Certificate of Analysis

Number: 6030-21110085-001A

Artesia Laboratory
200 E Main St.
Artesia, NM 88210
Phone 575-746-3481

Zach LaCount
Mewbourne Oil Company
4801 Business Park Blvd
Hobbs, NM 88240

Nov. 16, 2021

Station Name:	Buffalo Trace 1/36 Battery VRT	Sampled By:	Michael Mirabal
Station Location:	Mewbourne	Sample Of:	Gas Spot
Sample Point:	VRT	Sample Date:	10/28/2021 03:33
Instrument:	6030_GC2 (Agilent GC-7890B)	Sample Conditions:	40 psig Ambient: 71 °F
Last Inst. Cal.:	09/13/2021 14:05 PM	Effective Date:	10/28/2021 03:33
Analyzed:	11/12/2021 07:58:21 by EJR	Method:	GPA 2286
		Cylinder No:	5030-01255

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia		
Hydrogen Sulfide	0.000	0.00000	0.000		GPM TOTAL C2+	24.470
Nitrogen	1.970	1.97400	1.312		GPM TOTAL C3+	17.973
Methane	16.433	16.46600	6.269		GPM TOTAL iC5+	3.912
Carbon Dioxide	0.151	0.15100	0.158			
Ethane	23.914	23.96200	17.099	6.497		
Propane	28.994	29.05400	30.403	8.115		
Iso-butane	5.226	5.23700	7.223	1.737		
n-Butane	13.143	13.17000	18.166	4.209		
Iso-pentane	2.668	2.67300	4.577	0.991		
n-Pentane	3.111	3.11700	5.337	1.145		
Hexanes Plus	4.188	4.19600	9.456	1.776		
	99.798	100.00000	100.000	24.470		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	1.4774	3.2600
Calculated Molecular Weight	42.14	94.42
Compressibility Factor	0.9839	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	2406	5099
Water Sat. Gas Base BTU	2364	5010
Ideal, Gross HV - Dry at 14.696 psia	2367.2	5099.1
Ideal, Gross HV - Wet	2325.9	0.000

Comments: H2S Field Content 0 ppm

Data reviewed by: Eric Ramirez, Analyst

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

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Nov. 16, 2021

Station Name:	Buffalo Trace 1/36 Battery VRT	Sampled By:	Michael Mirabal
Station Location:	Mewbourne	Sample Of:	Gas Spot
Sample Point:	VRT	Sample Date:	10/28/2021 03:33
Cylinder No:	5030-01255	Sample Conditions:	40 psig
Analyzed:	11/12/2021 10:27:00 by EJR	Method:	GPA 2286

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.696 psia
Hydrogen Sulfide	0.000	0.000	
Nitrogen	1.974	1.312	
Methane	16.466	6.269	
Carbon Dioxide	0.151	0.158	
Ethane	23.962	17.099	6.497
Propane	29.054	30.403	8.115
Iso-Butane	5.237	7.223	1.737
n-Butane	13.170	18.166	4.209
Iso-Pentane	2.673	4.577	0.991
n-Pentane	3.117	5.337	1.145
i-Hexanes	0.948	1.913	0.386
n-Hexane	0.673	1.382	0.282
Benzene	0.044	0.078	0.012
Cyclohexane	0.347	0.692	0.120
i-Heptanes	0.786	1.753	0.326
n-Heptane	0.263	0.624	0.123
Toluene	0.072	0.159	0.024
i-Octanes	0.675	1.689	0.304
n-Octane	0.076	0.206	0.039
Ethylbenzene	0.004	0.011	0.002
Xylenes	0.060	0.160	0.023
i-Nonanes	0.148	0.420	0.076
n-Nonane	0.036	0.113	0.020
Decanes Plus	0.064	0.256	0.039
	100.000	100.000	24.470

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Nov. 16, 2021

Station Name:	Buffalo Trace 1/36 Battery VRT	Sampled By:	Michael Mirabal
Station Location:	Mewbourne	Sample Of:	Gas Spot
Sample Point:	VRT	Sample Date:	10/28/2021 03:33
Cylinder No:	5030-01255	Sample Conditions:	40 psig
Analyzed:	11/12/2021 10:27:00 by EJR	Method:	GPA 2286

Calculated Physical Properties	**Total**	**C10+**
Calculated Molecular Weight	42.14	147.53
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	2406.0	8002.1
Water Sat. Gas Base BTU	2364.0	7735.8
Relative Density Real Gas	1.4774	5.0939
Compressibility Factor	0.9839	
Ideal, Gross HV - Wet	2325.9	
Ideal, Gross HV - Dry at 14.696 psia	2367.2	
Net BTU Dry Gas - real gas	2213	
Net BTU Wet Gas - real gas	2174	

Comments: H2S Field Content 0 ppm

Data reviewed by: Eric Ramirez, Analyst

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

Mewbourne Oil Company

Natural Gas Flared Calculation Methodology

Metering low-pressure gas diverted from the Vapor Recovery Unit ("VRU") to backup flare is not technologically feasible. Gas volumes for VRU downtime events will be calculated using an average metered VRU gas to oil production ratio. This GOR is derived from available relevant data.

Average Metered VRU Gas to Oil Production GOR = 0.18 Mcf/BBL

Flared gas volume = GOR * Oil Production Volume (BBL)

808.002.00072551

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

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 411565
	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 411565

QUESTIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 411565
	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	**[fAPP2125645029] BUFFALO TRACE 1/36 W1PA FED 1H BATTERY**

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, 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	VRU

Representative Compositional Analysis of Vented or Flared Natural Gas	
Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	16
Nitrogen (N2) percentage, if greater than one percent	2
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 (continued)

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 411565
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	12/07/2024
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	*Not answered.*
Natural Gas Flared (Mcf) Details	Cause: Equipment Failure | Other (Specify) | Natural Gas Flared | Released: 298 Mcf | Recovered: 0 Mcf | Lost: 298 Mcf.
Other Released Details	*Not answered.*
Additional details for Measured or Estimated Volume(s). Please specify	Volume calculated
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	*Not answered.*
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	VRU malfunctioned
Steps taken to limit the duration and magnitude of vent or flare	Repaired VRU
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Continued routine preventive maintenance and daily operational inspections

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ACKNOWLEDGMENTS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 411565
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

☑	I acknowledge that I am authorized to submit a *Venting and/or Flaring* (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

Operator:	OGRID:
MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	14744
	Action Number: 411565
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
zlacount	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.	12/13/2024