

# Pre Plugging Test Report

Start Date: Wednesday, November 16th, 2022, 3:26 PM MST End Date: Thursday, November 17th, 2022, 11:28 AM MST

**Device:** VB100-0029 **Well Licensee:** NMOCD

Well Name: Double L Queen #01D

UWI: 30-005-60146

Well License Number: 30-005-60146

Surface Location: Chaves County - Bogle

Bottom Hole Location: unknown

Test Operator: Francis Vernwald Authorized By: NMOCD Test Reason: IIJA PRE PLUG Scope Of Work: 12-hr

AFE Number: NMOCD0038AA / APWS22.001

**GPS:** 33.03502,-103.97419

Notes: GTG \_ Monitoring tubing flow

## **Orphan Well Flow Test**

Average Flowrate

0.18 m3/d Average Flow Temperature **-2.7** 

°C

Average Flow Pressure

-2.7

Flow Duration

20.0

hours

Methane Concentration **96,730** 

ppm

Total Explosive Gas

230,880

ppm

Methane Emissions

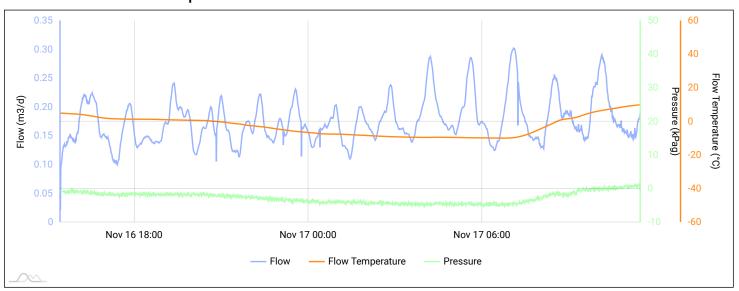
0.40

grams/hour

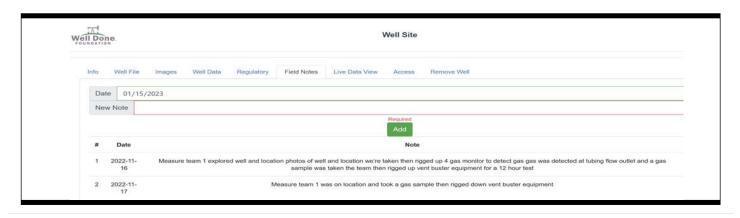
## Methane Calculations

• Methane Calculation: 554 grams CH4 per cubic meter (554 x 0.18 m3/day = 99.72 g/day total /24 = 4.15 g/hour x 0.096730 (methane concentration) = 0.40 g/hour CH4). Methane, gas weighs 0.000554 gram per cubic centimeter or 0.554 kilogram per cubic meter, i.e. density of methane, gas is equal to 0.554 kg/m³; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In Imperial or US customary measurement system, the density is equal to 0.0346 pound per cubic foot [lb/ft³], or 0.0003202 ounce per cubic inch [oz/inch³].

# Flow/Pressure/Temperature Timeseries



# Field Notes









DLQ #01D - North Facing

DLQ #01D - East Facing

DLQ #01D - South Facing

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15370G		Double L Queen #01D				Double L Queen #01D	
Sample Point Code	Sample Point Code Sample Point Na			ame		Sample Poir	nt Location
Laboratory Services		2022060540		Tedlar Bag		FV - Spot	
Source Laboratory		Lab File No		Container Identity		Sampler	
USA		USA		USA		New Mexico	
District		Area Name		Field Name	Facility Name		
Nov 16, 2022 1	5:00	Nov 16, 2022 15:00		Nov 23, 2022 08:52		Nov	23, 2022
Date Sampleo	i	Date Effective		Date Received		Date Reported	
		Torrand	<u>ce</u>				
Ambient Temp (°F)	Flow Rate (Mcf)	Analyst		Press PSI @ Temp °F Source Conditions			
Well Done Four	ndation					NG	
Operator				_	Lab :	Source Descript	ion
Component	Normalized Mol %	Un-Normalized Mol %	GPM	Gross 14.696 PSI @ 60	Heating Values (	-	t <sup>3</sup> ) @ 60.00 °F
H2S (H2S)	0.0000	0		Dry 431.5	Saturated 425.1	Dry <b>432.5</b>	Saturated 426.1
Nitrogen (N2)	76.8850	76.88573			ulated Total Sam		
CO2 (CO2)	0.0270	0.02654		1 1	2145-16 *Calculated at C		
Methane (C1)	9.6730	9.67251		Relative Densit			ensity Ideal
Ethane (C2)	7.2660	7.26602	1.9430	0.9993 Molecular We	eight	0.5	9984
Propane (C3)	3.2960	3.29569	0.9080	28.920	5		
I-Butane (IC4)	0.3600	0.35986	0.1180	<b>1</b>	C6+ Group Pro	-	
N-Butane (NC4)	0.7420	0.7419	0.2340	C6 - 60.000%	Assumed Compo		3 - 10.000%
I-Pentane (IC5)	0.2180	0.21808	0.0800		Field H2S		
N-Pentane (NC5)	0.2180	0.21822	0.0790	<b>1</b>	2 PPM		
Hexanes Plus (C6+)	1.3150	1.31546	0.5700	PROTREND STATUS:		DATA SO	UDCE.
TOTAL	100.0000	100.0000	3.9320	Passed By Validator	on Nov 23, 2022	Imported	
Method(s): Gas C6+ - GPA 2261, Extend	led Gas - GPA 2286, Calculat	tions - GPA 2172		PASSED BY VALIDATOR Close enough to be of		nable.	
	Analyzer Informa	tion		VALIDATOR:			
Device Type: Gas Chroma	<b>5</b> .			Luis Cano  VALIDATOR COMMENT	S:		
Device Model: GC-2014	Last Ca	al Date: Sep 26, 2	2022	ok			
Source	Date	Notes					
Luis Cano Nov 2	3. 2022 2:36 pm	Methane: 96.730 F	PPM				

<u>District I</u> 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

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 302416

#### **DEFINITIONS**

Operator:	OGRID:
CANYON E & P COMPANY	269864
251 O'Connor Ridge Blvd.	Action Number:
Irving, TX 75038	302416
	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 302416

### **QUESTIONS**

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#### QUESTIONS

Prerequisites	
[OGRID] Well Operator	[269864] CANYON E & P COMPANY
[API] Well Name and Number	[30-005-60146] DOUBLE L QUEEN UNIT #001D
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	11/16/2022	
Latitude	33.03502	
Longitude	-103.97419	

Monitoring Event Details	
Please answer all the questions in this group.	
Flow rate in cubic meters per day (m³/day)	0.18
Test duration in hours (hr)	20.0
Average flow temperature in degrees Celsius (°C)	-2.7
Average gauge flow pressure in kilopascals (kPag)	-2.7
Methane concentration in part per million (ppm)	96,730
Methane emission rate in grams per hour (g/hr)	0.40
Testing Method	Steady State

Monitoring Contractor		
Please answer all the questions in this group.		
Name of monitoring contractor	Well Done New Mexico LLC	