

**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 ₂ S	0.0500	34.08	1.70	0.071	--	--
N ₂	5.8559	28.01	164.02	6.876	--	--
CO ₂	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

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

Action 581471

DEFINITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 581471
	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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QUESTIONS

Action 581471

QUESTIONS

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	Action Number: 581471
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Prerequisites	
<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 Well	[30-015-53816] MARLEY STATE COM 31 AB #003H
<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>	

Determination of Reporting Requirements	
<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 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 within 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	
<i>Please provide the mole percent for the percentage questions in this group.</i>	
Methane (CH4) percentage	67
Nitrogen (N2) percentage, if greater than one percent	6
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	2
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 581471

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	04/20/2026
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: 749 Mcf Recovered: 0 Mcf Lost: 749 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

Action 581471

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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
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.	5/4/2026