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C6+ Gas Analysis Report

11806G		230025001		Buckeye CO2 Plant VGSAU Inlet	
Sample Point Code		Sample Point Name		Sample Point Location	
Laboratory Services		2023074371		1884	
Source Laboratory		Lab File No		Container Identity	
USA		USA		USA	
District		Area Name		Field Name	
Aug 23, 2023 12:08		Aug 23, 2023 12:08		Aug 25, 2023 09:57	
Date Sampled		Date Effective		Date Received	
86.00		Admin		134 @ 85	
Ambient Temp (°F)		Analyst		Press PSI @ Temp °F	
Flow Rate (Mcf)				Source Conditions	
Morningstar				NG	
Operator				Lab Source Description	

Component	Mol %	GPM
H2S (H2S)	0.4000	
Nitrogen (N2)	2.2010	
Oxygen (O2)		
CO2 (CO2)	82.3490	
Methane (C1)	6.7110	
Ethane (C2)	3.8200	1.0210
Propane (C3)	1.9030	0.5240
I-Butane (IC4)	0.2960	0.0970
N-Butane (NC4)	0.8390	0.2640
I-Pentane (IC5)	0.2920	0.1070
N-Pentane (NC5)	0.3040	0.1100
Hexanes Plus (C6+)	0.8850	0.3840
TOTAL	100.0000	2.5070

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 °F		14.73 PSI @ 60.00 °F	
Dry	Saturated	Dry	Saturated
293.1	289.000	293.8	289.7
Calculated Total Sample Properties			
GPA2145-16 *Calculated at Contract Conditions			
Relative Density Real		Relative Density Ideal	
1.4575		1.4493	
Molecular Weight			
41.9731			
C6+ Group Properties			
Assumed Composition			
C6 - 60.000%	C7 - 30.000%	C8 - 10.000%	
Field H2S			
4000 PPM			

PROTREND STATUS:

DATA SOURCE:

Passed By Validator on Aug 28, 2023

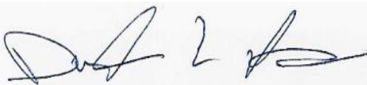
Imported

PASSED BY VALIDATOR REASON:

Close enough to be considered reasonable.

VALIDATOR:

Rush



VALIDATOR COMMENTS:

OK

Source	Date	Notes
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VGSAU P2 SATELLITE BTY

VolMCF/HoursFlowed = Flared Gas/ Day

09/01/2023 = 9,389

Applicable Natural Gas Flared

CO2 82.3490%

100 - 82.3490 = 17.66

Total MCF - CO2

9389 *.1766 = **1658 mcf Pressure**

Base Conversion

1658 * .9750415 = 1616 MCF

Initial 8 hr deduction

1616 mcf - 1077 = **539 MCF FLARED**

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Oil Conservation Division
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DEFINITIONS

Action 271907

DEFINITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 271907
	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 271907

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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 Operator	[330132] MorningStar Operating LLC
Incident Type	Flare
Incident Status	Closure Not Approved
Incident Well	Unavailable.
Incident Facility	[fAPP2133453800] VGSAU P2 Satellite
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 additional 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 within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

Equipment Involved

Primary Equipment Involved	Gas Plant
Additional details for Equipment Involved. Please specify	Flare due to Buckeye CO2 Plant power surge resulting in control system server failure

Representative Compositional Analysis of Vented or Flared Natural Gas

Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	7
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	82
Oxygen (O2) 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 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 271907

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	09/01/2023
Time vent or flare was discovered or commenced	12:00 PM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	12

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: 539 Mcf Recovered: 0 Mcf Lost: 539 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Flare due to Buckeye CO2 Plant power surge resulting in control system server failure
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	Flare due to Buckeye CO2 Plant power surge resulting in control system server failure
Steps taken to limit the duration and magnitude of vent or flare	Shut in where possible
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Buckeye CO2 Plant control system server repaired

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ACKNOWLEDGMENTS

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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
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.	10/3/2023