



## Pre Plugging Methane Quantification Test Report

Report Prepared By Curtis Shuck

**Start Date:** Mon Jan 29 2024 00:31:38 GMT+0000  
 (Coordinated Universal Time)  
**End Date:** Mon Jan 29 2024 19:34:52 GMT+0000  
 (Coordinated Universal Time)  
**Test Time Subset:** 2024-01-29T00:31:27.258Z -  
 2024-01-29T19:33:52.584Z  
**Device:** VB100-0081  
**Well Licensee:** NMOCD  
**Well Name:** Mobil King 002  
**UWI:** 30-025-09336  
**Well License Number:** Unknown  
**Surface Location:** Unknown  
**Bottom Hole Location:** Unknown  
**Test Operator:** ces QMS  
**Authorized By:** NMOCD  
**Test Reason:** IJJA PRE PLUG  
**Scope Of Work:** 12- hour  
**AFE Number:** Lea24.001  
**GPS:** 32.31809,-103.21792  
**Notes:** GTG

### Orphan Well Flow Test Results

Average Flowrate	Average Flow Temperature	Average Flow Pressure	Flow Duration	Methane Concentration	Methane Emissions	Benzene
179.6075 scf/hr	52.14 °F	0.857 psi	1142.42 min	79.8 %	2752.48 g/hr	1 ppm

Annual Emission Rate =  $(\bar{Q}_{measured}) \times (Conc_{measured}) \times p \times 0.454 \times 8,760$

#### Methane Calculation:

$(\bar{Q}_{measured})$  179.6075 scf/hr x  $(Conc_{measured})$  0.798 = 143.3267771 scf CH<sub>4</sub>/hr

Methane Flow x  $(p)$  x .0423 x .454 x 8,760 = 24111.7248 CH<sub>4</sub> kg/yr Emission Rate

#### Where:

$Q_{measured}$  - scf/hr total measured flow

$Conc_{measured}$  - methane concentration measured

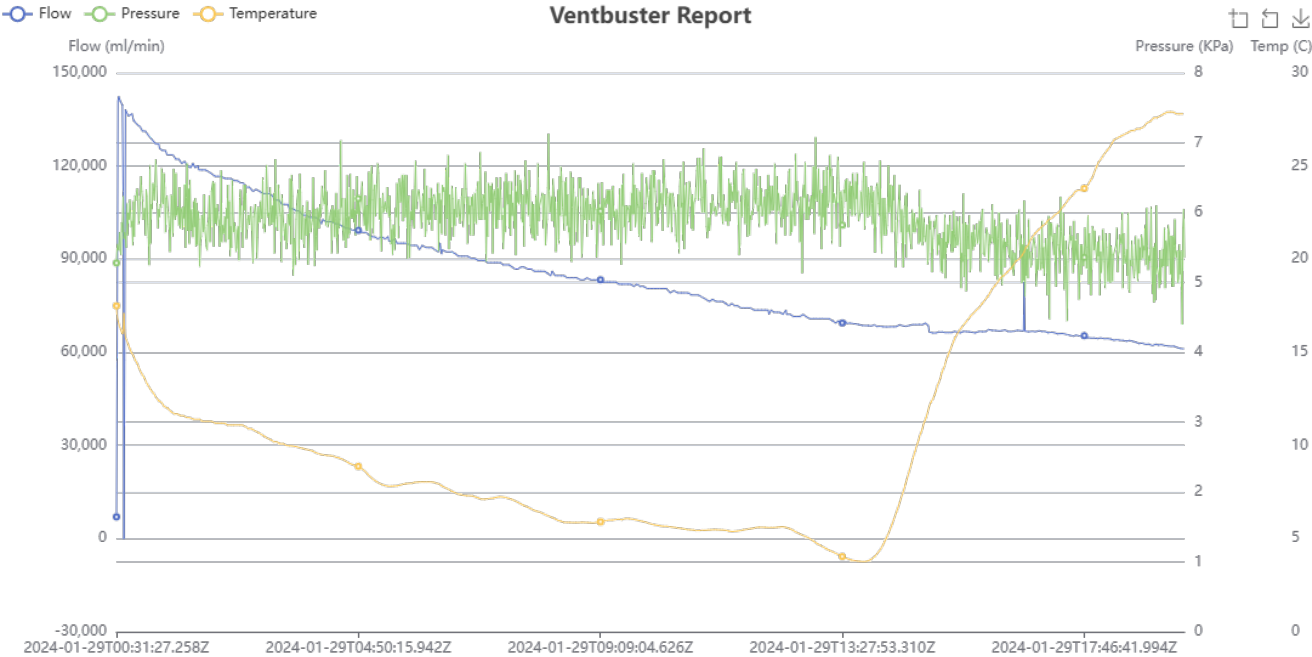
$p$  - 0.0423 methane density at 1 atm; 60° F

0.454 - Conversion from lb to kg

8760 - Conversion from hr to yr

# Flow/Pressure/Temperature Timeseries

Ventbuster Report



## Site Photos



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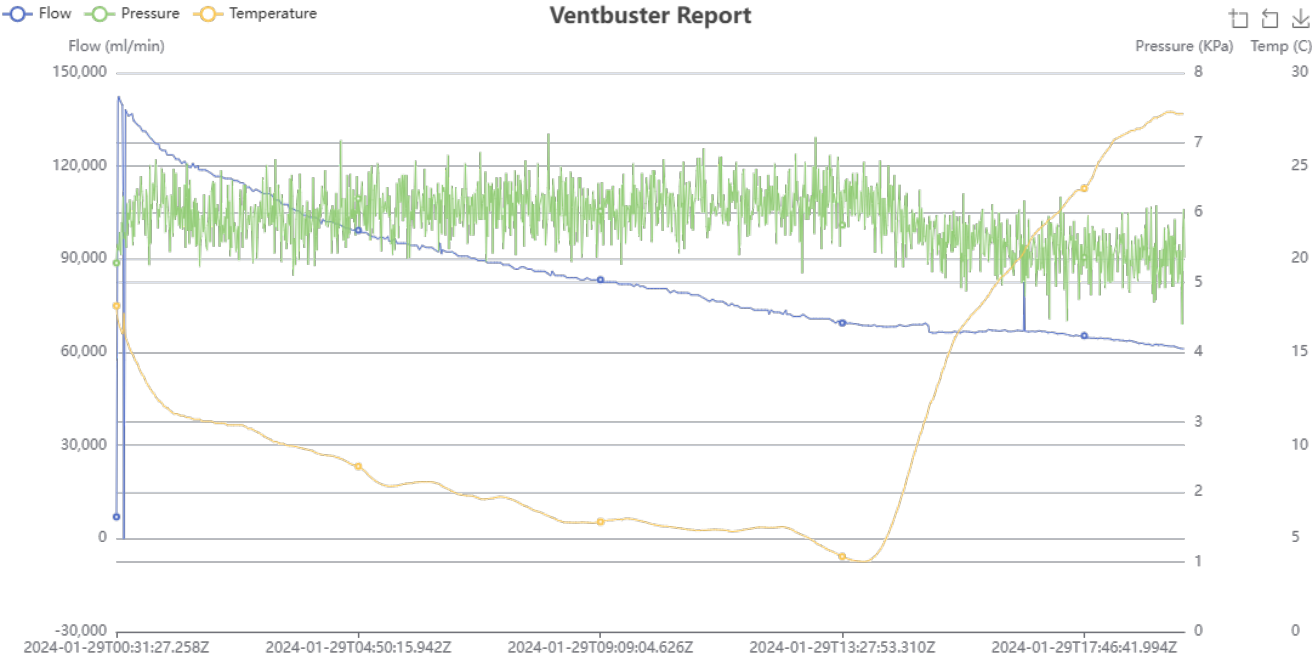
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# Flow/Pressure/Temperature Timeseries

Ventbuster Report



## Site Photos

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

Action 522182

DEFINITIONS

Operator: Well Done New Mexico LLC (OPG Vendor) 333 Main St Shelby, MT 59474	OGRID: 333567
	Action Number: 522182
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

DEFINITIONS

The OCD Mitigation Activity (OMA) forms are a subset of the OCD's forms exclusively designed for activities related to State of New Mexico's contracted evaluation, plugging, decommissioning, remediation, salvage and reclamation activities. Specifically, these forms are typically used where the OCD has acquired a hearing order allowing the OCD to perform mitigation activities on wells and associated facilities that no longer have an authorized or viable operator to perform the necessary work. These forms are not to be utilized for any other purpose.

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QUESTIONS

Action 522182

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Operator: Well Done New Mexico LLC (OPG Vendor) 333 Main St Shelby, MT 59474	OGRID: 333567
	Action Number: 522182
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

QUESTIONS

<b>Prerequisites</b>	
[OGRID] Well Operator	[142624] ROCA PRODUCTION INC.
[API] Well Name and Number	[30-025-09336] MOBIL KING #002
Well Status	Reclamation Fund Approved

<b>Monitoring Event Information</b>	
Please answer all the questions in this group.	
Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	01/29/2024
Latitude	32.3180313
Longitude	-103.2177277

<b>Monitoring Event Details</b>	
Please answer all the questions in this group.	
Flow rate in cubic meters per day (m³/day)	121.92
Test duration in hours (hr)	19.0
Average flow temperature in degrees Celsius (°C)	11.1
Average gauge flow pressure in kilopascals (kPag)	5.9
Methane concentration in part per million (ppm)	798,070
Methane emission rate in grams per hour (g/hr)	3,449.70
Testing Method	Steady State

<b>Monitoring Contractor</b>	
Please answer all the questions in this group.	
Name of monitoring contractor	WELL DONE NEW MEXICO LLC