



## Pre-Plugging Methane Emissions Monitoring Report

*Haley Chaveroo 17*

Prepared by TS-Nano, Inc.

For NM Energy, Minerals and Natural Resources Department, Oil Conservation Division

PO# 52100-0000079762

### Well information

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ID #: 30-041-10171  
Name: Haley Chaveroo 17

Coordinates: 33.66219, -103.5731  
Surface Location: Roosevelt County



### Measurement notes

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Device used: Ventbuster device VB100-0138

Test operator: Dwayne Smith

Gas sample taken from well: 5/22/25 9:30

Ventbuster connected to well: 5/27/25 8:48

Continuous monitoring of well flowrate, pressure,  
and temperature

Hourly measurement of weather data

Ventbuster disconnected from well: 5/28/25 7:25

Notes: No remarkable observations

Gas sample delivered to laboratory: 5/30/25

Laboratory Name/Location: Laboratory Services / Hobbs, NM



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### Measurement data

Wellhead pressure (kPa gage)\*: less than detection limit (<10 kPa)

Average flow rate ( $\text{Sm}^3/\text{d}$ ): 0.203

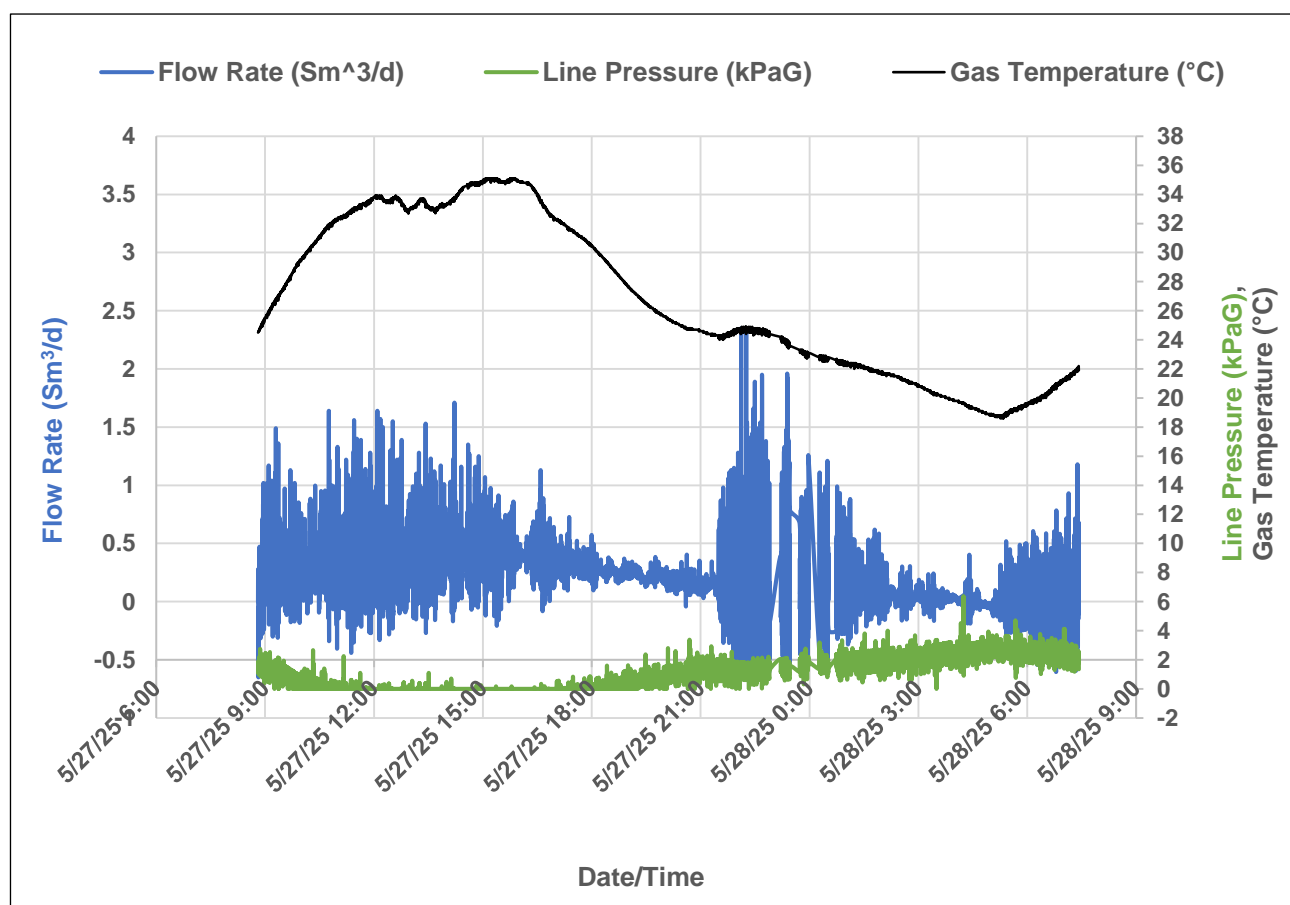
Average methane mass flow rate (g/hr)

using methane % from lab analysis: 0.02

### Methane mass flowrate calculation

Variable	Unit	Value
Pressure (P)	kPaA	Std pressure, 101.3 KPaA
Volumetric flow (V)	Std $\text{m}^3/\text{day}$	Measured from the Unit
% methane	% (methane/gas)	Measured from lab sample
Temperature (T)	Kelvin	Std temperature, 288.13 K
Gas constant (R)	$\text{m}^3 \text{ Pa}/(\text{K mol})$	8.3144626
Molecular weight of methane (Mw)	g/mole	16.04

$$\text{Mass flow of methane } \left( \frac{\text{g}}{\text{hr}} \right) = \frac{\%, \text{methane}}{100\%} * V * P * \frac{Mw}{R T} * \frac{1000}{24}$$



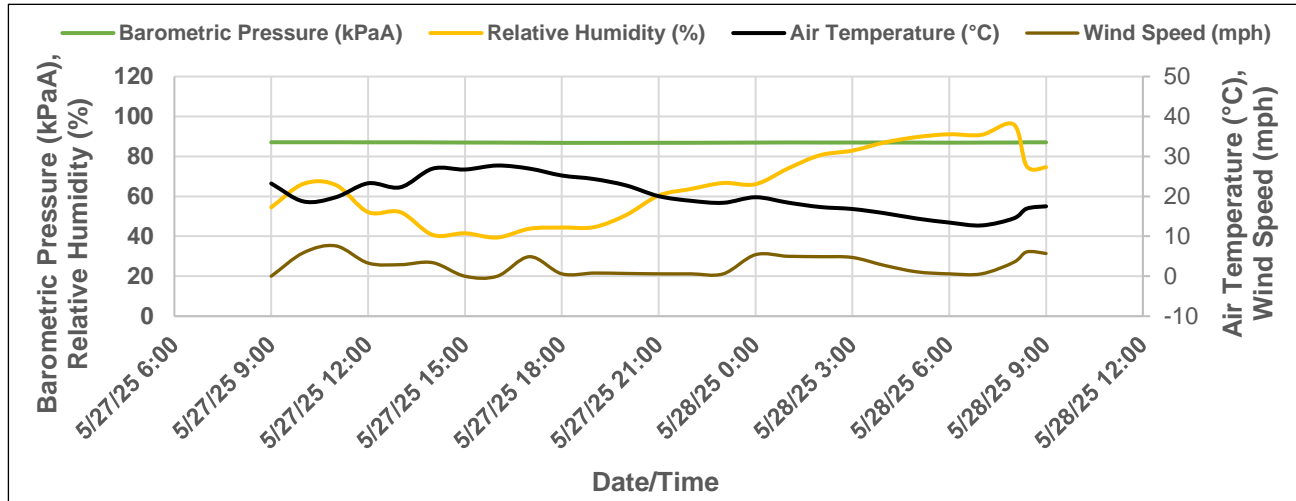


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### Weather data

Precipitation during measurement period (in): 0.000



Date and Time	Air Temperature (°C)	Relative Humidity (%)	Barometric Pressure (kPaA)	Wind Speed (mph)
5/27/2025 9:00	23.2	54.5	87.10	0.0
5/27/2025 10:00	18.7	66.3	87.10	5.9
5/27/2025 11:00	19.8	65.7	87.10	7.6
5/27/2025 12:00	23.3	52.1	87.06	3.3
5/27/2025 13:00	22.3	52.1	87.06	2.9
5/27/2025 14:00	26.9	40.7	87.03	3.4
5/27/2025 15:00	26.7	41.5	86.96	0.0
5/27/2025 16:00	27.7	39.4	86.93	0.0
5/27/2025 17:00	26.9	43.8	86.86	4.9
5/27/2025 18:00	25.2	44.4	86.79	0.6
5/27/2025 19:00	24.3	44.6	86.79	0.8
5/27/2025 20:00	22.7	50.7	86.79	0.7
5/27/2025 21:00	20.1	60.4	86.83	0.6
5/27/2025 22:00	18.9	63.7	86.83	0.6
5/27/2025 23:00	18.4	66.7	86.89	0.6
5/28/2025 0:00	19.8	66.1	86.93	5.4
5/28/2025 1:00	18.4	73.9	87.00	5.0
5/28/2025 2:00	17.3	80.6	86.96	4.9
5/28/2025 3:00	16.8	82.9	86.96	4.7
5/28/2025 4:00	15.8	87.0	86.96	2.7
5/28/2025 5:00	14.4	89.7	86.93	1.1
5/28/2025 6:00	13.4	91.1	86.89	0.6
5/28/2025 7:00	12.7	90.8	86.93	0.6



25040G

Sample Point Code

30-041-10171

Sample Point Name

HALEY CHAVEROO #17

Sample Point Location

Laboratory Services

Source Laboratory

2025113068

Lab File No

BAG

Container Identity

DWAYNE SMITH - Spot

Sampler

USA

District

USA

Area Name

USA

Field Name

New Mexico

Facility Name

May 22, 2025

Date Sampled

May 1, 2025

Date Effective

May 30, 2025 14:34

Date Received

Jun 2, 2025

Date Reported

Admin

Ambient Temp (°F)

Flow Rate (Mcf)

Analyst

Press PSI @ Temp °F  
Source Conditions

TS-Nano

Operator

NG

Lab Source Description

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	92.3490	92.3496	
CO2 (CO2)	0.0000	0	
Methane (C1)	0.4150	0.41458	
Ethane (C2)	1.4710	1.47095	0.3930
Propane (C3)	2.9980	2.99832	0.8260
I-Butane (IC4)	0.6080	0.60778	0.1990
N-Butane (NC4)	1.2810	1.28078	0.4040
I-Pentane (IC5)	0.3950	0.39499	0.1440
N-Pentane (NC5)	0.2710	0.27057	0.0980
Hexanes Plus (C6+)	0.2120	0.21238	0.0920
TOTAL	100.0000	100.0000	2.1560

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: May 27, 2025

## Gross Heating Values (Real, BTU/ft³)

14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
205.5	202.9	206.0	203.4

## Calculated Total Sample Properties

GPA2145-16 \*Calculated at Contract Conditions

Relative Density Real	Relative Density Ideal
1.0180	1.0177
Molecular Weight	
29.4770	

## C6+ Group Properties

Assumed Composition

C6 - 60.000%	C7 - 30.000%	C8 - 10.000%
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Field H2S  
0 PPM

## PROTREND STATUS:

Passed By Validator on Jun 2, 2025

## DATA SOURCE:

Imported

## PASSED BY VALIDATOR REASON:

First sample taken @ this point, composition looks reasonable

## VALIDATOR:

Alexus Sepeda

## VALIDATOR COMMENTS:

OK



[www.permianls.com](http://www.permianls.com)

575.397.3713 2609 W Marland Hobbs, NM 88240

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

DEFINITIONS

Action 472176

DEFINITIONS

Operator:  RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:  164557
	Action Number:  472176
	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

<b>Prerequisites</b>	
[OGRID] Well Operator	[164557] RIDGEWAY ARIZONA OIL CORP.
[API] Well Name and Number	[30-041-10171] HALEY CHAVEROO SA UNIT #017
Well Status	Active

<b>Monitoring Event Information</b>	
<i>Please answer all the questions in this group.</i>	
Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	05/27/2025
Latitude	33.66219
Longitude	-103.57310

<b>Monitoring Event Details</b>	
<i>Please answer all the questions in this group.</i>	
Flow rate in cubic meters per day (m³/day)	0.20
Test duration in hours (hr)	22.6
Average flow temperature in degrees Celsius (°C)	26.8
Average gauge flow pressure in kilopascals (kPag)	1.1
Methane concentration in part per million (ppm)	4,150
Methane emission rate in grams per hour (g/hr)	0.02
Testing Method	Steady State

<b>Monitoring Contractor</b>	
<i>Please answer all the questions in this group.</i>	
Name of monitoring contractor	TS-Nano, Inc.