



Certificate of Analysis

Number: 6030-21100297-002A

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. 04, 2021

Station Name: Silver Bullet 16 Battery VRU
Station Location: Mewbourne
Sample Point: VRU Meter run
Instrument: 6030_GC2 (Agilent GC-7890B)
Last Inst. Cal.: 09/13/2021 15:05 PM
Analyzed: 11/02/2021 09:31:43 by EJL

Sampled By: Michael Mirabal
Sample Of: Gas Spot
Sample Date: 10/28/2021
Sample Conditions: 117 psig Ambient: 72 °F
Effective Date: 10/28/2021
Method: GPA 2286
Cylinder No: 5030-02268

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia	
Hydrogen Sulfide	0.000	0.00000	0.000		GPM TOTAL C2+ 12.465
Nitrogen	0.572	0.56400	0.544		GPM TOTAL C3+ 8.264
Methane	58.266	57.47100	31.765		GPM TOTAL iC5+ 2.285
Carbon Dioxide	0.115	0.11300	0.171		
Ethane	15.848	15.63200	16.194	4.201	
Propane	12.366	12.19700	18.529	3.377	
Iso-butane	2.285	2.25400	4.513	0.741	
n-Butane	5.954	5.87300	11.760	1.861	
Iso-pentane	1.497	1.47700	3.671	0.543	
n-Pentane	1.868	1.84200	4.579	0.671	
Hexanes Plus	2.613	2.57700	8.274	1.071	
	101.384	100.00000	100.000	12.465	

Calculated Physical Properties

	Total	C6+
Relative Density Real Gas	1.0089	3.2035
Calculated Molecular Weight	29.03	92.78
Compressibility Factor	0.9926	

GPA 2172 Calculation:

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

Real Gas Dry BTU	1704	5020
Water Sat. Gas Base BTU	1674	4932
Ideal, Gross HV - Dry at 14.696 psia	1691.2	5019.5
Ideal, Gross HV - Wet	1661.7	0.000

Comments: H2S Field Content 0 ppm

Data reviewed by: Krystle Fitzwater, Laboratory Manager

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. 04, 2021

Station Name: Silver Bullet 16 Battery VRU
Station Location: Mewbourne
Sample Point: VRU Meter run
Cylinder No: 5030-02268
Analyzed: 11/03/2021 09:10:29 by EJR

Sampled By: Michael Mirabal
Sample Of: Gas Spot
Sample Date: 10/28/2021
Sample Conditions: 117 psig
Method: GPA 2286

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.696 psia
Hydrogen Sulfide	0.000	0.000	
Nitrogen	0.564	0.544	
Methane	57.471	31.765	
Carbon Dioxide	0.113	0.171	
Ethane	15.632	16.194	4.201
Propane	12.197	18.529	3.377
Iso-Butane	2.254	4.513	0.741
n-Butane	5.873	11.760	1.861
Iso-Pentane	1.477	3.671	0.543
n-Pentane	1.842	4.579	0.671
i-Hexanes	0.651	1.897	0.263
n-Hexane	0.464	1.382	0.192
Benzene	0.029	0.076	0.008
Cyclohexane	0.214	0.622	0.073
i-Heptanes	0.480	1.552	0.197
n-Heptane	0.159	0.545	0.073
Toluene	0.041	0.131	0.014
i-Octanes	0.379	1.386	0.170
n-Octane	0.041	0.157	0.021
Ethylbenzene	0.002	0.007	0.001
Xylenes	0.029	0.102	0.011
i-Nonanes	0.065	0.281	0.033
n-Nonane	0.012	0.054	0.007
Decanes Plus	0.011	0.082	0.008
	100.000	100.000	12.465



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Nov. 04, 2021

Station Name: Silver Bullet 16 Battery VRU
Station Location: Mewbourne
Sample Point: VRU Meter run
Cylinder No: 5030-02268
Analyzed: 11/03/2021 09:10:29 by EJRSampled By: Michael Mirabal
Sample Of: Gas Spot
Sample Date: 10/28/2021
Sample Conditions: 117 psig
Method: GPA 2286

Calculated Physical Properties	Total	C10+
Calculated Molecular Weight	29.03	156.31
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	1703.8	8552.5
Water Sat. Gas Base BTU	1674.0	8341.1
Relative Density Real Gas	1.0089	5.3970
Compressibility Factor	0.9926	
Ideal, Gross HV - Wet	1661.7	
Ideal, Gross HV - Dry at 14.696 psia	1691.2	
Net BTU Dry Gas - real gas	1557	
Net BTU Wet Gas - real gas	1530	

Comments: H2S Field Content 0 ppm

Data reviewed by: Krystle Fitzwater, Laboratory Manager

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)

District I1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720**District II**811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720**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

QUESTIONS

Action 63316

QUESTIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 63316
	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	Not answered.
Incident Facility	[fAPP2125248837] SILVER BULLET 16 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 or is this venting and/or flaring caused by an emergency or malfunction	Yes
Did or will this venting and/or flaring last eight hours or more cumulatively within any 24-hour period from a single event	Yes
Is this considered a submission for a venting and/or flaring 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 or will there be at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this venting and/or flaring 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 venting and/or flaring 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	57
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	0
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.

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	11/17/2021
Time venting and/or flaring was discovered or commenced	12:00 AM
Time venting and/or flaring 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: 274 Mcf Recovered: 0 Mcf Lost: 274 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 or is this venting and/or flaring a result of downstream activity	Not answered.
Was notification of downstream activity received by you or your operator	Not answered.
Downstream OGRID that should have notified you or your operator	Not answered.
Date notified of downstream activity requiring this venting and/or flaring	Not answered.
Time notified of downstream activity requiring this venting and/or flaring	Not answered.

Steps and Actions to Prevent Waste

For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control.	True
Please explain reason for why this event was beyond your operator's control	VRU malfunctioned
Steps taken to limit the duration and magnitude of venting and/or flaring	Repaired VRU
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	Continued routine preventive maintenance and daily operational inspections

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CONDITIONS

Action 63316

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Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 63316
	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.	11/30/2021