



## Pre-Plugging Methane Emissions Monitoring Report

*Morgan B Federal 006*

Prepared by TS-Nano, Inc.

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

PO# 52100-0000078682

### Well information

ID #: 30-041-10458

Name: Morgan B Federal 006

Coordinates: 33.68424, -103.53342

Surface Location: Roosevelt County



### Measurement notes

Device used: Ventbuster device VB100-0138

Test operator: JR Molina

Gas sample taken from well: 1/2/25 13:55

Ventbuster connected to well: 1/2/25 14:30

Continuous monitoring of well flowrate, pressure,  
and temperature

Hourly measurement of weather data

Ventbuster disconnected from well: 1/3/25 11:15

Notes: No remarkable observations

Gas sample delivered to laboratory: 1/9/25

Laboratory Name/Location: Laboratory Services / Hobbs, NM



## Pre-Plugging Methane Emissions Monitoring Report

Morgan B Federal 006

### Measurement data

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

Average flow rate ( $\text{Sm}^3/\text{d}$ ): 0.000

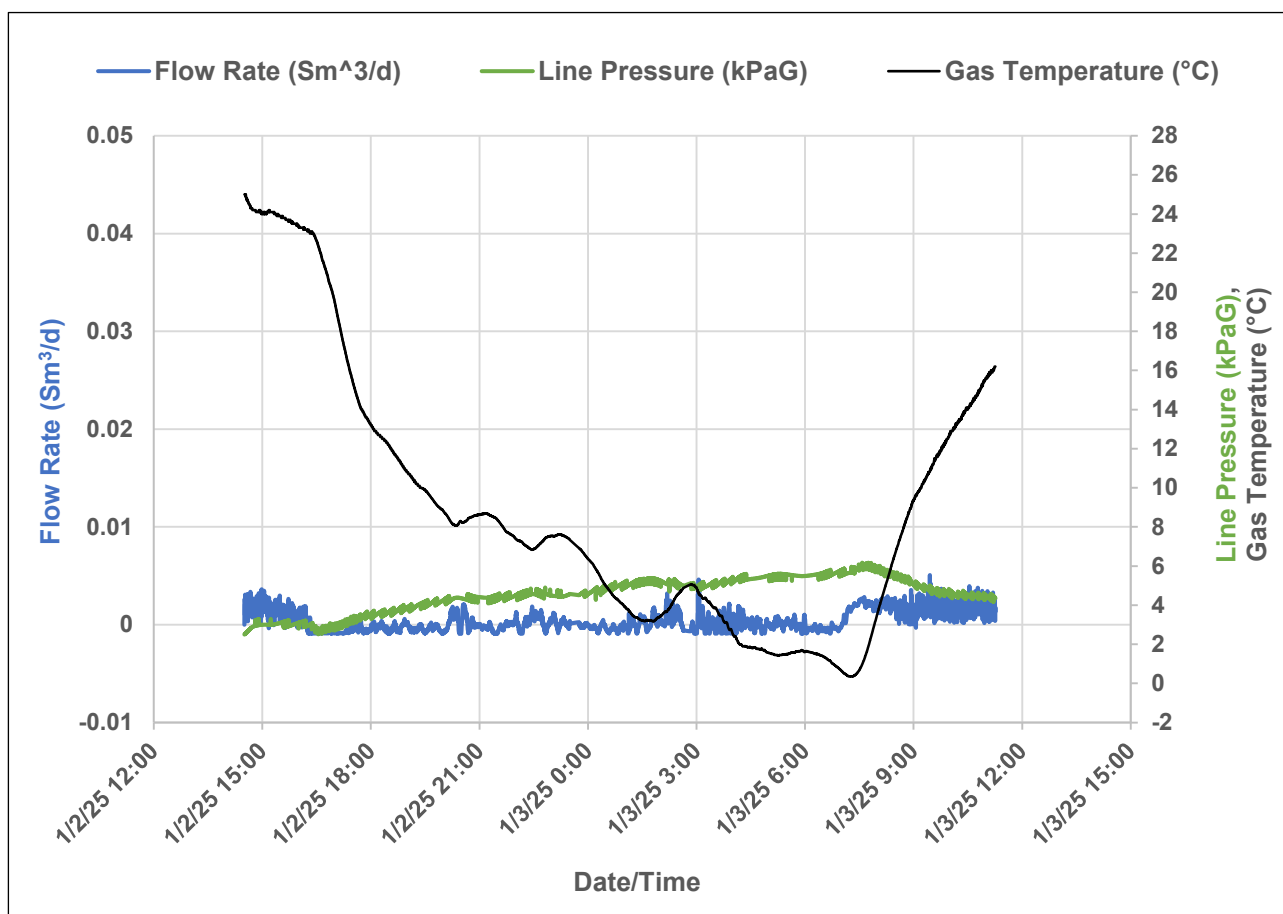
Average methane mass flow rate (g/hr)

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 $\text{m}^3/\text{day}$	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

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



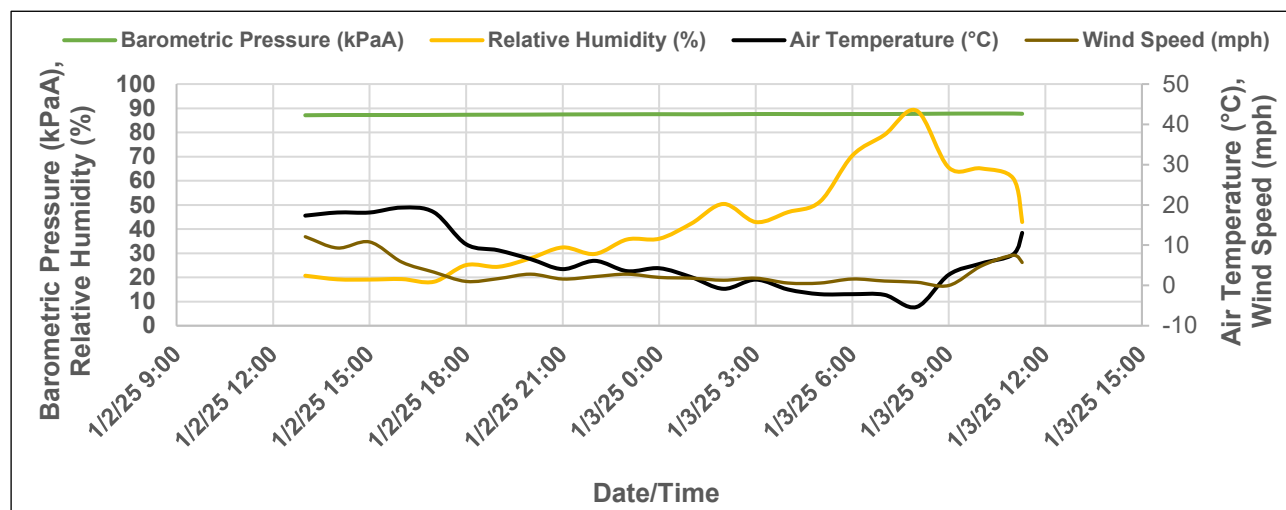


## Pre-Plugging Methane Emissions Monitoring Report

Morgan B Federal 006

### Weather data

Precipitation during measurement period (in): 0.000



Date and Time	Air Temperature (°C)	Relative Humidity (%)	Barometric Pressure (kPaA)	Wind Speed (mph)
1/2/2025 13:00	17.3	20.7	87.10	12.1
1/2/2025 14:00	18.1	19.2	87.20	9.3
1/2/2025 15:00	18.1	19.1	87.20	10.8
1/2/2025 16:00	19.3	19.3	87.20	5.8
1/2/2025 17:00	18.2	18.2	87.23	3.3
1/2/2025 18:00	10.2	25.1	87.30	1.0
1/2/2025 19:00	8.7	24.4	87.33	1.7
1/2/2025 20:00	6.6	27.9	87.37	2.8
1/2/2025 21:00	4.1	32.4	87.44	1.6
1/2/2025 22:00	6.1	29.7	87.47	2.2
1/2/2025 23:00	3.6	35.7	87.50	2.8
1/3/2025 0:00	4.3	36.0	87.54	2.0
1/3/2025 1:00	2.1	42.3	87.50	1.8
1/3/2025 2:00	-0.8	50.4	87.54	1.3
1/3/2025 3:00	1.4	42.9	87.61	1.8
1/3/2025 4:00	-1.0	47.0	87.61	0.6
1/3/2025 5:00	-2.2	51.4	87.57	0.6
1/3/2025 6:00	-2.2	70.4	87.61	1.6
1/3/2025 7:00	-2.3	79.0	87.61	1.1
1/3/2025 8:00	-5.3	89.0	87.67	0.8
1/3/2025 9:00	2.7	65.4	87.78	0.0
1/3/2025 10:00	5.4	65.1	87.81	4.8
1/3/2025 11:00	7.7	61.0	87.81	7.5



23309G		Morgan B Federal #006		Morgan B Federal #006	
Sample Point Code		Sample Point Name		Sample Point Location	
Laboratory Services		2025104468		BAG	
Source Laboratory		Lab File No		Container Identity	
JR Molina - Spot					
SAMPLER					
USA		USA		USA	
District		Area Name		Field Name	
New Mexico					
Facility Name					
Jan 2, 2025		Jan 1, 2025		Jan 9, 2025 14:07	
Date Sampled		Date Effective		Date Received	
Date Reported					
Admin					
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)	99.9560	99.9561	
CO2 (CO2)	0.0360	0.03591	
Methane (C1)	0.0000	0	
Ethane (C2)	0.0000	0	0.0000
Propane (C3)	0.0000	0	0.0000
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+)	0.0080	0.00804	0.0030
TOTAL	100.0000	100.0000	0.0030

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

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 Å°F	14.73 PSI @ 60.00 Å°F		
Dry	Saturated	Dry	Saturated
0.4	1.3	0.4	1.3

Calculated Total Sample Properties	
GPA2145-16 *Calculated at Contract Conditions	
Relative Density Real	Relative Density Ideal
0.9675	0.9676
Molecular Weight	
28.0244	

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

**PROTREND STATUS:** Passed By Validator on Jan 13, 2025  
**DATA SOURCE:** Imported  
**PASSED BY VALIDATOR REASON:** First sample taken @ this point, composition looks reasonable  
**VALIDATOR:** Ashley Russell  
**VALIDATOR COMMENTS:** OK

Released to Imaging: 1/19/2025 5:21:54 PM

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 422183

DEFINITIONS

Operator:  RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:  164557
	Action Number:  422183
	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

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**

QUESTIONS

Action 422183

**QUESTIONS**

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 422183
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

**QUESTIONS**

<b>Prerequisites</b>	
[OGRID] Well Operator	[164557] RIDGEWAY ARIZONA OIL CORP.
[API] Well Name and Number	[30-041-10458] MORGAN B FEDERAL #006
Well Status	Active

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

Reason For Filing	Pre-Plug Methane Monitoring
Date of monitoring	01/02/2025
Latitude	33.68424
Longitude	-103.53300

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

Flow rate in cubic meters per day (m <sup>3</sup> /day)	0.00
Test duration in hours (hr)	20.8
Average flow temperature in degrees Celsius (°C)	9.0
Average gauge flow pressure in kilopascals (kPag)	4.5
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.
-------------------------------	---------------