



Pre-Plugging Methane Emissions Monitoring Report

Haley Chaveroo 21

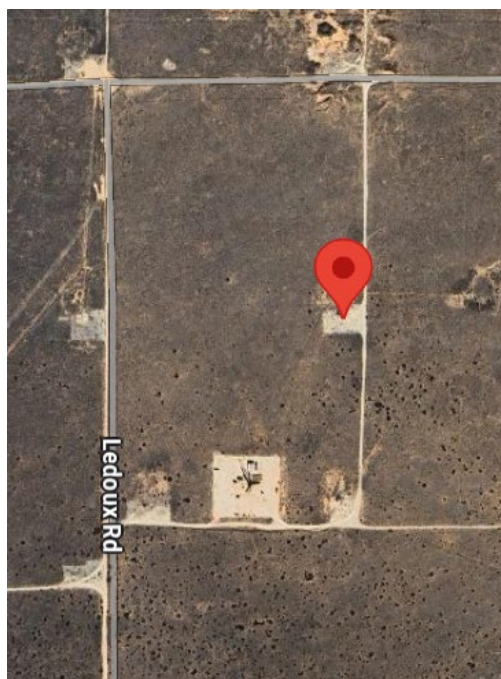
Prepared by TS-Nano, Inc.

For NM Energy, Minerals and Natural Resources Department, Oil Conservation Division
PO# 52100-0000079762

Well information

ID #: 30-041-10214
Name: Haley Chaveroo 21

Coordinates: 33.66235, -103.55553
Surface Location: Roosevelt County



Measurement notes

Device used: Ventbuster device VB100-0138

Test operator: Dwayne Smith

Gas sample taken from well: 5/21/25 12:00

Ventbuster connected to well: 5/22/25 11:10

Continuous monitoring of well flowrate, pressure,
and temperature

Hourly measurement of weather data

Ventbuster disconnected from well: 5/23/25 7:32

Notes: well had 2620 kPa (380 psi) pressure, bled overnight.

Gas sample delivered to laboratory: 5/23/25

Laboratory Name/Location: Laboratory Services / Hobbs, NM



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Measurement data

Wellhead pressure (kPa gage)*: 2620 kPa

Average flow rate (Sm^3/d): 2.614

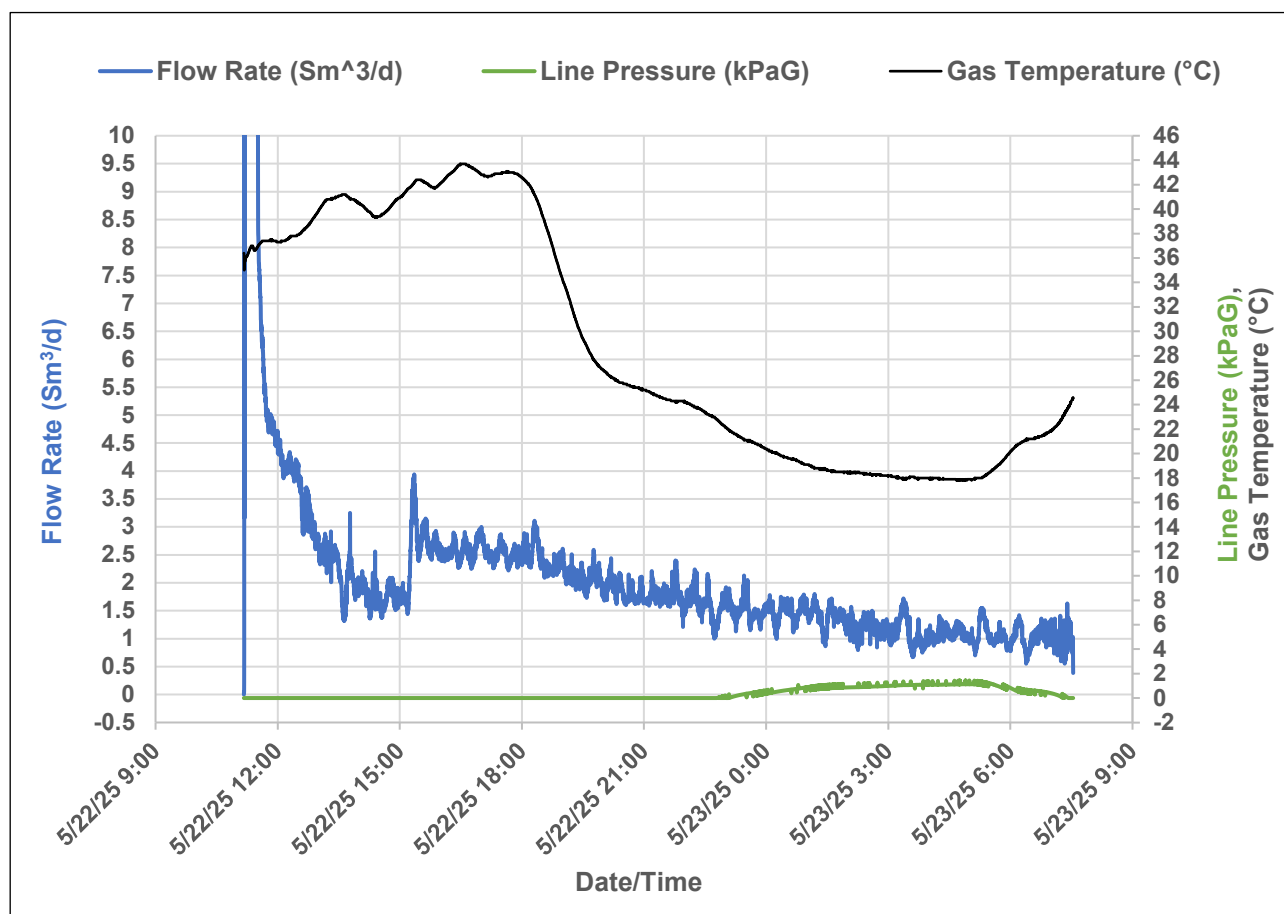
Average methane mass flow rate (g/hr)

using methane % from lab analysis: 0.00

Methane mass flowrate calculation

Variable	Unit	Value
Pressure (P)	kPaA	Std pressure, 101.3 KPaA
Volumetric flow (V)	Std m^3/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

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



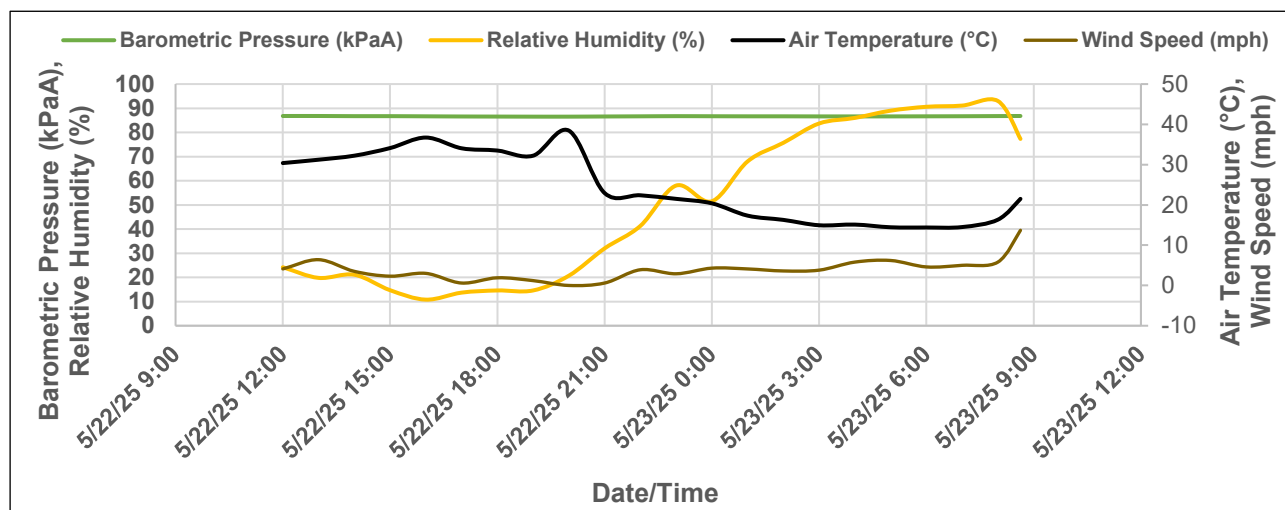
**TS-NANO**

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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)
5/22/2025 12:00	30.4	24.2	86.79	4.1
5/22/2025 13:00	31.2	19.8	86.79	6.4
5/22/2025 14:00	32.2	21.1	86.73	3.5
5/22/2025 15:00	34.1	14.7	86.73	2.3
5/22/2025 16:00	36.7	10.8	86.66	3.0
5/22/2025 17:00	34.1	13.7	86.59	0.6
5/22/2025 18:00	33.5	14.6	86.56	1.9
5/22/2025 19:00	32.2	14.6	86.52	1.2
5/22/2025 20:00	38.4	20.7	86.52	0.0
5/22/2025 21:00	22.9	32.0	86.59	0.6
5/22/2025 22:00	22.4	41.3	86.66	3.9
5/22/2025 23:00	21.5	58.0	86.73	2.9
5/23/2025 0:00	20.4	51.5	86.69	4.3
5/23/2025 1:00	17.3	68.0	86.66	4.1
5/23/2025 2:00	16.3	75.7	86.66	3.6
5/23/2025 3:00	14.9	83.7	86.62	3.8
5/23/2025 4:00	15.1	86.0	86.62	5.8
5/23/2025 5:00	14.4	89.0	86.62	6.2
5/23/2025 6:00	14.4	90.6	86.66	4.6
5/23/2025 7:00	14.5	91.1	86.69	5.0
5/23/2025 8:00	16.3	93.0	86.76	5.8
5/23/2025 8:37	21.5	77.3	86.79	13.7



24919G

Sample Point Code

30-041-10214

Sample Point Name

HALEY CHAVEROO #21

Sample Point Location

Laboratory Services

Source Laboratory

2025112704

Lab File No

BAG

Container Identity

DWAYNE SMITH - Spot

Sampler

USA

District

USA

Area Name

USA

Field Name

New Mexico

Facility Name

May 21, 2025

Date Sampled

May 1, 2025

Date Effective

May 27, 2025 08:05

Date Received

May 27, 2025

Date Reported

System Administrator

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)	99.4090	99.4085	
CO2 (CO2)	0.0770	0.0774	
Methane (C1)	0.0000	0	
Ethane (C2)	0.0080	0.0083	0.0020
Propane (C3)	0.0130	0.0133	0.0040
I-Butane (IC4)	0.0000	0	0.0000
N-Butane (NC4)	0.0830	0.0832	0.0260
I-Pentane (IC5)	0.1020	0.1015	0.0370
N-Pentane (NC5)	0.0920	0.0915	0.0330
Hexanes Plus (C6+)	0.2160	0.2163	0.0940
TOTAL	100.0000	100.0000	0.1960

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

Analyzer Information

Device Type:

Device Make:

Device Model:

Last Cal Date:

Gross Heating Values (Real, BTU/ft³)

14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
22.1	22.6	22.2	22.7

Calculated Total Sample Properties

GPA2145-16 *Calculated at Contract Conditions

Relative Density Real

Relative Density Ideal

0.9764

0.9765

Molecular Weight

28.2794

C6+ Group Properties

Assumed Composition

C6 - 60.000%

C7 - 30.000%

C8 - 10.000%

Field H2S

0 PPM

PROTREND STATUS:

Passed By Validator on May 27, 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

[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 469097

DEFINITIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 469097
	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.

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

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QUESTIONS

Action 469097

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Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 469097
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

QUESTIONS

Prerequisites	
[OGRID] Well Operator	[164557] RIDGEWAY ARIZONA OIL CORP.
[API] Well Name and Number	[30-041-10214] HALEY CHAVEROO SA UNIT #021
Well Status	Active

Monitoring Event Information*Please answer all the questions in this group.*

Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	05/22/2025
Latitude	33.66235
Longitude	-103.55553

Monitoring Event Details*Please answer all the questions in this group.*

Flow rate in cubic meters per day (m ³ /day)	2.61
Test duration in hours (hr)	20.4
Average flow temperature in degrees Celsius (°C)	29.3
Average gauge flow pressure in kilopascals (kPag)	0.3
Methane concentration in part per million (ppm)	0
Methane emission rate in grams per hour (g/hr)	0.00
Testing Method	Steady State

Monitoring Contractor*Please answer all the questions in this group.*

Name of monitoring contractor	TS-Nano, Inc.
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