



Pre Plugging Methane Quantification Test Report

Report Prepared By Curtis Shuck

Start Date: Wed Dec 06 2023 20:36:10 GMT+0000
 (Coordinated Universal Time)
End Date: Tue Dec 19 2023 20:16:48 GMT+0000
 (Coordinated Universal Time)
Test Time Subset: 2023-12-06T20:33:57.807Z -
 2023-12-19T20:01:36.534Z
Device: VB100-0049
Well Licensee: NMOCD
Well Name: DOUBLE L QUEEN UNIT 008
UWI: 30-005-601108
Well License Number: 30-005-60108
Surface Location: Unknown
Bottom Hole Location: Unknown
Test Operator: CES QMS
Authorized By: NMOCD
Test Reason: Pre Plug
Scope Of Work: 12 Hours
AFE Number: Unknown
GPS: 33.05325,-103.97416
Notes: surface casing vent

Orphan Well Flow Test Results

Average Flowrate	Average Flow Temperature	Average Flow Pressure	Flow Duration	Methane Concentration	Methane Emissions	Benzene
0.0028 scf/hr	50.85 °F	0.6324 psi	18687.65 min	null %	null g/hr	N/A ppm

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

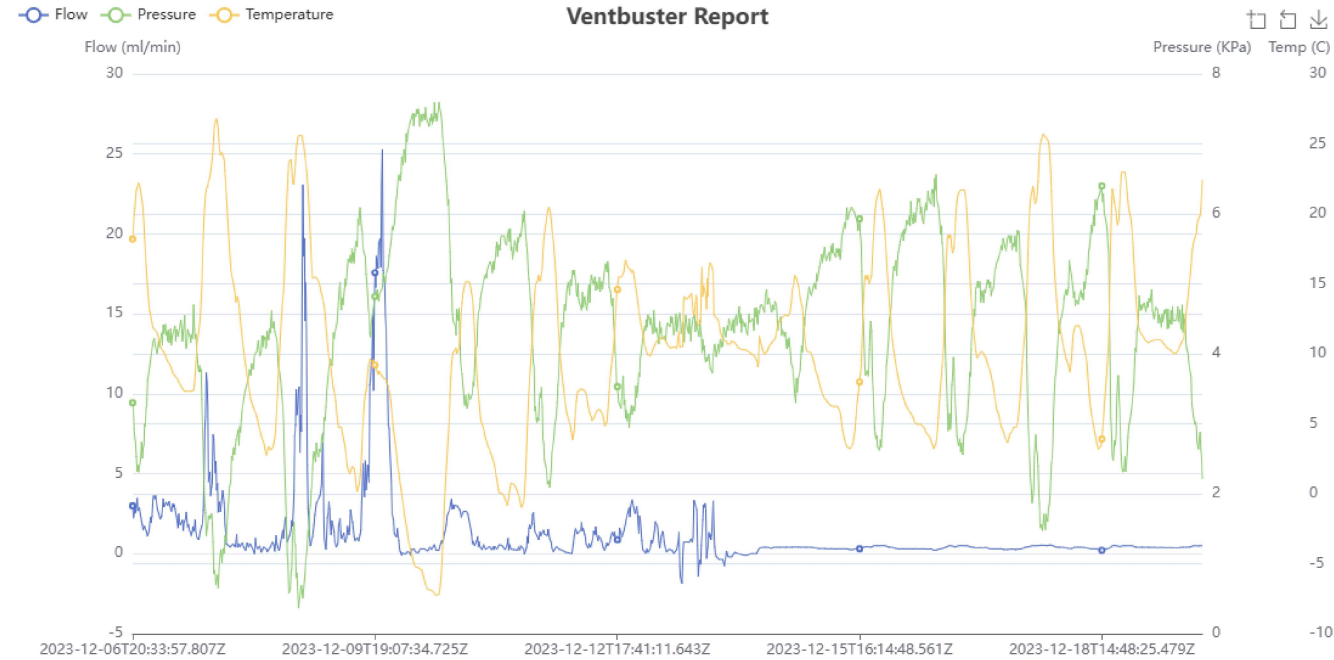
Methane Calculation:

$(\bar{x}Q_{measured})$ 0.0028 scf/hr x $(Conc_{measured})$ null = null scf CH₄/hr
 Methane Flow x (p) x .0423 x .454 x 8,760 = null 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



Site Photos



Site Photos



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

C6+ Gas Analysis Report

15335G	Double L Queen #008	Double L Queen #008	
Sample Point Code	Sample Point Name	Sample Point Location	
Laboratory Services	2022060366	bag	FV - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
Nov 15, 2022 13:17	Nov 15, 2022 13:17	Nov 18, 2022 16:23	Nov 18, 2022
Date Sampled	Date Effective	Date Received	Date Reported
Torrance			
Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
Well Done Foundation		gas	
Operator		Lab Source Description	

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	96.9550	96.95503	
CO2 (CO2)	0.1150	0.1147	
Methane (C1)	0.6340	0.63398	
Ethane (C2)	0.3990	0.39887	0.1070
Propane (C3)	0.2880	0.28805	0.0790
I-Butane (IC4)	0.0510	0.05086	0.0170
N-Butane (NC4)	0.1550	0.15542	0.0490
I-Pentane (IC5)	0.0000	0	0.0000
N-Pentane (NC5)	0.1090	0.10924	0.0400
Hexanes Plus (C6+)	1.2940	1.29384	0.5610
TOTAL	100.0000	100.0000	0.8530

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 26, 2022

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
98.5	97.7	98.7	97.9

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.9999	0.9998
Molecular Weight	
28.9639	

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

Field H2S
0 PPM

PROTREND STATUS: Passed By Validator on Nov 18, 2022
DATA SOURCE: Imported

PASSED BY VALIDATOR REASON:
Close enough to be considered reasonable.

VALIDATOR:
Luis Cano
VALIDATOR COMMENTS:
ok

Source	Date	Notes
Luis Cano	Nov 18, 2022 4:26 pm	Methane: 6,340 PPM

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 521211

DEFINITIONS

Operator: Well Done New Mexico LLC (OPG Vendor) 333 Main St Shelby, MT 59474	OGRID: 333567
	Action Number: 521211
	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.

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

QUESTIONS

Action 521211

QUESTIONS

Operator: Well Done New Mexico LLC (OPG Vendor) 333 Main St Shelby, MT 59474	OGRID: 333567
	Action Number: 521211
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

QUESTIONS

Prerequisites	
[OGRID] Well Operator	[269864] CANYON E & P COMPANY
[API] Well Name and Number	[30-005-60108] DOUBLE L QUEEN UNIT #008
Well Status	Reclamation Fund Approved

Monitoring Event Information	
<i>Please answer all the questions in this group.</i>	
Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	12/19/2023
Latitude	33.0532608
Longitude	-103.9741135

Monitoring Event Details	
<i>Please answer all the questions in this group.</i>	
Flow rate in cubic meters per day (m ³ /day)	0.00
Test duration in hours (hr)	96.0
Average flow temperature in degrees Celsius (°C)	10.5
Average gauge flow pressure in kilopascals (kPag)	4.4
Methane concentration in part per million (ppm)	6,340
Methane emission rate in grams per hour (g/hr)	0.05
Testing Method	Steady State

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