



Pre Plugging Methane Quantification Test Report

Report Prepared By Curtis Shuck

Start Date: Sat Nov 30 2024 22:40:03 GMT+0000
 (Coordinated Universal Time)
End Date: Sun Dec 01 2024 19:03:42 GMT+0000
 (Coordinated Universal Time)
Test Time Subset: 2024-11-30T22:39:38.745Z -
 2024-12-01T19:02:26.160Z
Device: VB100-0054
Well Licensee: NMOCD
Well Name: Helena 25 Fee com 001
UWI: 30-015-31909
Well License Number: 30-015-31909
Surface Location: Quality Transport
Bottom Hole Location: Unknown
Test Operator: CES QMS
Authorized By: NMOCD
Test Reason: IIJA / BIL Pre Plug
Scope Of Work: 2- hoyr normalized flow
AFE Number: 78655
GPS: 32.45477,-104.14839
Notes: 2 tubing valve

Orphan Well Flow Test Results

Average Flowrate 1.0971 scf/hr	Average Flow Temperature 45.75 °F	Average Flow Pressure 0.8413 psi	Flow Duration 1222.79 min	Methane Concentration 10.21 %	Methane Emissions 2.15 g/hr	Benzene 1 ppm
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Annual Emission Rate = ($\bar{x}Q_{measured}$) x (Conc $_{measured}$) x p x 0.454 x 8,760

Methane Calculation:

($\bar{x}Q_{measured}$) 1.0971 scf/hr x (Conc $_{measured}$) 0.1021 = 0.11200987 scf CH₄/hr

Methane Flow x (p) x .0423 x .454 x 8,760 = 18.834 CH₄ kg/yr Emission Rate

Where:

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

Conc $_{measured}$ - methane concentration measured

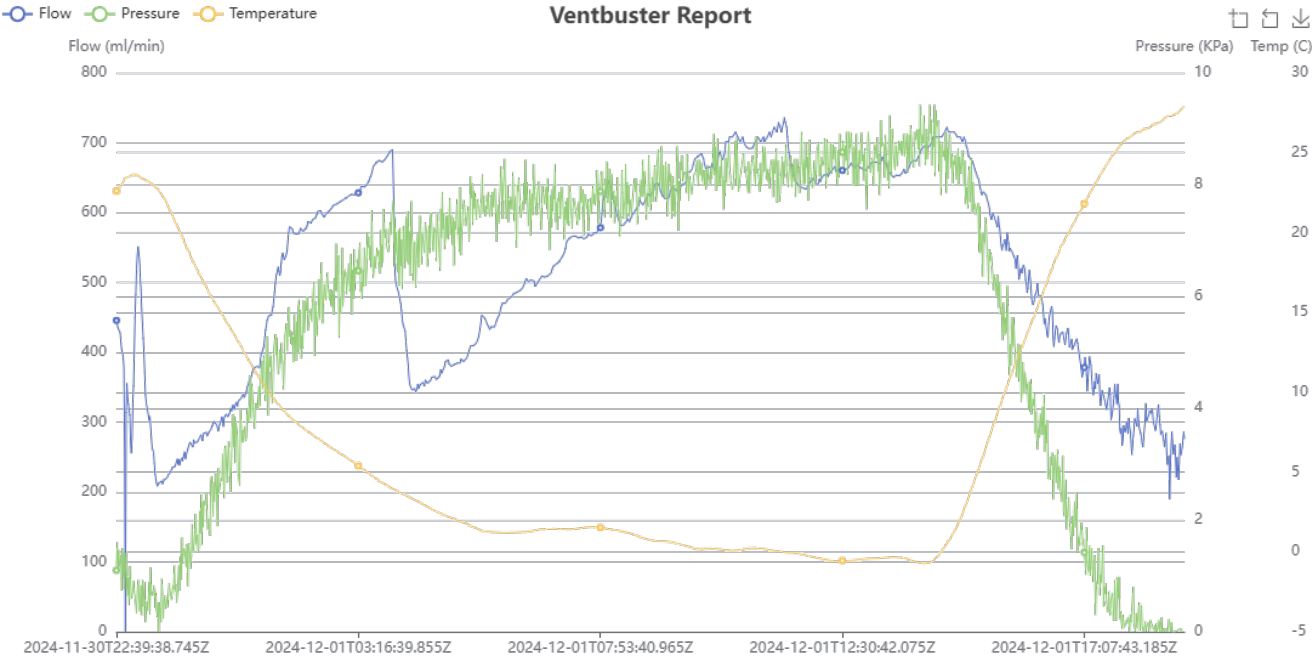
p - 0.0423 methane density at 1 atm; 60° F

0.454 - Conversion from lb to kg

8760 - Conversion from hr to yr

Flow/Pressure/Temperature Timeseries

Ventbuster Report



Site Photos



www.permianls.com
575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

23013G		Helena 25 #001 Pre Plug		Helena 25 #001 Pre Plug	
Sample Point Code		Sample Point Name		Sample Point Location	
Laboratory Services		2024102451		CES - Spot	
Source Laboratory		Lab File No		Sampler	
USA		USA		New Mexico	
District		Area Name		Facility Name	
Nov 30, 2024 15:50		Nov 1, 2024		Dec 5, 2024 15:41	
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)	88.0970	88.098	
CO2 (CO2)	0.1420	0.142	
Methane (C1)	10.2090	10.209	
Ethane (C2)	0.5090	0.509	0.1360
Propane (C3)	0.2930	0.293	0.0810
I-Butane (IC4)	0.1170	0.117	0.0380
N-Butane (NC4)	0.1760	0.176	0.0550
I-Pentane (IC5)	0.1120	0.112	0.0410
N-Pentane (NC5)	0.0670	0.067	0.0240
Hexanes Plus (C6+)	0.2780	0.278	0.1210
TOTAL	100.0000	100.0010	0.4960

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
151.0	149.3	151.3	149.6

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.9399	0.9398
Molecular Weight	
27.2200	

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 522479

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Operator: Well Done New Mexico LLC (OPG Vendor) 333 Main St Shelby, MT 59474	OGRID: 333567
	Action Number: 522479
	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	[262232] QUALITY TRANSPORT, INC.
[API] Well Name and Number	[30-015-31909] HELENA 25 FEE COM #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	11/30/2024
Latitude	32.4547386
Longitude	-104.1483536

Monitoring Event Details	
Please answer all the questions in this group.	
Flow rate in cubic meters per day (m³/day)	129.60
Test duration in hours (hr)	0.4
Average flow temperature in degrees Celsius (°C)	21.7
Average gauge flow pressure in kilopascals (kPag)	1.0
Methane concentration in part per million (ppm)	102,090
Methane emission rate in grams per hour (g/hr)	3,661.00
Testing Method	Steady State

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