



# Pre Plugging Test Report

**Start Date:** Saturday, December 17th, 2022, 12:39 PM MST

**End Date:** Sunday, December 18th, 2022, 10:27 AM MST

**Device:** VB100-0047

**Well Licensee:** NMOCD

**Well Name:** LEWIS NEFF003

**UWI:** 30-005-10432

**Well License Number:** 30-005-10432

**Surface Location:** LEWIS NEFF

**Bottom Hole Location:** UNKNOWN

**Test Operator:** f.v.

**Authorized By:** NMOCD

**Test Reason:** IJJA/PRE PLUG

**Scope Of Work:** 12-HR

**AFE Number:** 52100-0000072998

**GPS:** 33.65829,-104.20829

**Notes:** MONITORING CASING FLOW

**Prepared By:** Curtis Shuck, QMS

## Orphan Well Flow Test

Average Flowrate

**10.45**

m<sup>3</sup>/d

Average Flow

Temperature

**1.3**

°C

Average Flow

Pressure

**3.4**

kPag

Flow Duration

**21.8**

hours

Methane Concentration

**129,340**

ppm

Methane Emissions

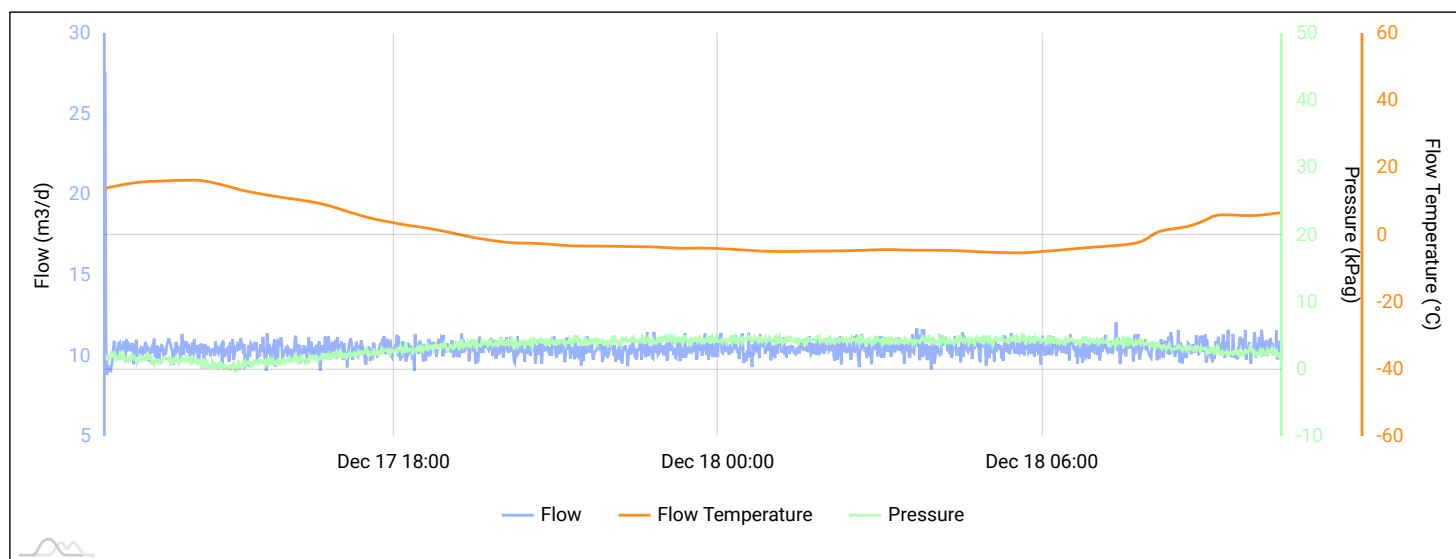
**40.41**

g/ hour

## Methane Calculations

- <sup>1</sup> Methane Calculation: 717 grams CH<sub>4</sub> per cubic meter (717 x 10.45 m<sup>3</sup>/day = 7,492.65 g/day total /24 = 312.19 g/hour x 0.129450 (methane concentration) = **40.41 g/hour CH<sub>4</sub>**). **Methane, gas** weighs 0.000717 gram per cubic centimeter or 0.717 kilogram per cubic meter, i.e. density of *methane, gas* is equal to 0.717 kg/m<sup>3</sup>; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In Imperial or US customary measurement system, the density is equal to 0.044 pound per cubic foot [lb/ft<sup>3</sup>].

## Flow/Pressure/Temperature Timeseries



Field Notes

Well Done

FOUNDATION

Well Site

Info

Well File

Images

Well Data

Regulatory

Field Notes

Live Data View

Access

Remove Well

Date

01/15/2023

New Note

Required

Add

#	Date	Note
1	2022-12-17	Measure team 1 was on location today took pictures n,e,s,w and of well head took gas sample and detected gas plumbed in and rigged up vb #47 was on location at 12:14 pm
2	2022-12-18	F.g.v. Measure team 1 was on location today at 10:41 a.m took a 4 gas monitor test and gas sample pictures of both and rigged down vb 47

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Lewis Neff #003 - North Facing



Lewis Neff #003 - South Facing



Lewis Neff #003 - Gas Sample

December 17, 2022

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+23°	+23°	30.1	▲ S 2.7	63%
Morning	+21°	+12°	30.1	▲ S 7.4	63%
Day	+46°	+45°	30.1	▲ S 4.5	25%
Evening	+37°	+32°	30.1	▲ S 6.9	41%

Hourly forecast for 17.12.2022



December 18, 2022

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+27°	+21°	30.1	▼ SE 4.5	63%
Morning	+27°	+21°	30.1	▼ SE 4.7	63%
Day	+45°	+41°	26.3	▲ S 5.6	38%
Evening	+37°	+34°	26.3	▲ NE 4.3	66%

Hourly forecast for 18.12.2022





15553G	Lewis Neff #003 Casing Flow Sample	Lewis Neff #003 Casing Flow Sample	
Sample Point Code	Sample Point Name	Sample Point Location	
Laboratory Services	2022061770	Tedlar Bag	Francis V. - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
Dec 18, 2022 12:14	Dec 18, 2022 12:14	Dec 22, 2022 15:01	Dec 23, 2022
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	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	76.5270	76.528	
CO2 (CO2)	0.5740	0.574	
Methane (C1)	12.9540	12.954	
Ethane (C2)	3.4090	3.409	0.9110
Propane (C3)	2.4500	2.45	0.6750
I-Butane (IC4)	0.3740	0.374	0.1220
N-Butane (NC4)	1.0600	1.06	0.3340
I-Pentane (IC5)	0.3770	0.377	0.1380
N-Pentane (NC5)	0.4230	0.423	0.1530
Hexanes Plus (C6+)	1.8520	1.852	0.8030
TOTAL	100.0000	100.0010	3.1360

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
428.1	421.6	429.1	422.6

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
1.0026	1.0017
Molecular Weight	
29.0105	

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

Field H2S
1 PPM

**PROTREND STATUS:** Passed By Validator on Dec 27, 2022  
**DATA SOURCE:** Imported

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

**VALIDATOR:**  
 Luis Cano  
**VALIDATOR COMMENTS:**  
 OK

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

Source	Date	Notes
Luis Cano	Dec 27, 2022 8:48 am	Methane: 129,540 PPM

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

DEFINITIONS

Action 301890

DEFINITIONS

Operator: ROGER SLAYTON DBA ESCUDILLA OIL COMPANY P.O. Box 687 Roswell, NM 88202	OGRID: 228270
	Action Number: 301890
	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.

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QUESTIONS

Action 301890

**QUESTIONS**

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**QUESTIONS**

<b>Prerequisites</b>	
[OGRID] Well Operator	[228270] ROGER SLAYTON DBA ESCUDILLA OIL COMPANY
[API] Well Name and Number	[30-005-10432] LEWIS NEFF #003
Well Status	Plugged (not released)

**Monitoring Event Information***Please answer all the questions in this group.*

Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	12/17/2022
Latitude	33.65829
Longitude	-104.20829

**Monitoring Event Details***Please answer all the questions in this group.*

Flow rate in cubic meters per day (m³/day)	10.45
Test duration in hours (hr)	21.8
Average flow temperature in degrees Celsius (°C)	1.3
Average gauge flow pressure in kilopascals (kPag)	3.4
Methane concentration in part per million (ppm)	129,340
Methane emission rate in grams per hour (g/hr)	40.41
Testing Method	Steady State

**Monitoring Contractor***Please answer all the questions in this group.*

Name of monitoring contractor	Well Done New Mexico LLC
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