY**

**VolMCF/HoursFlowed = Flared Gas/ Day**

03/26/2025 = 25,243

**Applicable Natural Gas Flared**

**CO2 87.58%**

Total MCF - CO2

100 - 87.58 = 12.41

25,243 \*.1241 = **3,133 mcf**

**Pressure Base Conversion**

**3,133 \* .9750415 = 3,055 MCF Flared**

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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 451563

DEFINITIONS

|                                                                                |                                                               |
|--------------------------------------------------------------------------------|---------------------------------------------------------------|
| Operator:<br>MorningStar Operating LLC<br>400 W 7th St<br>Fort Worth, TX 76102 | OGRID:<br>330132                                              |
|                                                                                | Action Number:<br>451563                                      |
|                                                                                | Action Type:<br>[C-129] Amend Venting and/or Flaring (C-129A) |

DEFINITIONS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application:</p> <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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QUESTIONS

Action 451563

**QUESTIONS**

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

**QUESTIONS**

| <b>Prerequisites</b>                                                                                                                                                                                     |                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <i>Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.</i>                                |                                                                 |
| Incident ID (n#)                                                                                                                                                                                         | Unavailable.                                                    |
| Incident Name                                                                                                                                                                                            | Unavailable.                                                    |
| Incident Type                                                                                                                                                                                            | Flare                                                           |
| Incident Status                                                                                                                                                                                          | Unavailable.                                                    |
| Incident Facility                                                                                                                                                                                        | [FPAC0614330614] CVU Tank Battery (CVU TB) and Injection System |
| <i>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.</i> |                                                                 |

| <b>Determination of Reporting Requirements</b>                                                                                                                                                                                                                                             |                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i>                                                                                                                                                 |                                                   |
| 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. |
| <i>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.</i>                                                                                     |                                                   |
| Was there <b>at least 50 MCF</b> 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 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                                                |

| <b>Equipment Involved</b>                                 |                 |
|-----------------------------------------------------------|-----------------|
| Primary Equipment Involved                                | Other (Specify) |
| Additional details for Equipment Involved. Please specify | FLARE           |

| <b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>                                                         |               |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <i>Please provide the mole percent for the percentage questions in this group.</i>                                                   |               |
| Methane (CH4) percentage                                                                                                             | 2             |
| Nitrogen (N2) percentage, if greater than one percent                                                                                | 0             |
| Hydrogen Sulfide (H2S) PPM, rounded up                                                                                               | 0             |
| Carbon Dioxide (CO2) percentage, if greater than one percent                                                                         | 88            |
| Oxygen (O2) percentage, if greater than one percent                                                                                  | 0             |
| <i>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</i> |               |
| 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 451563

**QUESTIONS (continued)**

|                                                                                |                                                               |
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|                                                                                | Action Number:<br>451563                                      |
|                                                                                | Action Type:<br>[C-129] Amend Venting and/or Flaring (C-129A) |

**QUESTIONS**

| Date(s) and Time(s)                            |            |
|------------------------------------------------|------------|
| Date vent or flare was discovered or commenced | 03/26/2025 |
| Time vent or flare was discovered or commenced | 12:00 AM   |
| Time vent or flare was terminated              | 11:59 PM   |
| Cumulative hours during this event             | 24         |

| Measured or Estimated Volume of Vented or Flared Natural Gas              |                                                                                                                                           |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Natural Gas Vented (Mcf) Details                                          | Not answered.                                                                                                                             |
| Natural Gas Flared (Mcf) Details                                          | Cause: Midstream Emergency Maintenance   Other (Specify)   Natural Gas Flared   Released: 3,055 Mcf   Recovered: 0 Mcf   Lost: 3,055 Mcf. |
| Other Released Details                                                    | Not answered.                                                                                                                             |
| Additional details for Measured or Estimated Volume(s). Please specify    | FLARE                                                                                                                                     |
| 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 | Yes                                          |
| Downstream OGRID that should have notified this operator          | [706273] El Paso Natural Gas Company, L.L. C |
| Date notified of downstream activity requiring this vent or flare | 03/18/2025                                   |
| Time notified of downstream activity requiring this vent or flare | 01:11 PM                                     |

| 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                                                     | EPNG line number 3051 anomaly requiring repair |
| Steps taken to limit the duration and magnitude of vent or flare                                                                | SI where possible or bypass flow               |
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare                                               | EPNG to repair line number 3051                |



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ACKNOWLEDGMENTS

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**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

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CONDITIONS

| Created By | Condition                                                                                                                                                                                  | Condition Date |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| savarello  | 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. | 4/14/2025      |