



Test Report

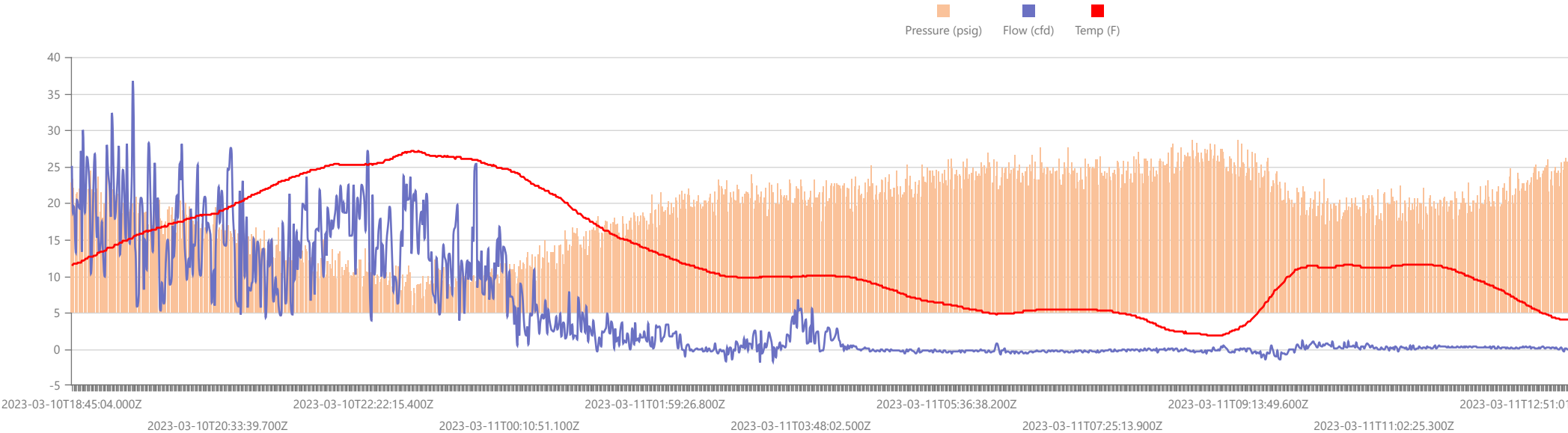
<b>Start Date:</b> Fri Mar 10 2023 18:45:04 GMT+0000 (Coordinated Universal Time) <b>End Date:</b> Sat Mar 11 2023 18:13:53 GMT+0000 (Coordinated Universal Time) <b>Device:</b> VB100-0054 <b>Well Licensee:</b> 30-015-00950 <b>Well Name:</b> Artesia Metex 038 <b>UWI:</b> 30-015-00950 <b>Well License Number:</b> 30-015-00950 <b>Surface Location:</b> State of NM <b>Bottom Hole Location:</b> Unknown	<b>Test Operator:</b> Sean O. Jacobson <b>Authorized By:</b> State of NM Test <b>Reason:</b> IJJA Pre Plugging Scope <b>Of Work:</b> 12 Hour <b>AFE Number:</b> 52100-0000072986 <b>GPS:</b> 32.71917,-104.23335 <b>Notes:</b> GTG <b>Prepared By:</b> Curtis Shuck - QMS
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Flow / Pressure Test

<b>Flow Duration</b> 23 hrs 27 minutes <small>Duration</small>	<b>Average Flowrate</b> 5.1841 <small>cfd</small>	<b>Average Pressure</b> 0.5170 <small>psig</small>	<b>Average Flow Temperature</b> 69.8986 <small>°F</small>	<b>Average CH4 Mass</b> 0.04 g/hr
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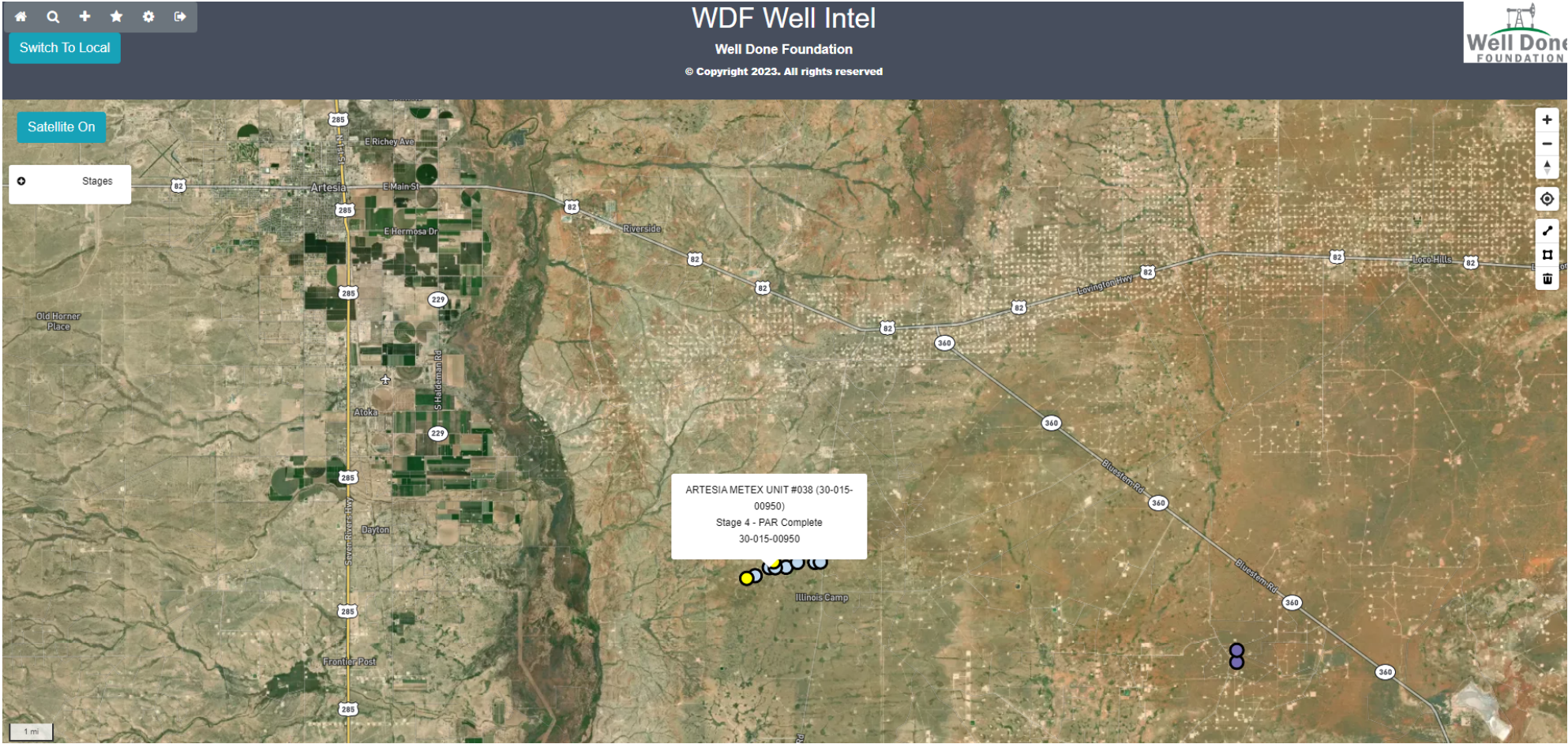
**Methane Calculation:** 717 grams CH4 per cubic meter (717 g/m<sup>3</sup> x 0.1468 m<sup>3</sup>/day = 105.26 g/day total /24 = 4.39 g/hour x 0.00982 (methane concentration) = **0.04 g/hour CH4**). **Methane, gas** weighs 0.000717 *gram per cubic centimeter* or 0.717 *kilgram per cubic meter*, i.e. density of *methane, gas* is equal to 0.717 kg/m<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 0.0448 *pound per cubic foot* [lb/ft<sup>3</sup>], or 0.0004144 *ounce per cubic inch* [oz/inch<sup>3</sup>].

Flow / Pressure / Temperature Timeseries



#	Date	Note
1	2023-05-27	ces: On location with Measure1 for post plug sampling. Cement to within 9" of top of casing. Collect gas sample for Lab Analysis. Place green ribbon at casing. OK for cutoff.
2	2023-03-11	Arrived 11:12am 3/11/2023. Rigged down flow test. SP VB #54
3	2023-03-10	Arrived 11:31am 3/10/2023. Rigged up flow test. SP VB #54
4	2023-03-10	Arrived 11:54am 3/10/2023. Rigged up flow test. SP VB #40
5	2023-02-27	Arrived 12:13am 2/27/2023. Rigged down flow test.
6	2023-02-26	Arrived 11:34am 2/26/2023. Rigged up Ventbuster #16 for flow testing.





March 10, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+46°	+41°	26.5	◀ E 13.4	89%
Morning	+45°	+39°	26.5	◀ E 10.1	84%
Day	+59°	+59°	26.3	▲ S 15.2	49%
Evening	+61°	+61°	26.2	▲ S 11.6	58%

March 11, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+54°	+54°	26.1	↙ SW 9.4	88%
Morning	+55°	+55°	26.1	↙ SW 11.2	25%
Day	+81°	+81°	26.2	▶ W 19.5	13%
Evening	+68°	+68°	26.1	▶ W 13	19%





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

## C6+ Gas Analysis Report

<b>16144G</b>	<b>Artesia Metex #38</b>	<b>Artesia Metex #38</b>	
Sample Point Code	Sample Point Name	Sample Point Location	
<b>Laboratory Services</b>	<b>2023064922</b>	<b>Tedlar Bag</b>	<b>SOJ - Spot</b>
Source Laboratory	Lab File No	Container Identity	Sampler
<b>USA</b>	<b>USA</b>	<b>USA</b>	<b>New Mexico</b>
District	Area Name	Field Name	Facility Name
<b>Feb 27, 2023 12:20</b>	<b>Feb 27, 2023 12:20</b>	<b>Mar 2, 2023 07:19</b>	<b>Mar 6, 2023</b>
Date Sampled	Date Effective	Date Received	Date Reported
<b>System Administrator</b>			
<b>Ambient Temp (°F)</b>	<b>Flow Rate (Mcf)</b>	<b>Analyst</b>	<b>Press PSI @ Temp °F</b> Source Conditions
<b>Well Done Foundation</b>		<b>NG</b>	
Operator		Lab Source Description	

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	98.0150	98.015	
CO2 (CO2)	0.0860	0.086	
Methane (C1)	0.9820	0.982	
Ethane (C2)	0.3370	0.337	0.0900
Propane (C3)	0.1610	0.161	0.0440
I-Butane (IC4)	0.0210	0.021	0.0070
N-Butane (NC4)	0.0470	0.047	0.0150
I-Pentane (IC5)	0.0000	0	0.0000
N-Pentane (NC5)	0.0180	0.018	0.0070
Hexanes Plus (C6+)	0.3330	0.333	0.1440
TOTAL	100.0000	100.0000	0.3070

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:	Feb 13, 2023

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
40.1	40.3	40.2	40.4

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.9731	0.9731
Molecular Weight	
28.1879	

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

Field H2S
0 PPM

**PROTREND STATUS:** Passed By Validator on Mar 7, 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	Mar 7, 2023 2:22 pm	Methane = 9,820 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 295380

DEFINITIONS

Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 295380
	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 295380

**QUESTIONS**

Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 295380
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

**QUESTIONS**

<b>Prerequisites</b>	
[OGRID] Well Operator	[269864] CANYON E & P COMPANY
[API] Well Name and Number	[30-015-00950] ARTESIA METEX UNIT #038
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	03/10/2023
Latitude	32.71917
Longitude	-104.23335

**Monitoring Event Details**

Please answer all the questions in this group.

Flow rate in cubic meters per day (m³/day)	0.01
Test duration in hours (hr)	23.5
Average flow temperature in degrees Celsius (°C)	20.0
Average gauge flow pressure in kilopascals (kPag)	0.5
Methane concentration in part per million (ppm)	9,820
Methane emission rate in grams per hour (g/hr)	0.04
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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