



Pre Plugging Methane Quantification Test Report

Report Prepared By Curtis Shuck

Start Date: Sun Dec 01 2024 22:52:20 GMT+0000
 (Coordinated Universal Time)
End Date: Tue Dec 03 2024 15:09:13 GMT+0000
 (Coordinated Universal Time)
Test Time Subset: 2024-12-01T22:50:52.816Z -
 2024-12-03T15:07:45.136Z
Device: VB100-0054
Well Licensee: NMOCD
Well Name: Malaga Unit 001
UWI: 30-015-03701
Well License Number: 30-015-03701
Surface Location: Oxy
Bottom Hole Location: Unknown
Test Operator: CES QMS
Authorized By: NMOCD
Test Reason: IJJA / BIL PRE PLUG
Scope Of Work: 2- hour normalized flow
AFE Number: 78646
GPS: 32.23314,-104.02472
Notes: Unknown

Orphan Well Flow Test Results

Average Flowrate	Average Flow Temperature	Average Flow Pressure	Flow Duration	Methane Concentration	Methane Emissions	Benzene
-0.0005 scf/hr	55.86 °F	0.6668 psi	2416.87 min	100 %	-0.01 g/hr	1 ppm

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

Methane Calculation:

$(\bar{x}Q_{measured})$ -0.0005 scf/hr x $(Conc_{measured})$ 1= -0.00052201 scf CH₄/hr

Methane Flow x (p) x .0423 x .454 x 8,760 = -0.0876 CH₄ kg/yr Emission Rate

Where:

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

$Conc_{measured}$ - methane concentration measured

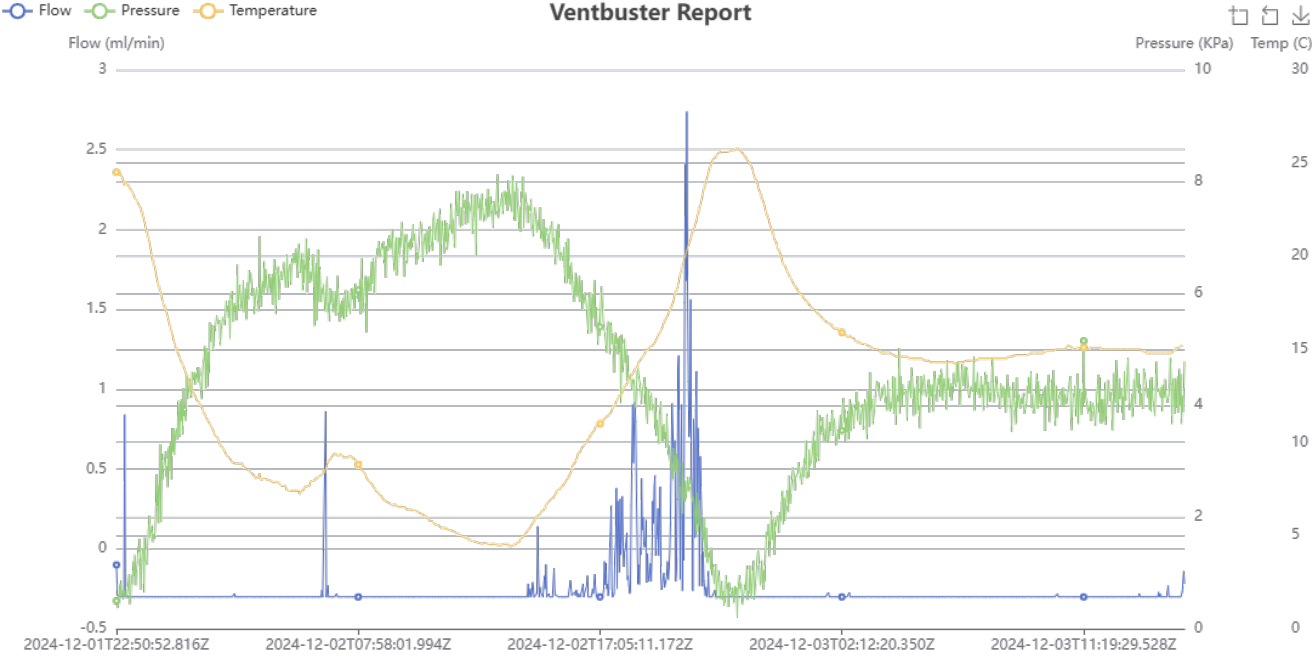
p - 0.0423 methane density at 1 atm; 60° F

0.454 - Conversion from lb to kg

8760 - Conversion from hr to yr

Flow/Pressure/Temperature Timeseries

Ventbuster Report



Site Photos



23014G		Malaga Unit 1 Pre Plug		Malaga Unit 1 Pre Plug	
Sample Point Code		Sample Point Name		Sample Point Location	
Laboratory Services		2024102452		BAG	
Source Laboratory		Lab File No		Container Identity	
USA		USA		USA	
District		Area Name		Field Name	
Dec 1, 2024 16:09		Dec 1, 2024		Dec 5, 2024 15:44	
Date Sampled		Date Effective		Date Received	
				Dec 6, 2024	
				Date Reported	
System Administrator					
Ambient Temp (°F)		Flow Rate (Mcf)		Analyst	
				Press PSI @ Temp °F	
				Source Conditions	
Well Done Montana			NG		
Operator			Lab Source Description		

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	96.7020	96.703	
CO2 (CO2)	0.4960	0.496	
Methane (C1)	1.1140	1.114	
Ethane (C2)	0.0980	0.098	0.0260
Propane (C3)	0.4220	0.422	0.1160
I-Butane (IC4)	0.2060	0.206	0.0670
N-Butane (NC4)	0.3690	0.369	0.1160
I-Pentane (IC5)	0.1410	0.141	0.0520
N-Pentane (NC5)	0.1370	0.137	0.0500
Hexanes Plus (C6+)	0.3150	0.315	0.1370
TOTAL	100.0000	100.0010	0.5640

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

Analyzer Information			
Device Type:	Gas Chromatograph	Device Make:	Shimadzu
Device Model:	GC-2014	Last Cal Date:	Sep 9, 2024

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
69.8	69.6	70.0	69.8

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.9849	0.9849
Molecular Weight	
28.5304	

C6+ Group Properties		
Assumed Composition		
C6 - 60.000%	C7 - 30.000%	C8 - 10.000%

PROTREND STATUS: Passed By Validator on Dec 9, 2024
DATA SOURCE: Imported
PASSED BY VALIDATOR REASON: First sample taken @ this point, composition looks reasonable
VALIDATOR: Ashley Russell
VALIDATOR COMMENTS: OK

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 522473

DEFINITIONS

Operator: Well Done New Mexico LLC (OPG Vendor) 333 Main St Shelby, MT 59474	OGRID: 333567
	Action Number: 522473
	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

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QUESTIONS

Prerequisites	
[OGRID] Well Operator	[271769] GIANT OPERATING LLC
[API] Well Name and Number	[30-015-03701] MALAGA UNIT #001
Well Status	Reclamation Fund Approved

Monitoring Event Information	
Please answer all the questions in this group.	
Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	12/01/2024
Latitude	32.2332916
Longitude	-104.0248032

Monitoring Event Details	
Please answer all the questions in this group.	
Flow rate in cubic meters per day (m³/day)	0.00
Test duration in hours (hr)	40.2
Average flow temperature in degrees Celsius (°C)	13.2
Average gauge flow pressure in kilopascals (kPag)	4.6
Methane concentration in part per million (ppm)	11,140
Methane emission rate in grams per hour (g/hr)	0.00
Testing Method	Steady State

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