



Pre Plugging Methane Quantification Test Report

Report Prepared By Curtis Shuck

Start Date: Sat Dec 17 2022 19:39:44 GMT+0000
 (Coordinated Universal Time)
End Date: Sun Dec 18 2022 18:18:18 GMT+0000
 (Coordinated Universal Time)
Test Time Subset: 2022-12-17T19:39:44.000Z -
 2022-12-18T00:22:45.800Z
Device: VB100-0039
Well Licensee: NMOCD
Well Name: Standard State 003
UWI: 30-005-10429
Well License Number: 30-005-10429
Surface Location: State / Chaves County
Bottom Hole Location: unknown
Test Operator: ces
Authorized By: NMOCD
Test Reason: IJJA PRE PLUG
Scope Of Work: 12-Hour
AFE Number: 52100-072998
GPS: 33.65355,-104.21168
Notes: GTG

Orphan Well Flow Test Results

Average Flowrate	Average Flow Temperature	Average Flow Pressure	Flow Duration	Methane Concentration	Methane Emissions	Benzene
-0.0014 scf/hr	60.17 °F	0.2348 psi	283.03 min	100 %	-0.03 g/hr	1 ppm

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

Methane Calculation:

$(\bar{Q}_{measured})$ -0.0014 scf/hr x $(Conc_{measured})$ 1= -0.00141082 scf CH₄/hr

Methane Flow x (p) x .0423 x .454 x 8,760 = -0.2628 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

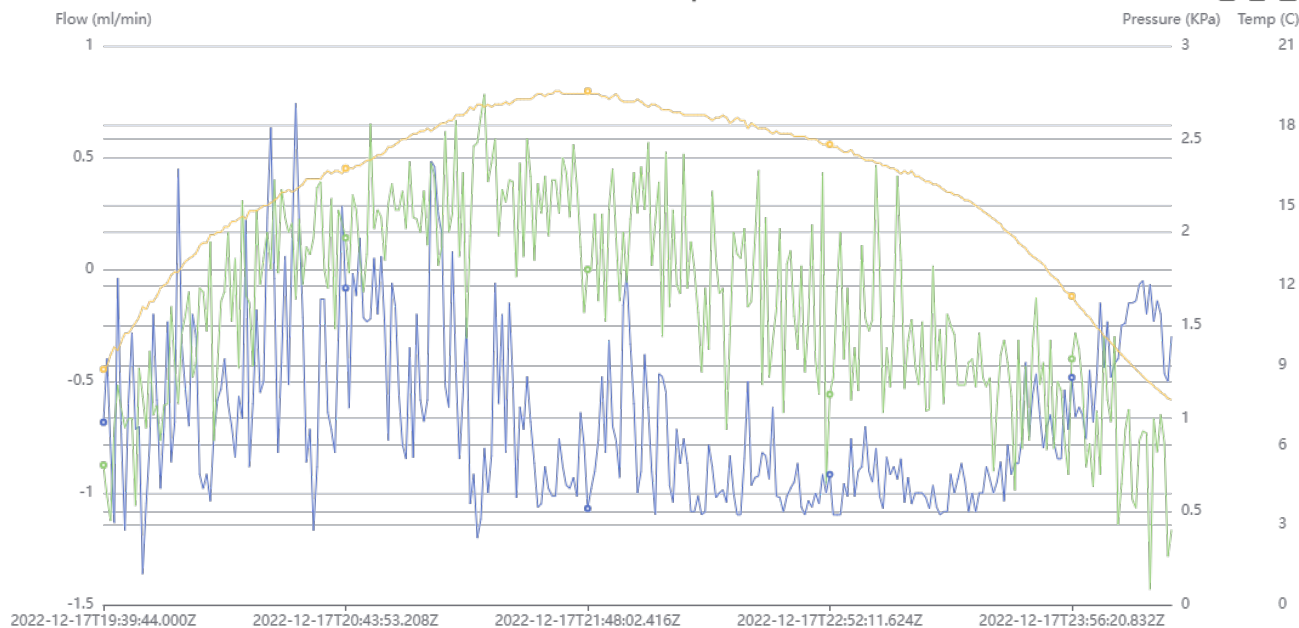
8760 - Conversion from hr to yr

Flow/Pressure/Temperature Timeseries

Flow Pressure Temperature

Ventbuster Report

Pressure (KPa) Temp (C)



Site Photos



15638G	Standard State #003	Standard State #003	
Sample Point Code	Sample Point Name	Sample Point Location	
Laboratory Services	2023062365	Tedlar Bag	CES - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
Dec 17, 2022 12:30	Dec 17, 2022 12:30	Jan 9, 2023 08:55	Jan 9, 2023
Date Sampled	Date Effective	Date Received	Date Reported
System Administrator			
Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
Well Done Foundation		NG	
Operator		Lab Source Description	

Component	Mol %	GPM
H2S (H2S)	0.0000	
Nitrogen (N2)	99.3000	
CO2 (CO2)	0.1000	
Methane (C1)	0.0000	
Ethane (C2)	0.0000	0.0000
Propane (C3)	0.0000	0.0000
I-Butane (IC4)	0.0000	0.0000
N-Butane (NC4)	0.0000	0.0000
I-Pentane (IC5)	0.0000	0.0000
N-Pentane (NC5)	0.0000	0.0000
Hexanes Plus (C6+)	0.6000	0.2600
TOTAL	100.0000	0.2600

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

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
30.9	31.2	31.00	31.3

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.9812	0.9812
Molecular Weight	
28.4205	

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

Field H2S
0 PPM

PROTREND STATUS:

Passed By Validator on Jan 11, 2023

DATA SOURCE:

Imported

PASSED BY VALIDATOR REASON:

Close enough to be considered reasonable.

VALIDATOR:

Brooke Rush

VALIDATOR COMMENTS:

ok

Source	Date	Notes
Brooke Rush	Jan 11, 2023 2:51 pm	Methane = 0 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 495015

DEFINITIONS

Operator: ROGER SLAYTON DBA ESCUDILLA OIL COMPANY P.O. Box 687 Roswell, NM 88202	OGRID: 228270
	Action Number: 495015
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

DEFINITIONS

The Orphan Well Mitigation Activity (OMA) forms are a subset of the OCD's forms exclusively designed for activities related to State of New Mexico's contracted plugging and reclamation activities. Specifically, these forms are used for orphan wells or associated facilities which are in a "Reclamation Fund Approved" status. This status represents wells or facilities where the OCD has acquired a hearing order allowing the OCD to perform plugging or reclamation on wells and associated facilities that no longer have a 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 495015

QUESTIONS

Operator: ROGER SLAYTON DBA ESCUDILLA OIL COMPANY P.O. Box 687 Roswell, NM 88202	OGRID: 228270
	Action Number: 495015
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

QUESTIONS

Prerequisites	
[OGRID] Well Operator	[228270] ROGER SLAYTON DBA ESCUDILLA OIL COMPANY
[API] Well Name and Number	[30-005-10429] STANDARD STATE #003
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	12/17/2022
Latitude	33.6534119
Longitude	-104.2117538

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)	4.7
Average flow temperature in degrees Celsius (°C)	15.6
Average gauge flow pressure in kilopascals (kPag)	1.6
Methane concentration in part per million (ppm)	0
Methane emission rate in grams per hour (g/hr)	0.00
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