



TS-NANO

Pre-Plugging Methane Emissions Monitoring Report

Jennifer Chaveroo SA Unit 25

Prepared by TS-Nano, Inc.

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

PO# 52100-0000078682

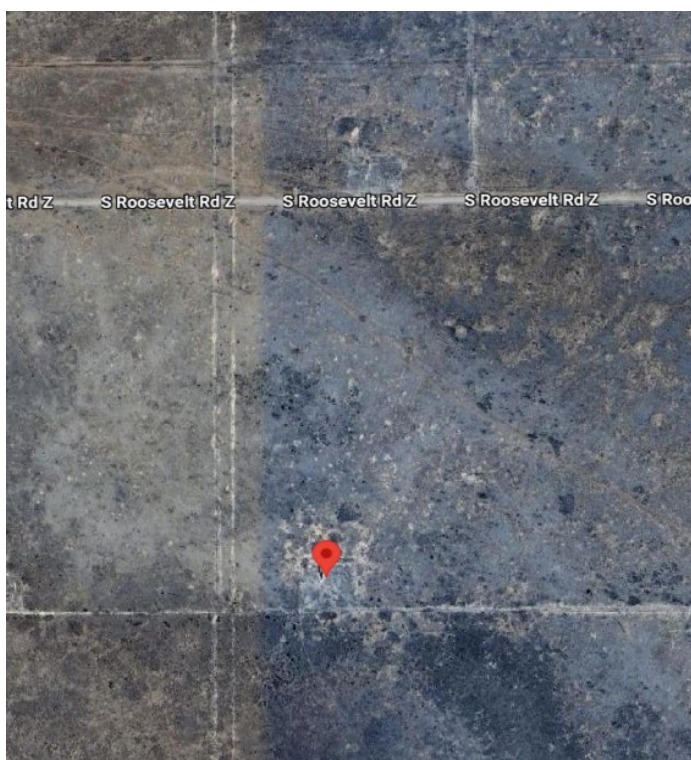
Well information

ID #: 30-041-10655

Name: Jennifer Chaveroo SA Unit 25

Coordinates: 33.68183, -103.4948

Surface Location: Roosevelt County



Measurement notes

Device used: Ventbuster device VB100-0138

Test operator: Jr Molina

Gas sample taken from well: 1/13/25 13:00

Ventbuster connected to well: 1/13/25 14:34

Continuous monitoring of well flowrate, pressure, and temperature

Hourly measurement of weather data

Ventbuster disconnected from well: 1/14/25 14:02

Notes: No remarkable observations

Gas sample delivered to laboratory: 1/20/25

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 (Sm³/d): 0.001

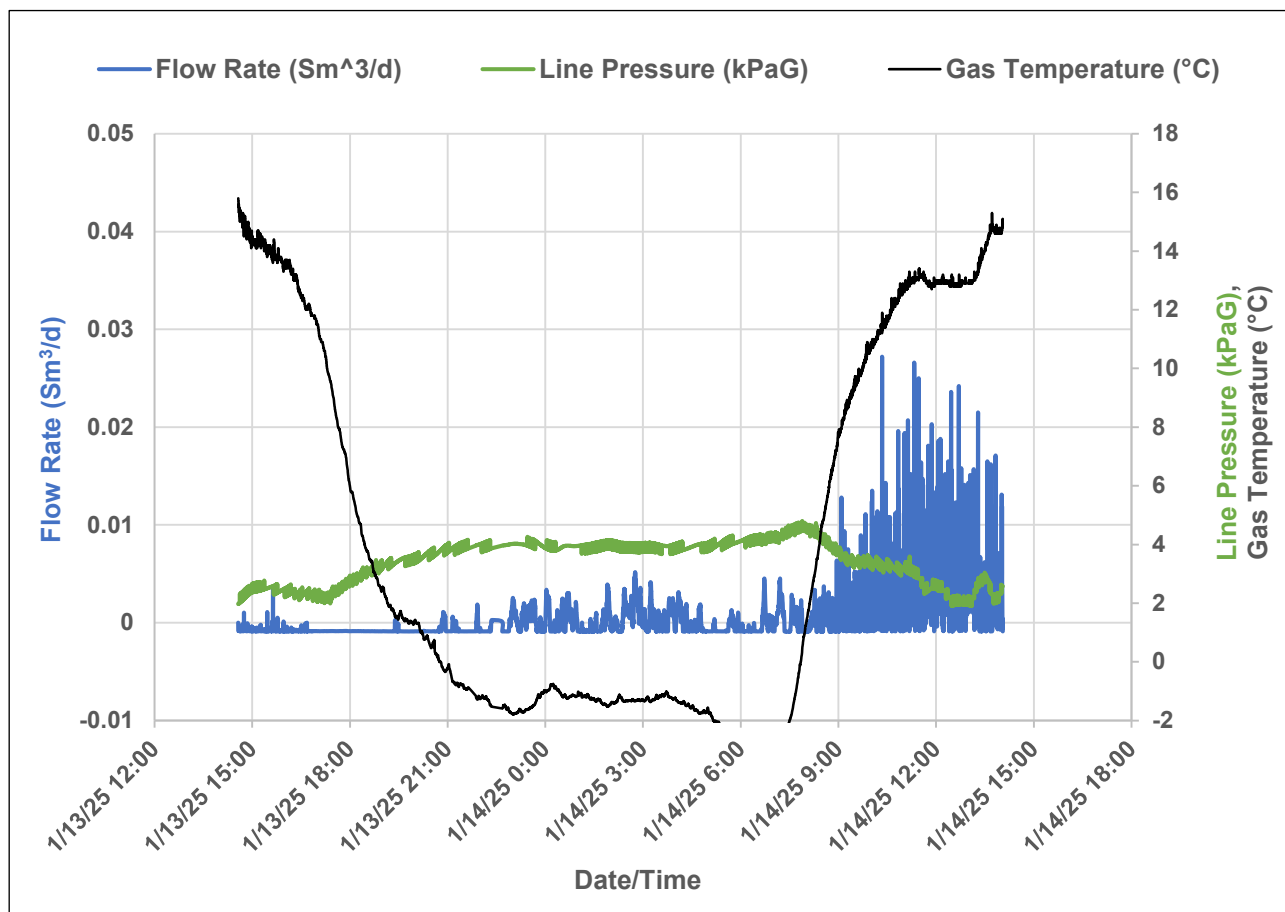
Average methane mass flow rate (g/hr)

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)	m ³ Pa/(K mol)	8.3144626
Molecular weight of methane (Mw)	g/mole	16.04

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



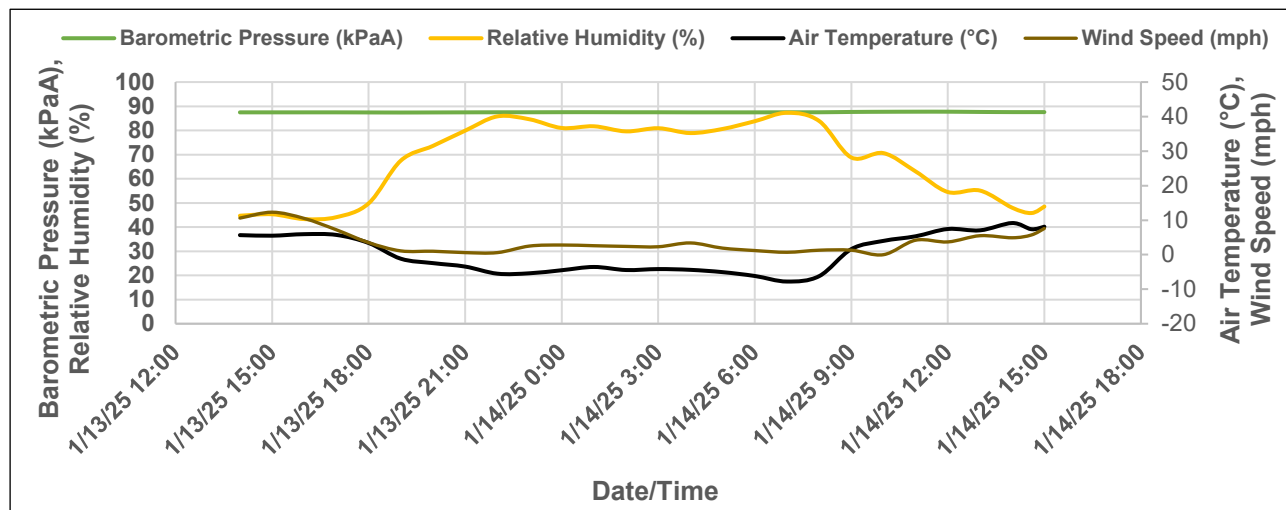


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Weather data

Precipitation during measurement period (in): 0.000



Date and Time	Air Temperature (°C)	Relative Humidity (%)	Barometric Pressure (kPaA)	Wind Speed (mph)
1/13/2025 14:00	5.7	44.7	87.47	10.6
1/13/2025 15:00	5.5	45.3	87.47	12.3
1/13/2025 16:00	5.9	43.3	87.47	10.5
1/13/2025 17:00	5.7	44.1	87.47	7.2
1/13/2025 18:00	3.4	49.8	87.44	3.5
1/13/2025 19:00	-1.2	67.5	87.40	1.1
1/13/2025 20:00	-2.4	73.6	87.44	1.0
1/13/2025 21:00	-3.4	79.9	87.47	0.6
1/13/2025 22:00	-5.5	85.8	87.50	0.6
1/13/2025 23:00	-5.4	84.6	87.50	2.5
1/14/2025 0:00	-4.5	81.0	87.54	2.8
1/14/2025 1:00	-3.6	81.7	87.54	2.6
1/14/2025 2:00	-4.4	79.6	87.50	2.4
1/14/2025 3:00	-4.2	80.9	87.50	2.3
1/14/2025 4:00	-4.4	78.9	87.47	3.4
1/14/2025 5:00	-5.1	80.6	87.47	1.9
1/14/2025 6:00	-6.2	83.8	87.47	1.2
1/14/2025 7:00	-7.8	87.3	87.50	0.7
1/14/2025 8:00	-6.2	83.9	87.50	1.3
1/14/2025 9:00	1.6	68.8	87.64	1.3
1/14/2025 10:00	4.0	70.6	87.71	0.0
1/14/2025 11:00	5.3	63.0	87.74	4.2
1/14/2025 12:00	7.4	54.5	87.74	3.7



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575.397.3713 2609 W Marland Hobbs NM 88240

C6+ Gas Analysis Report

23363G	jennifer chaveroo sa unit #25	jennifer chaveroo sa unit #25	
Sample Point Code	Sample Point Name	Sample Point Location	
Laboratory Services	2025104905	bag	JR Molina - Spot
Source Laboratory	Lab File No	Container Identity	Sampler
USA	USA	USA	New Mexico
District	Area Name	Field Name	Facility Name
Jan 13, 2025	Jan 1, 2025	Jan 20, 2025 14:46	Jan 21, 2025
Date Sampled	Date Effective	Date Received	Date Reported
System Administrator			
Ambient Temp (°F)	Flow Rate (Mcf)	Analyst	Press PSI @ Temp °F Source Conditions
TS-Nano			NG
Operator			Lab Source Description

Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	98.6880	98.688	
CO2 (CO2)	0.0410	0.041	
Methane (C1)	0.0000	0	
Ethane (C2)	0.0000	0	0.0000
Propane (C3)	0.0110	0.011	0.0030
I-Butane (IC4)	0.0000	0	0.0000
N-Butane (NC4)	0.0000	0	0.0000
I-Pentane (IC5)	0.0000	0	0.0000
N-Pentane (NC5)	0.0000	0	0.0000
Hexanes Plus (C6+)	1.2600	1.26	0.5470
TOTAL	100.0000	100.0000	0.5500

Gross Heating Values (Real, BTU/ft ³)			
14.696 PSI @ 60.00 Å°F		14.73 PSI @ 60.00 Å°F	
Dry	Saturated	Dry	Saturated
65.1	65.0	65.3	65.2

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.9958	0.9958
Molecular Weight	
28.8429	

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

PROTREND STATUS: Passed By Validator on Jan 21, 2025
DATA SOURCE: Imported


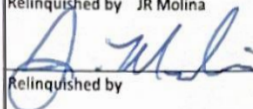
PASSED BY VALIDATOR REASON: Close enough to be considered reasonable.

VALIDATOR: Ashley Russell

VALIDATOR COMMENTS: OK

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:	Sep 9, 2024

 LABORATORY SERVICES <small>Natural Gas Analysis</small>		CHAIN-OF-CUSTODY AND ANALYSIS REQUEST																						
www.permianls.com 575.397.3713 2609 W Marland Hobbs, NM 88240																								
Company Name: TS- Nano, Inc.						BILL TO						Analysis Request												
Project Manager: John Stormont						PO #:																		
Address: 5901 Indian School Rd. NE						Company: TS- Nano, Inc.																		
City: Albuquerque		State: NM		Zip: 87110		Attn: Jay Kitowski																		
Phone #: 505-907-4095			Email: jstormont@ts-nano.com			Address: Same																		
Project #:			Project Owner:			City:																		
Project Name:						State:		Zip:																
Project Location:						Phone #: 505-464-4836																		
Sampler Name:						Email: jkitowski@ts-nano.com																		
Lab I.D.	Sample I.D.	(S)POT or (C)OMP	# Container	Matrix						Preserve								Sampling		C-6+ RGA		C-10+ Ext		
				Groudwater	Wastewater	GAS	Oil	Solid	Other	Acid/Base	Ice/Cool							Other	Date					Time
	J. C. SA UNIT 16	S	1Tedlar			X							1.17.25	1:00PM	X									
	J. C. SA UNIT 22	S	1Tedlar			X							1.17.25	1:00PM	X									
	J. C. SA UNIT 25	S	1Tedlar			X							1.17.25	1:00PM	X									
Relinquished by JR Molina		Date: 1/17/25		Received by:						Phone Result:		Add'l Phone:												
		Time: 13:00								<input type="checkbox"/> Yes <input type="checkbox"/> No														
Relinquished by		Date:		Received by:						Email Result:		REMARKS:												
		Time:								<input type="checkbox"/> Yes <input type="checkbox"/> No														
Deliver by: (circle one)				Sample Condition				Checked by																
Sampler - UPS - Bus - other:				Cool		Intact		(Initials)																
				Yes <input type="checkbox"/>		Yes <input type="checkbox"/>																		
				No <input type="checkbox"/>		No <input type="checkbox"/>																		

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 424748

DEFINITIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 424748
	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 424748

QUESTIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 424748
	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	[30-041-10655] JENNIFER CHAVEROO SA UNIT #025
Well Status	Active

Monitoring Event Information	
<i>Please answer all the questions in this group.</i>	
Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	01/13/2025
Latitude	33.68183
Longitude	-103.49480

Monitoring Event Details	
<i>Please answer all the questions in this group.</i>	
Flow rate in cubic meters per day (m ³ /day)	0.00
Test duration in hours (hr)	23.5
Average flow temperature in degrees Celsius (°C)	4.3
Average gauge flow pressure in kilopascals (kPag)	3.4
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	
<i>Please answer all the questions in this group.</i>	
Name of monitoring contractor	TS-Nano, Inc.