Test Report

Start Date: Wed Nov 16 2022 21:30:56 GMT+0000 (Coordinated Universal Time)
End Date: Thu Nov 17 2022 18:01:47 GMT+0000 (Coordinated Universal Time)
Device: VB100-0005
Well Licensee: NMOCD
Well Name: Double L Queen #02X
UWI: 30-005-60093
Well License Number: 30-005-60093
Surface Location: Chaves County - Bogle
Bottom Hole Location: unknown

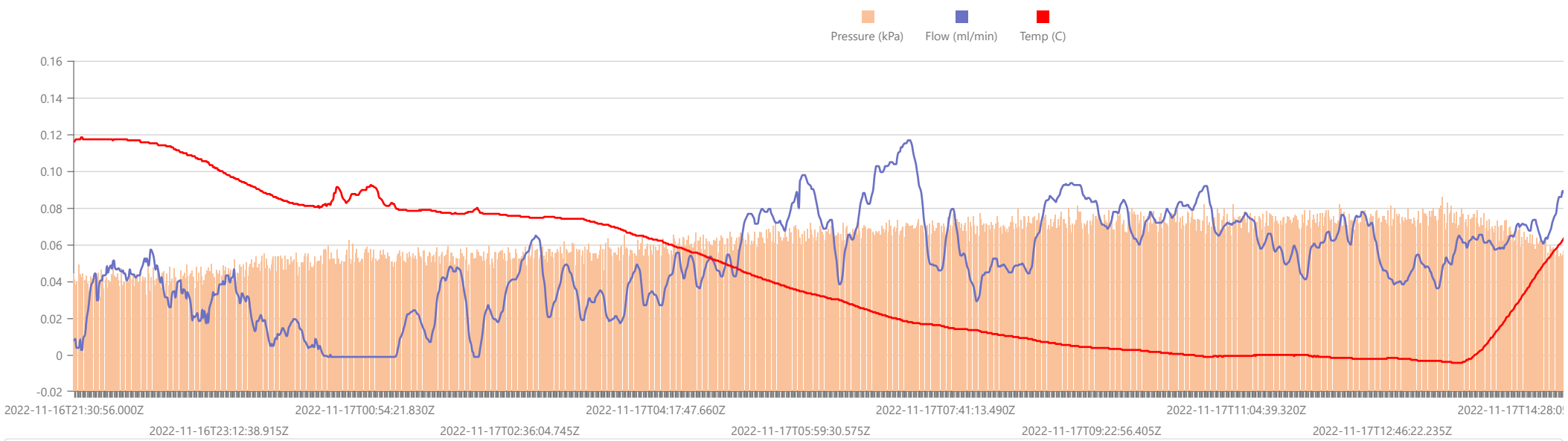
Test Operator: Francis Vernwald
Authorized By: NMOCD
Test Reason: IIJA PRE PLUG
Scope Of Work: 12-hr
AFE Number: NMOCD0038AA / APWS22.001
GPS: 33.04328,-103.97526
Notes: GTG - Monitoring casing flow
Prepared By: Curtis Shuck, QMS

Flow / Pressure Test

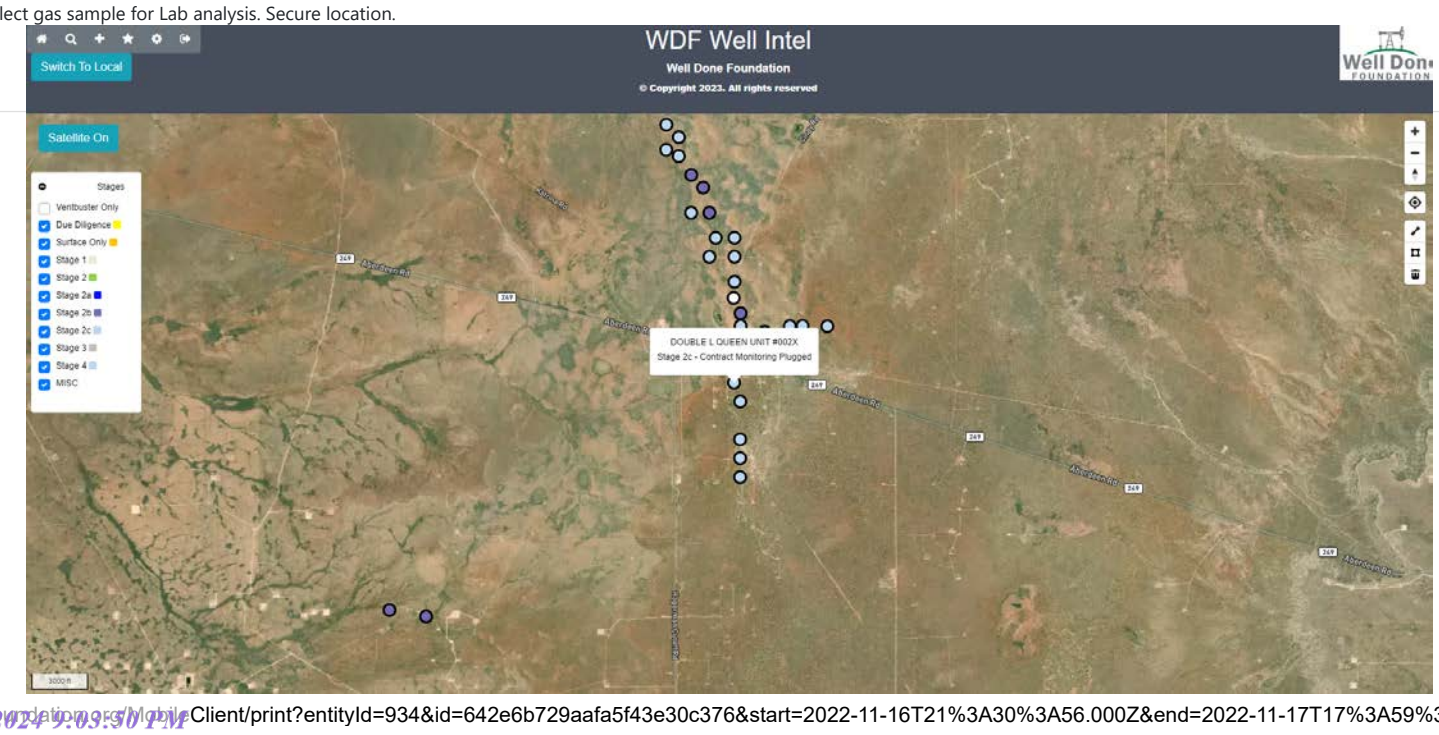
Flow Duration	Average Flowrate	Average Pressure	Average Flow Temperature	Average CH4 Mass
20 hrs 28 minutes	0.0549	7.8683	4.3545	0.02 g/hr
Duration	m3/d	kPag	°C	

Methane Calculation: 717 grams CH4 per cubic meter (717 g/m^3 x 0.0549 m^3/day = 39.36 g/day total /24 = 1.64 g/hour x 0.00918 (methane concentration) = **0.02 g/hour CH4**). **Methane, gas** weighs 0.000717 *gram per cubic centimeter* or 0.717 *kilgram per cubic meter*, i.e. density of *methane, gas* is equal to 0.717 kg/m^3; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In imperial or US customary measurement system, the density is equal to 0.0448 *pound per cubic foot* [lb/ft^3], or 0.0004144 *ounce per cubic inch* [oz/$inch^3$].

Flow / Pressure / Temperature Timeseries



#	Date	Note
1	2023-12-19	ces: On location with WDF Measure1. Perform Post Plug Methane Quantification. Well is plugged with no leaks. Field Gas Analysis shows 0% CH4. Collect Gas Sample for Lab analysis. Green Ribbon. Site Photos. Wildcat OUT!
2	2022-11-17	ces: Back on location with WDF Measure1. Stop Methane Quantification Test. Rig down VB100-05. Secure location. WILDCAT OUT!
3	2022-11-16	ces: On location with WDF Measure1 Team. Update GPS coordinates. Site Photos. Field Gas Analysis shows CH4 levels above 5,000 ppm. Rig up VB100-05 to the casing vent. Start 12-hour methane quantification test. Collect gas sample for Lab analysis. Secure location.



LABORATORY SERVICES Natural Gas Analysis

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

C6+ Gas Analysis Report: **November 16, 2022**

15368G	Double L Queen #02X Pre Plug	Double L Queen #02X
Sample Point Code	Sample Point Name	Sample Point Location

Laboratory Services	2022060526	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 13:56	Nov 16, 2022 13:56	Nov 22, 2022 15:29	Nov 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)	98.5540	98.554	
CO2 (CO2)	0.0470	0.047	
Methane (C1)	0.9180	0.918	
Ethane (C2)	0.1460	0.146	0.0390
Propane (C3)	0.0590	0.059	0.0160
I-Butane (IC4)	0.0000	0	0.0000
N-Butane (NC4)	0.0190	0.019	0.0060
I-Pentane (IC5)	0.0000	0	0.0000
N-Pentane (NC5)	0.0000	0	0.0000
Hexanes Plus (C6+)	0.2570	0.257	0.1110
TOTAL	100.0000	100.0000	0.1720

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

Gross Heating Values (Real, BTU/ft³)

14.696 PSI @ 60.00 Â°F		14.73 PSI @ 60.00 Â°F	
Dry	Saturated	Dry	Saturated
27.2	27.6	27.3	27.7

Calculated Total Sample Properties

GPA2145-16 *Calculated at Contract Conditions

Relative Density Real	Relative Density Ideal
0.9700	0.9701

Molecular Weight: 28.0967

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 23, 2022

DATA SOURCE: Imported

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

VALIDATOR: Luis Cano

VALIDATOR COMMENTS: ok

Analyzer Information

Device Type:	Gas Chromatograph	Device Make:	Shimadzu
Device Model:	GC-2014	Last Cal Date:	Sep 26, 2022

Source	Date	Notes
Luis Cano	Nov 23, 2022 2:35 pm	Methane: 9,180 PPM

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+36°	+30°	30.4	SE 6.5	55%
Morning	+30°	+27°	30.4	SE 4.5	69%
Day	+45°	+43°	30.4	SE 4.9	33%
Evening	+39°	+34°	30.4	SW 9.8	56%

Hourly forecast for 16.11.2022

November 17, 2022

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+30°	+23°	30.4	SW 6.9	69%
Morning	+21°	+12°	30.4	S 8.3	86%
Day	+54°	+50°	30.2	S 6	26%
Evening	+39°	+34°	30.2	S 8.7	41%

Hourly forecast for 17.11.2022

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C6+ Gas Analysis Report

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15368G	Double L Queen #02X Pre Plug	Double L Queen #02X

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Propane (C3)	0.0590	0.059	0.0160
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GPA2145-16 *Calculated at Contract Conditions

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Device Model:	GC-2014	Last Cal Date:	Sep 26, 2022

Source	Date	Notes
Luis Cano	Nov 23, 2022 2:35 pm	Methane: 9,180 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

Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 300515
	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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Santa Fe, NM 87505

QUESTIONS

Action 300515

QUESTIONS

Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 300515
	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	**[30-005-60093] DOUBLE L QUEEN UNIT #002X**
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	33.04328
Longitude	-103.97526

Monitoring Event Details *Please answer all the questions in this group.*	
Flow rate in cubic meters per day (m^3/day)	0.05
Test duration in hours (hr)	20.5
Average flow temperature in degrees Celsius (°C)	4.3
Average gauge flow pressure in kilopascals (kPag)	7.8
Methane concentration in part per million (ppm)	9,180
Methane emission rate in grams per hour (g/hr)	0.02
Testing Method	Steady State

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