



## Certificate of Analysis

Number: 6030-21100279-009A

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. 01, 2021

Station Name: Inland 26//23  
Station Number: N/A  
Station Location: Mewbourne  
Sample Point: Meter Run VRU  
Instrument: 6030\_GC2 (Agilent GC-7890B)  
Last Inst. Cal.: 09/13/2021 14:54 PM  
Analyzed: 10/29/2021 07:52:39 by EJL

Sampled By: Chad Whitt  
Sample Of: Gas Spot  
Sample Date: 10/26/2021  
Sample Conditions: 91 psig, @ 90.9 °F Ambient: 91 °F  
Effective Date: 10/26/2021  
Method: GPA 2286  
Cylinder No: 5030-02665

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.696 psia	
Hydrogen Sulfide	0.000	0.00000	0.000		GPM TOTAL C2+ 6.247
Nitrogen	2.028	1.99500	2.529		GPM TOTAL C3+ 3.102
Methane	76.131	74.87700	54.354		GPM TOTAL iC5+ 0.651
Carbon Dioxide	1.205	1.18500	2.360		
Ethane	11.941	11.74500	15.980	3.145	
Propane	5.880	5.78300	11.539	1.595	
Iso-butane	0.876	0.86200	2.267	0.282	
n-Butane	1.848	1.81800	4.781	0.574	
Iso-pentane	0.590	0.58000	1.894	0.212	
n-Pentane	0.540	0.53100	1.734	0.193	
Hexanes Plus	0.634	0.62400	2.562	0.246	
	101.673	100.00000	100.000	6.247	

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7657	3.1335
Calculated Molecular Weight	22.10	90.76
Compressibility Factor	0.9962	

## GPA 2172 Calculation:

Calculated Gross BTU per ft<sup>3</sup> @ 14.696 psia & 60°F

Real Gas Dry BTU	1277	4845
Water Sat. Gas Base BTU	1254	4761
Ideal, Gross HV - Dry at 14.696 psia	1271.7	4845.4
Ideal, Gross HV - Wet	1249.5	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.



## Certificate of Analysis

Number: 6030-21100279-009A

Artesia Laboratory

200 E Main St.  
Artesia, NM 88210  
Phone 575-746-3481Zach LaCount  
Mewbourne Oil Company  
4801 Business Park Blvd  
Hobbs, NM 88240

Nov. 01, 2021

Station Name: Inland 26//23  
Station Number: N/A  
Station Location: Mewbourne  
Sample Point: Meter Run VRU  
Analyzed: 11/01/2021 06:18:03 by EJRSampled By: Chad Whitt  
Sample Of: Gas Spot  
Sample Date: 10/26/2021  
Sample Conditions: 91 psig, @ 90.9 °F  
Method: GPA 2286  
Cylinder No: 5030-02665

## Analytical Data

Components	Mol. %	Wt. %	GPM at 14.696 psia
Hydrogen Sulfide	0.000	0.000	
Nitrogen	1.995	2.529	
Methane	74.877	54.354	
Carbon Dioxide	1.185	2.360	
Ethane	11.745	15.980	3.145
Propane	5.783	11.539	1.595
Iso-Butane	0.862	2.267	0.282
n-Butane	1.818	4.781	0.574
Iso-Pentane	0.580	1.894	0.212
n-Pentane	0.531	1.734	0.193
i-Hexanes	0.161	0.619	0.065
n-Hexane	0.080	0.326	0.034
Benzene	0.047	0.169	0.013
Cyclohexane	0.062	0.239	0.021
i-Heptanes	0.104	0.427	0.041
n-Heptane	0.022	0.099	0.010
Toluene	0.036	0.150	0.012
i-Octanes	0.070	0.318	0.030
n-Octane	0.006	0.030	0.003
Ethylbenzene	0.005	0.022	0.002
Xylenes	0.008	0.039	0.003
i-Nonanes	0.013	0.073	0.007
n-Nonane	0.003	0.016	0.002
Decanes Plus	0.007	0.035	0.003
	100.000	100.000	6.247



## Certificate of Analysis

Number: 6030-21100279-009A

Artesia Laboratory

200 E Main St.  
Artesia, NM 88210  
Phone 575-746-3481Zach LaCount  
Mewbourne Oil Company  
4801 Business Park Blvd  
Hobbs, NM 88240

Nov. 01, 2021

Station Name: Inland 26//23  
Station Number: N/A  
Station Location: Mewbourne  
Sample Point: Meter Run VRU  
Analyzed: 11/01/2021 06:18:03 by EJRSampled By: Chad Whitt  
Sample Of: Gas Spot  
Sample Date: 10/26/2021  
Sample Conditions: 91 psig, @ 90.9 °F  
Method: GPA 2286  
Cylinder No: 5030-02665

Calculated Physical Properties	Total	C10+
Calculated Molecular Weight	22.10	147.27
<b>GPA 2172 Calculation:</b>		
<b>Calculated Gross BTU per ft<sup>3</sup> @ 14.696 psia &amp; 60°F</b>		
Real Gas Dry BTU	1276.6	7868.4
Water Sat. Gas Base BTU	1254.3	7701.4
Relative Density Real Gas	0.7657	5.0848
Compressibility Factor	0.9962	
Ideal, Gross HV - Wet	1249.5	
Ideal, Gross HV - Dry at 14.696 psia	1271.7	
Net BTU Dry Gas - real gas	1159	
Net BTU Wet Gas - real gas	1139	

**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 I**1625 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 61395

**QUESTIONS**

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID:	14744
	Action Number:	61395
	Action Type:	[C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b>	
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	[fAPP2125746427] INLAND 26/23 B2OJ ST COM 1H 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	No
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	76
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	1
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	10/28/2021
Time venting and/or flaring was discovered or commenced	02:30 AM
Time venting and/or flaring was terminated	09:30 AM
Cumulative hours during this event	7

**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: 112 Mcf   Recovered: 0 Mcf   Lost: 112 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

**District I**  
1625 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**

CONDITIONS  
  
Action 61395

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 61395
	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.	11/12/2021