Test Report

Start Date: Fri May 26 2023 23:36:32 GMT+0000 (Coordinated Universal Time)
End Date: Sat May 27 2023 23:38:27 GMT+0000 (Coordinated Universal Time)
Device: VB100-0054
Well Licensee: EMNRD OCD
Well Name: Cato San Andres 069
UWI: 30-005-10586
Well License Number: 30-005-10586
Surface Location: CHAVES
Bottom Hole Location: unknown

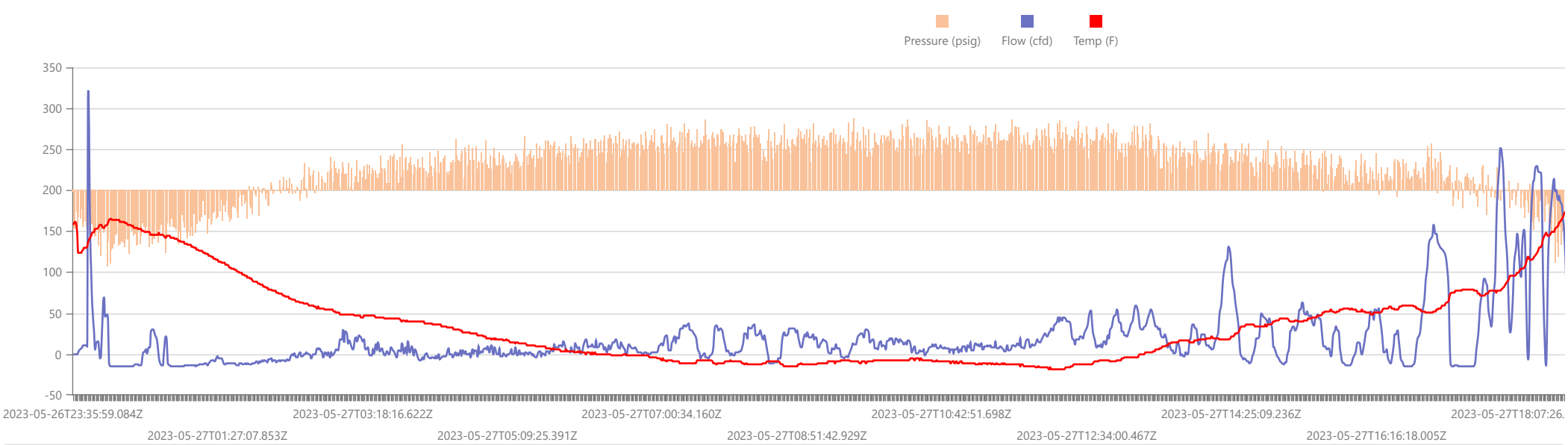
Test Operator: ces
Authorized By: OCD
Test Reason: IIJA PRE Plug
Scope Of Work: 12-HOUR
AFE Number: 52100-0000073108
GPS: 33.62529,-103.89598
Notes: Casing
Prepared By: Curtis Shuck

Flow / Pressure Test

Flow Duration	Average Flowrate	Average Pressure	Average Flow Temperature	Average CH4 Mass
24 hrs 1 minutes	23.2956	0.0373	76.4854	1.62 g/hr
Duration	cfd	psig	°F	

Methane Calculation: 717 grams CH4 per cubic meter (717 g/m^3 x 0.6597 m^3/day = 473.00 g/day total /24 = 19.71 g/hour x 0.08239 (methane concentration) = **1.62 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	2023-06-29	ces: On location with WDF Measure 1 for Post Plugging Methane Testing. Perform Field Gas analysis. Collect gas sample for Laboratory analysis,. Place ribbon at well bore, Site photos. Secure location. WILDCAT OUT!
2	2023-05-28	ces: On location with WDF Measure 1. Stop active test. Rig down VBI-54. Secure location. WILDCAT OUT!
3	2023-05-27	ces: On location with WDF Measure1. Take site photos. Perform Field Gas Analysis. Collect Gas Samples for Pre Plug Laboratory analysis. Rig up VB100-54 for 12-hour test. Secure locaiton.

May 25, 2023

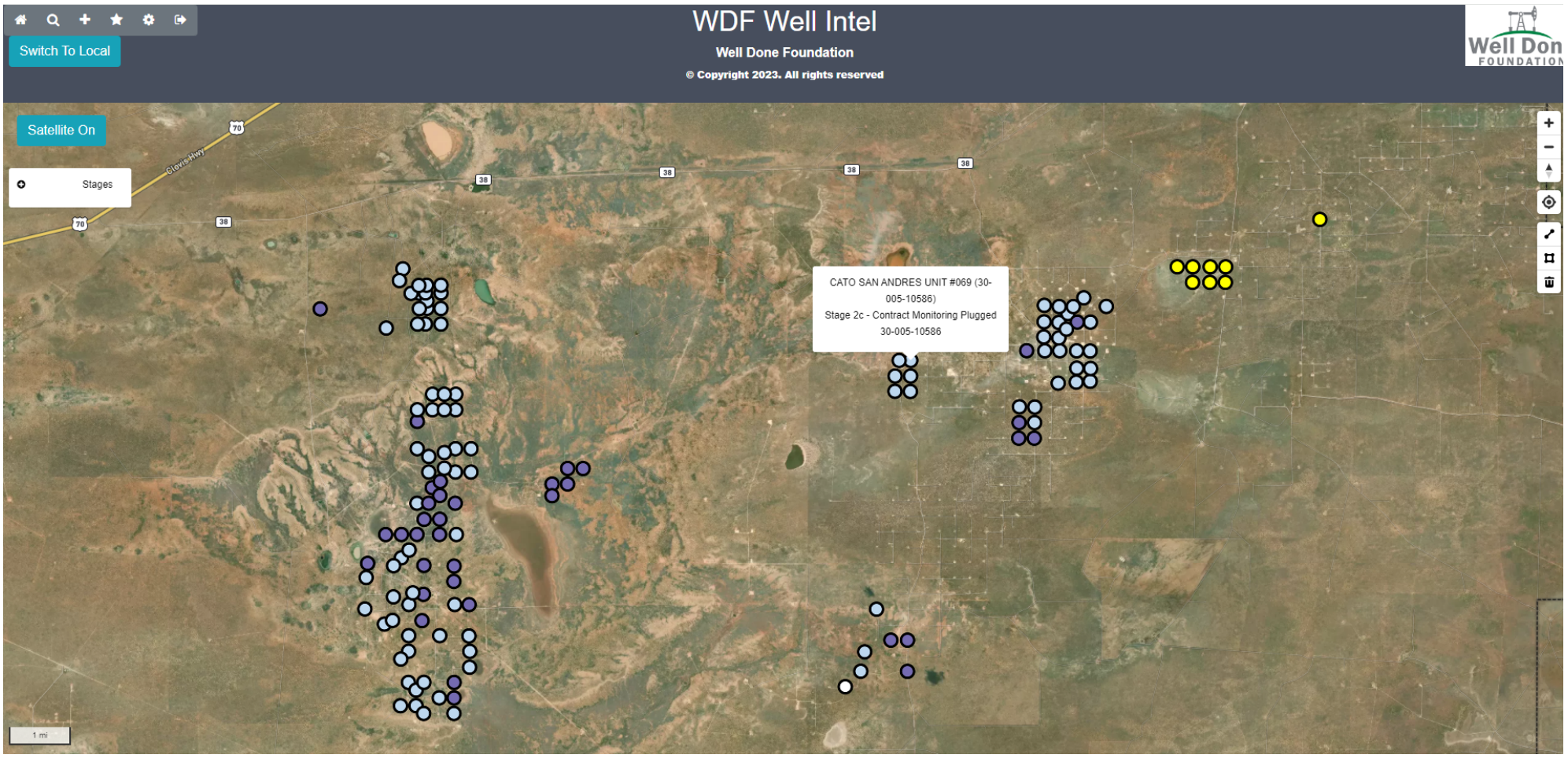
	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+73°	+73°	26.3	S 9.6	58%
Morning	+63°	+63°	26.3	SE 8.5	77%
Day	+81°	+81°	26.4	S 13	35%
Evening	+82°	+82°	26.4	SE 14.3	38%

Hourly forecast for 25.05.2023

May 26, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	+72°	+72°	26.4	SE 11.6	70%
Morning	+68°	+68°	26.5	SE 10.7	73%
Day	+75°	+75°	26.4	S 15.7	39%
Evening	+82°	+82°	26.4	SE 16.8	37%

Hourly forecast for 26.05.2023



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
17170G	CSA #069 (Pre Plug)	CSA #069 (Pre Plug)

Source Laboratory	Lab File No	Container Identity	Sampler
Laboratory Services	2023069952	BAG	CES - Spot

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

Date Sampled	Date Effective	Date Received	Date Reported
May 26, 2023 17:00	May 26, 2023 17:00	Jun 8, 2023 07:09	Jun 9, 2023

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

Operator	Lab Source Description
Well Done Foundation	NG

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	87.1200	87.119	
CO2 (CO2)	0.0530	0.053	
Methane (C1)	8.2430	8.243	
Ethane (C2)	1.9790	1.979	0.5290
Propane (C3)	1.1540	1.154	0.3180
I-Butane (IC4)	0.1580	0.158	0.0520
N-Butane (NC4)	0.3700	0.37	0.1170
I-Pentane (IC5)	0.0690	0.069	0.0250
N-Pentane (NC5)	0.0990	0.099	0.0360
Hexanes Plus (C6+)	0.7550	0.755	0.3280
TOTAL	100.0000	99.9990	1.4050

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:	Jun 5, 2023

Gross Heating Values (Real, BTU/ft³)

14.696 PSI @ 60.00 Â°F		14.73 PSI @ 60.00 Â°F	
Dry	Saturated	Dry	Saturated
210.7	208.000	211.2	208.5

Calculated Total Sample Properties

GPA2145-16 *Calculated at Contract Conditions

Relative Density Real	Relative Density Ideal
0.9666	0.9663

Molecular Weight: 27.9866

C6+ Group Properties

Assumed Composition

C6 - 60.000% C7 - 30.000% C8 - 10.000%

Field H2S: 0 PPM

PROTREND STATUS: Passed By Validator on Jun 12, 2023

DATA SOURCE: Imported

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

VALIDATOR: Luis Cano

VALIDATOR COMMENTS: OK

Source	Date	Notes
Luis Cano	Jun 12, 2023 9:16 am	Methane: 82,430 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 295389

DEFINITIONS

Operator: CANO PETRO OF NEW MEXICO, INC. 801 Cherry Street Fort Worth, TX 76102	OGRID: 248802
	Action Number: 295389
	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 295389

QUESTIONS

Operator: CANO PETRO OF NEW MEXICO, INC. 801 Cherry Street Fort Worth, TX 76102	OGRID: 248802
	Action Number: 295389
	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	**[30-005-10586] CATO SAN ANDRES UNIT #069**
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	05/26/2023
Latitude	33.62529
Longitude	-103.89598

Monitoring Event Details *Please answer all the questions in this group.*	
Flow rate in cubic meters per day (m^3/day)	0.66
Test duration in hours (hr)	24.0
Average flow temperature in degrees Celsius (°C)	24.7
Average gauge flow pressure in kilopascals (kPag)	0.3
Methane concentration in part per million (ppm)	82,430
Methane emission rate in grams per hour (g/hr)	1.60
Testing Method	Steady State

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