**TABLE 6-6**
**GAS ANALYSIS**
**LONGFELLOW ENERGY LP**
**MARLEY STATE COM 31 AB**
**EDDY COUNTY, NEW MEXICO**

| Component | Mole % | Molecular Weight | lb/100 mole | Wt % Total | Wt % Hydrocarbon | Wt % VOC |
|---|---|---|---|---|---|---|
| $H_2S$ | 0.0500 | 34.08 | 1.70 | 0.071 | -- | -- |
| N2 | 5.8559 | 28.01 | 164.02 | 6.876 | -- | -- |
| CO2 | 1.7128 | 44.01 | 75.38 | 3.160 | -- | -- |
| Methane | 66.8732 | 16.04 | 1072.65 | 44.969 | 44.969 | -- |
| Ethane | 13.1059 | 30.07 | 394.09 | 16.522 | 16.522 | -- |
| Propane | 7.1813 | 44.10 | 316.70 | 13.277 | 13.277 | 13.28% |
| Isobutane | 0.9038 | 58.12 | 52.53 | 2.202 | 2.202 | 2.20% |
| n-Butane | 2.2252 | 58.12 | 129.33 | 5.422 | 5.422 | 5.42% |
| Isopentane | 0.5241 | 72.15 | 37.81 | 1.585 | 1.585 | 1.59% |
| n-Pentane | 0.5642 | 72.15 | 40.71 | 1.707 | 1.707 | 1.71% |
| Benzene | 0.0000 | 78.11 | 0.00 | 0.000 | 0.000 | 0.00% |
| Toluene | 0.0000 | 92.14 | 0.00 | 0.000 | 0.000 | 0.00% |
| E-Benzene | 0.0000 | 106.17 | 0.00 | 0.000 | 0.000 | 0.000% |
| Xylenes | 0.0000 | 106.17 | 0.00 | 0.000 | 0.000 | 0.00% |
| N-Hexane | 0.0000 | 86.18 | 0.00 | 0.000 | 0.000 | 0.00% |
| Hexanes+ | 1.0037 | 100.00 | 100.37 | 4.208 | 4.208 | 4.21% |
| Total | 100.00 | -- | 2385.29 | 100.00 | 89.89 | 28.40% |

Notes:
1. Gas analysis from SPL, sampled 1/13/2022. This sample was pulled from the same reservoir as Marley State Com 31 AB and is considered to be a representative analysis.

FLARING SUMMARY

| Battery | Date | Total Flare Vol (mcf) | Hrs Flared | Start | | End | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

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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

| | |
|---|---|
| Operator:<br>LONGFELLOW ENERGY, LP<br>8115 Preston Road<br>Dallas, TX 75225 | OGRID:<br>372210 |
| | Action Number:<br>583407 |
| | Action Type:<br>[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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QUESTIONS

Action 583407

## QUESTIONS

| | |
|---|---|
| Operator:<br>LONGFELLOW ENERGY, LP<br>8115 Preston Road<br>Dallas, TX 75225 | OGRID:<br>372210 |
| | Action Number:<br>583407 |
| | Action Type:<br>[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 ID (n#) | *Unavailable.* |
| Incident Name | *Unavailable.* |
| Incident Type | **Flare** |
| Incident Status | *Unavailable.* |
| Incident Well | **[30-015-54605] MARLEY STATE COM 31 CD #003H** |
| *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 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 | 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 withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence | No |

| **Equipment Involved** | |
|---|---|
| Primary Equipment Involved | *Not answered.* |
| Additional details for Equipment Involved. Please specify | *Not answered.* |

| **Representative Compositional Analysis of Vented or Flared Natural Gas** | |
|---|---|
| *Please provide the mole percent for the percentage questions in this group.* | |
| Methane (CH4) percentage | 67 |
| Nitrogen (N2) percentage, if greater than one percent | 6 |
| Hydrogen Sulfide (H2S) PPM, rounded up | 0 |
| Carbon Dioxide (C02) percentage, if greater than one percent | 2 |
| 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)

| | |
|---|---|
| Operator:<br>LONGFELLOW ENERGY, LP<br>8115 Preston Road<br>Dallas, TX 75225 | OGRID:<br>372210 |
| | Action Number:<br>583407 |
| | 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 | 04/23/2026 |
| Time vent or flare was discovered or commenced | 12:01 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 \| Separator \| Natural Gas Flared \| Released: 1,405 Mcf \| Recovered: 0 Mcf \| Lost: 1,405 Mcf. |
| Other Released Details | *Not answered.* |
| Additional details for Measured or Estimated Volume(s). Please specify | *Not answered.* |
| 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 | |
| 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 | No way to avoid periodic downtime for maintenance or repairs to address unforeseen issues |
| Steps taken to limit the duration and magnitude of vent or flare | Worked with vendor to coordinate service time and minimize downtime |
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare | No way to avoid periodic downtime for maintenance or repairs to address unforeseen issues |

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## ACKNOWLEDGMENTS

| | |
|---|---|
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| | Action Number:<br>583407 |
| | Action Type:<br>[C-129] Amend Venting and/or Flaring (C-129A) |

**ACKNOWLEDGMENTS**

| | |
|---|---|
| ☑ | 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. |
| ☑ | 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. |
| ☑ | 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. |
| ☑ | 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 |
|---|---|---|
| jlogan | 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. | 5/8/2026 |