Test Report

Start Date: Sat Mar 04 2023 17:54:10 GMT+0000 (Coordinated Universal Time)
End Date: Sun Mar 05 2023 18:08:39 GMT+0000 (Coordinated Universal Time)
Device: VB100-0054
Well Licensee: 30-005-28016
Well Name: Cato San Andres 573
UWI: 30-005-28016
Well License Number: 30-005-28016
Surface Location: State of NM
Bottom Hole Location: Unknown

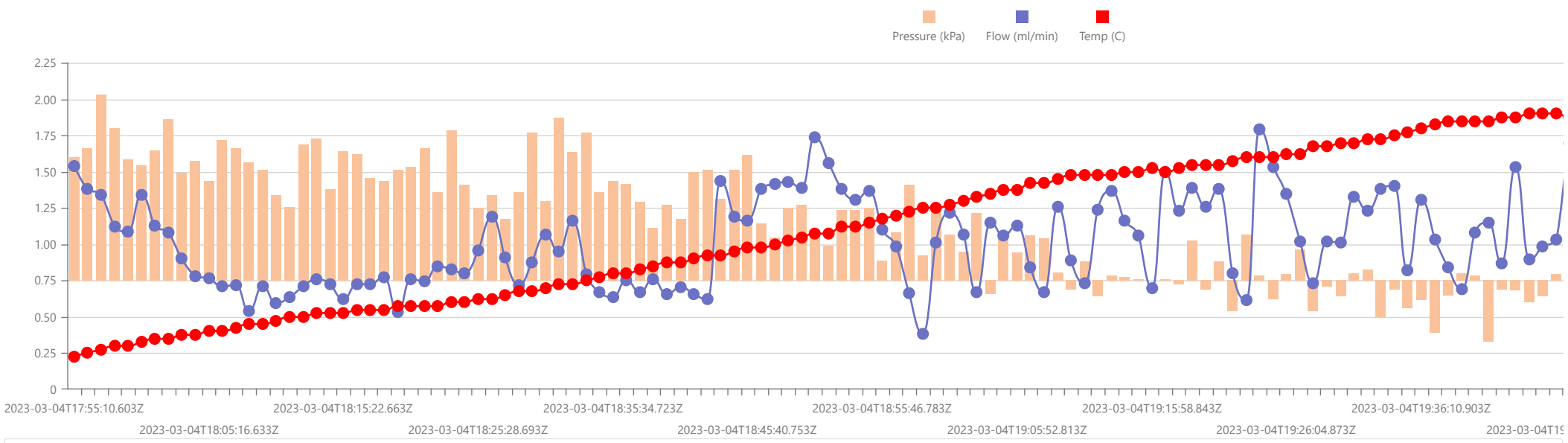
Test Operator: Sean O. Jacobson
Authorized By: State of NM
Test Reason: IIJA Pre Plugging
Scope Of Work: 12 Hour
AFE Number: 52100-00000073108
GPS: 33.62341,-103.84953
Notes: GTG
Prepared By: Curtis Shuck, QMS

Flow / Pressure Test

Flow Duration	Average Flowrate	Average Pressure	Average Flow Temperature	Average CH4 Mass
2 hrs 20 minutes	1.0351	0.5547	25.0307	0.60 g/hr
Duration	m3/d	kPag	°C	**CH4 Concentration** 19,500 ppm

Methane Calculation: 717 grams CH4 per cubic meter (717 g/m^3 x 1.0351 m^3/day = 742.17 g/day total /24 = 30.92 g/hour x 0.0195 (methane concentration) = **0.60 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	2023-03-05	Arrived 11:07am 3/5/2023. Rigged down flow test. SP
2	2023-03-04	Arrived 10:30am 3/4/2023. Stopped flow test. Flipped to high flow. Started new test.
3	2023-03-03	Arrived 11:24am 3/3/2023. Rigged Up Ventbuster #54 for flow testing.

Weather in Roswell, March 4

Weather Forecast for March 4 in Roswell, New Mexico - temperature, wind, atmospheric pressure, humidity and precipitations. Detailed hourly weather chart.

March 02 | March 03 | Select date: | March 05 | March 06

March 04, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+45°	+39°	26.1	NW 9.4	27%
Morning	+36°	+30°	26.3	N 5.8	43%
Day	+63°	+63°	26.3	SE 8.3	12%
Evening	+61°	+61°	26.3	S 11.6	14%

Weather in Roswell, March 5

Weather Forecast for March 5 in Roswell, New Mexico - temperature, wind, atmospheric pressure, humidity and precipitations. Detailed hourly weather chart.

March 03 | March 04 | Select date: | March 06 | March 07

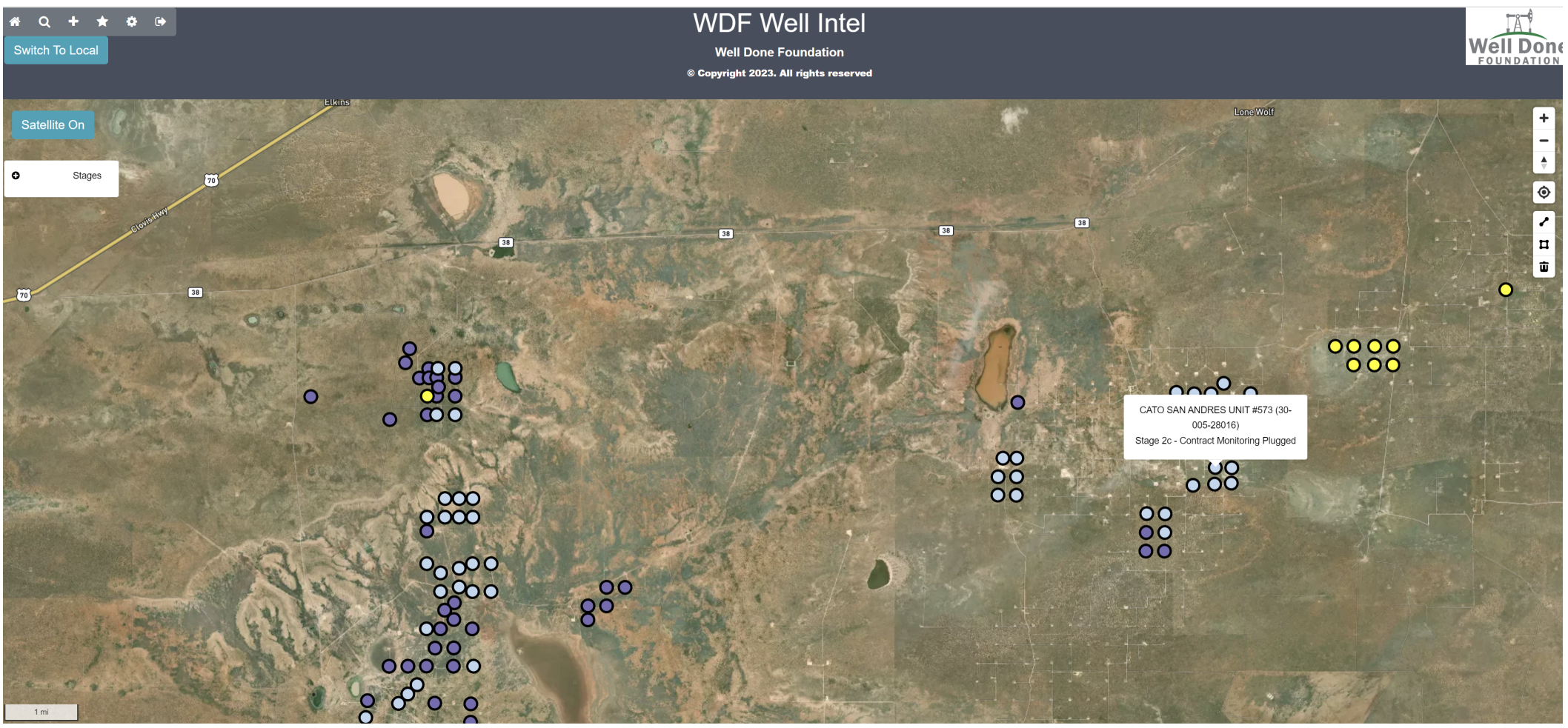
March 05, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+43°	+39°	26.2	SW 4.9	21%
Morning	+39°	+34°	26.2	S 7.8	30%
Day	+77°	+77°	26.3	SW 14.3	7%
Evening	+64°	+64°	26.3	W 9.6	9%


Well Head


Gas Sample
CLOSE OPEN
ONE FULL TURN ONLY
TEDLAR® BAG
BATCH ID: 28211126


Rig Up


WDF Well Intel
Well Done Foundation
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Switch To Local
Satellite On
Stages
Elkins
Lone Wolf
Glorieta Hwy
70
38
CATO SAN ANDRES UNIT #573 (30-005-28016)
Stage 2c - Contract Monitoring Plugged
1 mi

LABORATORY SERVICES Natural Gas Analysis
www.permianls.com
575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

Sample Point Code	Sample Point Name	Sample Point Location
16224G	CSAU #573 Pre Plug	CSA #573

Source Laboratory	Lab File No	Container Identity	Sampler
Laboratory Services	2023065368	Tedlar Bag	SOJ - Spot

District	Area Name	Field Name	Facility Name
USA	USA	USA	New Mexico

Date Sampled	Date Effective	Date Received	Date Reported
Mar 3, 2023 11:28	Mar 3, 2023 11:28	Mar 9, 2023 11:44	Mar 9, 2023

Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
		Torrance	

Operator	Lab Source Description
Well Done Foundation	NG

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	78.2060	78.2057	
CO2 (CO2)	2.3230	2.32318	
Methane (C1)	1.9500	1.95016	
Ethane (C2)	5.4760	5.47567	1.4640
Propane (C3)	7.2070	7.20737	1.9850
I-Butane (IC4)	1.0160	1.01586	0.3320
N-Butane (NC4)	2.1900	2.19017	0.6900
I-Pentane (IC5)	0.6330	0.63266	0.2310
N-Pentane (NC5)	0.4950	0.49539	0.1790
Hexanes Plus (C6+)	0.5040	0.50383	0.2190
TOTAL	100.0000	100.0000	5.1000

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
475.1	467.9	476.2	469.000

Calculated Total Sample Properties

GPA2145-16 *Calculated at Contract Conditions

Relative Density Real	Relative Density Ideal
1.0790	1.0777

Molecular Weight: 31.2148

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 13, 2023

DATA SOURCE: Imported

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

VALIDATOR: Brooke Rush

VALIDATOR COMMENTS: OK

Analyzer Information

Device Type:	Gas Chromatograph	Device Make:	Shimadzu
Device Model:	GC-2014	Last Cal Date:	Feb 13, 2023

Source	Date	Notes
Brooke Rush	Mar 13, 2023 9:12 am	Methane = 19,500 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: CANO PETRO OF NEW MEXICO, INC. 801 Cherry Street Fort Worth, TX 76102	OGRID: 248802
	Action Number: 278352
	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 278352

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	Action Number: 278352
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

QUESTIONS

Prerequisites	
[OGRID] Well Operator	**[248802] CANO PETRO OF NEW MEXICO, INC.**
[API] Well Name and Number	**[30-005-28016] CATO SAN ANDRES UNIT #573**
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	03/04/2023
Latitude	33.62341
Longitude	-103.84953

Monitoring Event Details *Please answer all the questions in this group.*	
Flow rate in cubic meters per day (m^3/day)	1.03
Test duration in hours (hr)	2.4
Average flow temperature in degrees Celsius (°C)	25.0
Average gauge flow pressure in kilopascals (kPag)	0.5
Methane concentration in part per million (ppm)	19,500
Methane emission rate in grams per hour (g/hr)	0.60
Testing Method	Steady State

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