



Test Report

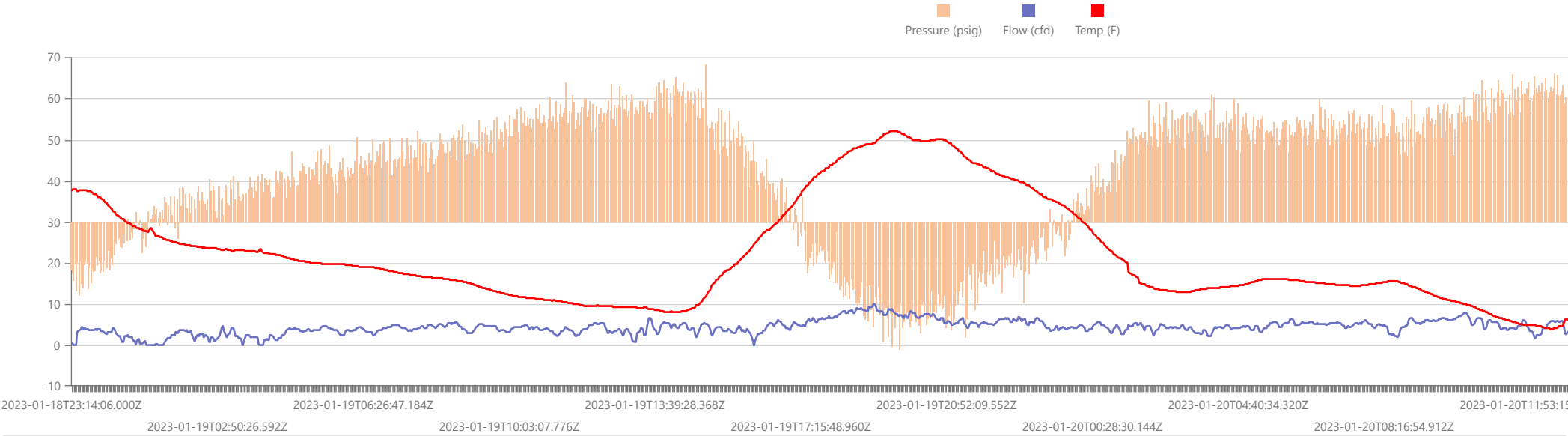
Start Date: Wed Jan 18 2023 23:14:06 GMT+0000 (Coordinated Universal Time) End Date: Fri Jan 20 2023 22:52:14 GMT+0000 (Coordinated Universal Time) Device: VB100-0020 Well Licensee: 30-005-20236 Well Name: Cato San Andres Unit 68 UWI: 30-005-20236 Well License Number: 30-005-20236 Surface Location: State of NM Bottom Hole Location: Unknown	Test Operator: Sean O. Jacobson Authorized By: State of NM Test Reason: I/JA Pre Plugging Scope Of Work: 12 Hour AFE Number: 52100-00000073108 GPS: 33.62526,-103.89920 Notes: 1 Inch Upper Prepared By: Curtis Shuck
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Flow / Pressure Test

Flow Duration 47 hrs 36 minutes <small>Duration</small>	Average Flowrate 4.1064 <small>cfd</small>	Average Pressure 0.0858 <small>psig</small>	Average Flow Temperature 44.9183 <small>°F</small>	Average CH4 Mass 2.07 g/hr
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Methane Calculation: 717 grams CH4 per cubic meter (717 g/m³ x 0.1163 m³/day = 83.39 g/day total /24 = 3.47 g/hour x 0.59641 (methane concentration) = **2.07 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/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 0.0448 *pound per cubic foot* [lb/ft³], or 0.0004144 *ounce per cubic inch* [oz/inch³].

Flow / Pressure / Temperature Timeseries



#	Date	Note
1	2023-06-29	ces: On location with WDF Measure 1 for post plugging testing. Inspect cement. Conduct field gas analysis. Collect gas sample for Laboratory analysis. Place green ribbon. Take site photos. WILDCAT OUT!
2	2023-01-20	On location to rig down VB100-020 and VB100-029. Secure location.
3	2023-01-18	Arrived on location 2:32pm January 18, 2023. Conducted field gas analysis then collected a gas sample from both the 2" the 1". Rigged VB100-020 at the 1" production head. Rigged VB100-029 at the 2" casing port. Site photos.





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575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

15810G	CSA #68	CSA #68	
Sample Point Code	Sample Point Name	Sample Point Location	
Laboratory Services	2023062997	Tedlar Bag	SJ - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
Jan 18, 2023 15:00	Jan 18, 2023 15:00	Jan 23, 2023 08:34	Jan 23, 2023
Date Sampled	Date Effective	Date Received	Date Reported
Luis			
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)	34.4610	34.46097	
CO2 (CO2)	0.1080	0.10827	
Methane (C1)	59.6410	59.64118	
Ethane (C2)	2.8250	2.82456	0.7550
Propane (C3)	1.4180	1.4176	0.3910
I-Butane (IC4)	0.2490	0.24916	0.0810
N-Butane (NC4)	0.3070	0.30714	0.0970
I-Pentane (IC5)	0.2400	0.23956	0.0880
N-Pentane (NC5)	0.1420	0.14212	0.0510
Hexanes Plus (C6+)	0.6090	0.60944	0.2640
TOTAL	100.0000	100.0000	1.7270

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:	Jan 3, 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
755.3	743.4	757.000	745.1

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.7575	0.7565
Molecular Weight	
21.9102	

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

Field H2S
1.2 PPM

PROTREND STATUS:

Passed By Validator on Jan 23, 2023

DATA SOURCE:

Imported

PASSED BY VALIDATOR REASON:

First sample taken @ this point, composition looks reasonable

VALIDATOR:

Brooke Rush

VALIDATOR COMMENTS:

ok

Source	Date	Notes
Brooke Rush	Jan 23, 2023 5:42 pm	Methane = 596,410 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 243490

DEFINITIONS

Operator: CANO PETRO OF NEW MEXICO, INC. 801 Cherry Street Fort Worth, TX 76102	OGRID: 248802
	Action Number: 243490
	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

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QUESTIONS

Prerequisites	
[OGRID] Well Operator	[248802] CANO PETRO OF NEW MEXICO, INC.
[API] Well Name and Number	[30-005-20236] CATO SAN ANDRES UNIT #068
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	01/18/2023
Latitude	33.6252213
Longitude	-103.8991928

Monitoring Event Details

Please answer all the questions in this group.

Flow rate in cubic meters per day (m³/day)	0.12
Test duration in hours (hr)	47.3
Average flow temperature in degrees Celsius (°C)	7.2
Average gauge flow pressure in kilopascals (kPag)	0.8
Methane concentration in part per million (ppm)	596,410
Methane emission rate in grams per hour (g/hr)	2.07
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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