



Certificate of Analysis

Number: 5030-22090049-001A

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. 15, 2022

Station Name: VACUUM DRINKARD CONSOLIDATED TANK BAT Sampled By: RONNIE RICHARD
Method: GPA 2286 Sample Of: Gas Spot
Cylinder No: 5030-03545 Sample Date: 08/31/2022 10:50
Analyzed: 09/07/2022 08:20:55 by MGN Sample Conditions: 17.8 psig, @ 75 °F

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.696 psia	
Hydrogen Sulfide	0.000	0.000		GPM TOTAL C2+ 0.526
Carbon Dioxide	0.002	0.005		
Nitrogen	2.838	4.770		
Methane	95.191	91.632		
Ethane	1.949	3.517	0.521	
Propane	0.014	0.037	0.004	
Iso-Butane	0.000	0.000	0.000	
n-Butane	0.000	0.000	0.000	
Iso-Pentane	0.000	0.000	0.000	
n-Pentane	0.000	0.000	0.000	
Cyclopentane	0.000	0.000	0.000	
n-Hexane	0.000	0.002	0.000	
Cyclohexane	0.003	0.004	0.000	
Other Hexanes	0.000	0.002	0.000	
Heptanes	0.000	0.005	0.000	
Methylcyclohexane	0.000	0.001	0.000	
2,2,4-Trimethylpentane	0.000	0.000	0.000	
Benzene	0.000	0.002	0.000	
Toluene	0.003	0.004	0.000	
Ethylbenzene	0.000	0.001	0.000	
Xylenes	0.000	0.003	0.000	
Octanes Plus	0.000	0.015	0.001	
	100.000	100.000	0.526	

Calculated Physical Properties	Total	C8+
Relative Density Real Gas	0.5763	4.3237
Calculated Molecular Weight	16.67	125.23
Compressibility Factor	0.9980	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.696 psia & 60°F

Real Gas Dry BTU	998.6	6547.4
Water Sat. Gas Base BTU	981.2	6420.3

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.



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Sep. 15, 2022

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400 W 7th St

Fort Worth, TX 76102

Station Name: VACUUM DRINKARD CONSOLIDATED TANK BA Sampled By: RONNIE RICHARD
Sample Conditions: 17.8 psig, @ 75 °F Sample Of: Gas Spot
Cylinder No: 5030-03545 Sample Date: 08/31/2022 10:50

Analytical Data

Test	Method	Result	Units	Detection Limit	Lab Tech.	Analysis Date
Hydrogen Sulfide	ASTM D-4810	ND	ppm		RJR	08/01/2022

A handwritten signature in black ink, appearing to read 'Marco Barrientos', is written over a horizontal line.

Data reviewed by: Marco Barrientos

Quality Assurance:

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Fort Worth, TX 76102

Sep. 15, 2022

Station Name: VACUUM DRINKARD CONSOLIDATED TANK BAT Sampled By: RONNIE RICHARD
Method: GPA 2103M Sample Of: Oil Spot
Cylinder No: 5030-00035 Sample Date: 08/31/2022 11:07
Analyzed: 09/06/2022 16:02:50 by DMA Sample Conditions: 17.8 psig, @ 75 °F

Analytical Data

Components	Mol. %	MW	Wt. %	Sp. Gravity	L.V. %
Carbon Dioxide	0.696	44.010	0.162	0.8172	0.167
Nitrogen	0.007	28.013	0.001	0.8069	0.001
Methane	0.742	16.043	0.063	0.3000	0.176
Ethane	0.629	30.069	0.100	0.3563	0.236
Propane	1.547	44.096	0.361	0.5072	0.598
Iso-Butane	0.494	58.122	0.152	0.5628	0.227
n-Butane	2.247	58.122	0.691	0.5842	0.993
Iso-Pentane	1.687	72.149	0.644	0.6251	0.865
n-Pentane	2.442	72.149	0.932	0.6307	1.241
Other Hexanes	1.976	86.175	0.901	0.6641	1.140
Heptanes	6.451	100.202	3.420	0.6882	4.174
Octanes	10.216	114.229	6.174	0.7066	7.339
Nonanes	6.399	128.255	4.342	0.7222	5.049
Decanes Plus	54.713	266.647	77.189	0.8896	72.876
Benzene	1.174	78.112	0.485	0.8844	0.461
Toluene	3.530	92.138	1.721	0.8719	1.658
Ethylbenzene	2.380	106.165	1.337	0.8716	1.288
Xylenes	0.951	106.167	0.534	0.8761	0.512
n-Hexane	1.669	86.175	0.761	0.6641	0.963
2,2,4-Trimethylpentane	0.050	114.229	0.030	0.6964	0.036
	100.000		100.000		100.000

Calculated Physical Properties

	Total	C10+
Specific Gravity at 60°F	0.8399	0.8896
API Gravity at 60°F	36.970	27.556
Molecular Weight	189.008	266.647
Pounds per Gallon (in Vacuum)	7.003	7.417
Pounds per Gallon (in Air)	6.995	7.409
Cu. Ft. Vapor per Gallon @ 14.696 psia	14.060	10.556

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.

VACUUM DRINKARD BTY

MTD Avg Gas – Prod Gas =

Vented Gas/ Day

05/11/24 = 66

Pressure Base Conversion

14.65/15.025 = .9750415

142 *.9750415 = **64 mcf Vented**

District I
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District II
811 S. First St., Artesia, NM 88210
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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

Action 352197

DEFINITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 352197
	Action Type: [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.
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QUESTIONS

Action 352197

QUESTIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 352197
	Action Type: [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	[fAB1915155171] Vacuum Drinkard Consolidated Tank Battery

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	No
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, 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	FLARE

Representative Compositional Analysis of Vented or Flared Natural Gas Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	95
Nitrogen (N2) percentage, if greater than one percent	3
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.

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QUESTIONS, Page 2
Action 352197

QUESTIONS (continued)

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 352197
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	05/11/2024
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	Cause: Midstream Scheduled Maintenance Other (Specify) Natural Gas Vented Released: 64 Mcf Recovered: 0 Mcf Lost: 64 Mcf.
Natural Gas Flared (Mcf) Details	Not answered.
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	[24650] TARGA MIDSTREAM SERVICES LLC
Date notified of downstream activity requiring this vent or flare	05/07/2024
Time notified of downstream activity requiring this vent or flare	07:02 AM

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	Event is due to Monument Plant Turn Around
Steps taken to limit the duration and magnitude of vent or flare	SI WHERE POSSIBLE
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Cause out of our control

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ACKNOWLEDGMENTS

Action 352197

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Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID:
	330132
	Action Number:
	352197
Action Type:	
[C-129] Venting and/or Flaring (C-129)	

ACKNOWLEDGMENTS

☒	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (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.

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CONDITIONS

Action 352197

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 352197
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
savarello	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.	6/7/2024