



Pre-Plugging Test Report

Start Date: Sunday, February 19th, 2023, 4:49 PM EST
End Date: Tuesday, February 21st, 2023, 11:30 AM EST
Device: VB100-0020
Well Licensee: 30-005-61020
Well Name: OBrien Fee 18, 005
UWI: 30-005-61020
Well License Number: 30-005-61020
Surface Location: State of NM
Bottom Hole Location: Unknown

Test Operator: Sean O. Jacobson
Authorized By: State of NM
Test Reason: IJJA Pre Plugging
Scope Of Work: 12 Hour
AFE Number: 52100-0000072995
GPS: 33.61726,-104.02675
Notes: GTG

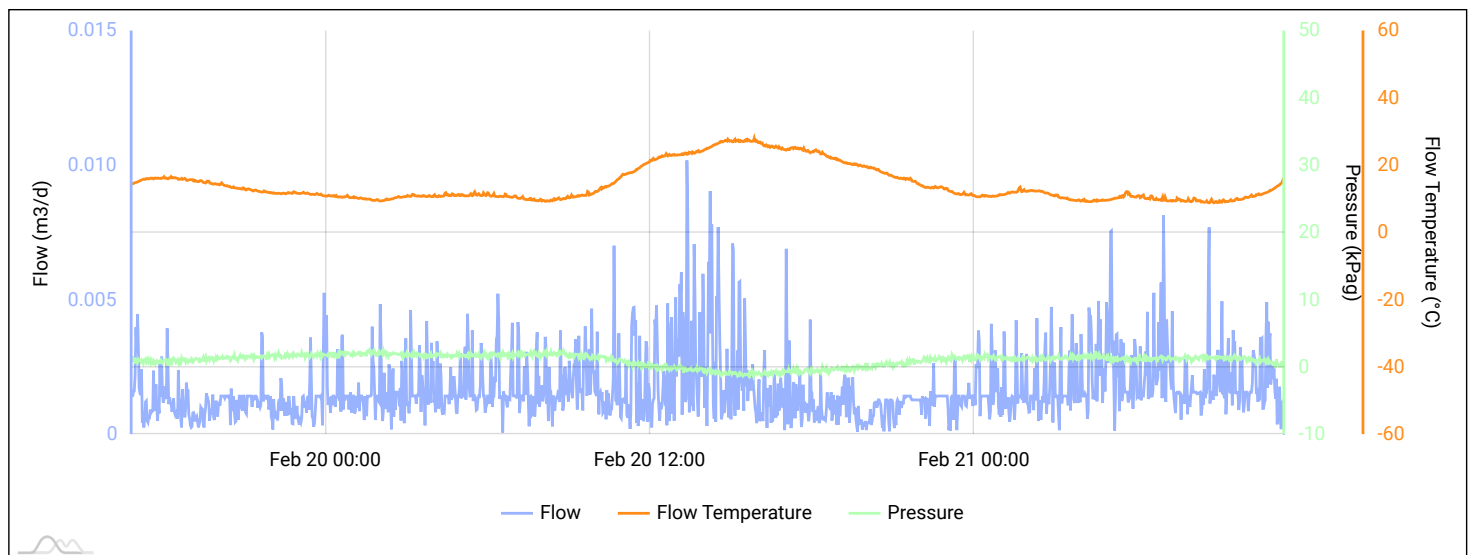
Orphan Well Flow Test

Average Flowrate 0.00 m3/d	Average Flow Temperature 14.5 °C	Average Flow Pressure 1.1 kPag	Flow Duration 42.6 hours	Methane Concentration 0 ppm Total Explosive Gas 145 ppm	Methane Emissions 0.00 g/ hour
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Methane Calculations

- ¹ Methane Calculation: 717 grams CH₄ per cubic meter (717 x 0.00 m³/day = 0.00 g/day total /24 = 0.00 g/hour x 0.00 (methane concentration) = 0.00 **g/hour CH₄**). **Methane, gas** weighs 0.000717 grams per cubic centimeter or 0.717 kilograms per cubic meter, i.e. density of methane, gas is equal to 0.717 kg/m³; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In the Imperial or US customary measurement system, the density is equal to 0.044 pounds per cubic foot [lb/ft³].

Flow/Pressure/Temperature Timeseries



Field Notes



Well Site

[Info](#)[Well File](#)[Images](#)[Well Data](#)[Regulatory](#)[Field Notes](#)[Live Data View](#)[Access](#)

Date04/21/2023

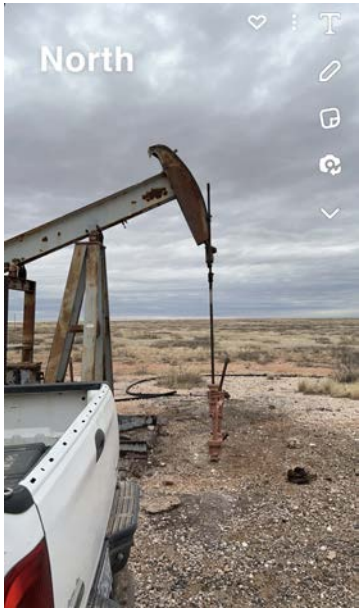
New Note

Required

Add

#	Date	Note
1	2023-02-21	Arrived 9:23am 2/21/2023. Rigged down flow test.
2	2023-02-19	Arrived 3:01pm 2/19/2021. Rigged up Ventbuster #20 for flow testing.

Site Photos

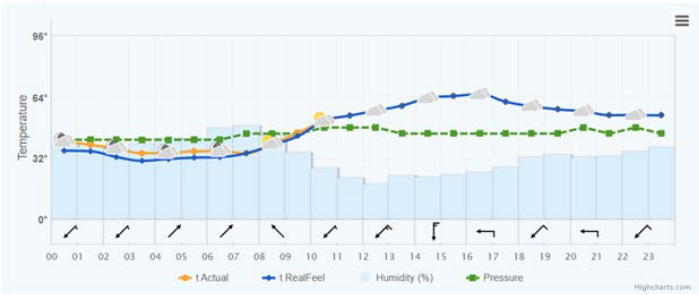


Weather Observations

February 19, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure in-Hg	Wind speed mph	Humidity
Night	+39°	+36°	26.3	▲ S 3.8	60%
Morning	+34°	+34°	26.4	▼ N 1.3	77%
Day	+59°	+59°	26.4	▼ SE 10.1	36%
Evening	+57°	+57°	26.4	▼ SW 7.4	53%

Hourly forecast for 19.02.2023



February 20, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure in-Hg	Wind speed mph	Humidity
Night	+52°	+52°	26.4	► W 12.5	56%
Morning	+48°	+45°	26.4	▼ N 6.7	57%
Day	+73°	+73°	26.4	► W 17.7	24%
Evening	+64°	+64°	26.3	► W 5.6	43%

Hourly forecast for 20.02.2023



February 21, 2023

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure in-Hg	Wind speed mph	Humidity
Night	+52°	+52°	26.3	► W 4.5	59%
Morning	+50°	+50°	26.1	▲ S 7.6	58%
Day	+70°	+70°	26.1	▲ S 19.2	39%
Evening	+59°	+59°	25.9	▼ SW 15.4	35%

Hourly forecast for 21.02.2023





Pre Plugging Test Report

Start Date: March 30, 2023

End Date: March 30, 2023

Device: VB100

Well Licensee: EMNRD - OCD

Well Name: O'Brien Fee 18 #005

UWI: 30-005-61020

Well License Number: 30-005-61020

Surface Location: State of NM

Bottom Hole Location: Unknown

Test Operator: Sean O. Jacobson

Authorized By: State of NM

Test Reason: IJJA Pre Plugging

Scope Of Work: 12 Hour Minimum

AFE Number: 52100-0000072995

GPS: 33.617335,-104.0263367

Notes: GTG

Report Prepared By: CES March 30, 2023

Orphan Well Flow Test

Average Flowrate

0.61

m3/d

Average Flow

Temperature

15.9

°C

Average Flow

Pressure

1.4

kPag

Flow Duration

12.0

hours

Methane Concentration

91,741.25

PPM

Methane Emissions

1.67

g/hour

Methane Calculations

- ¹ Methane Calculation: 717 grams CH₄ per cubic meter (717 x 0.6088 m3/day = 436.51 g/day total /24 = 18.19 g/hour x 0.091741 (methane concentration) = **1.67 g/hour CH₄**). **Methane, gas** weighs 0.000717 gram per cubic centimeter or 0.717 kilogram per cubic meter, i.e. density of methane, gas is equal to 0.717 kg/m³; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In Imperial or US customary measurement system, the density is equal to 0.044 pound per cubic foot [lb/ft³].

O' Brien Field Methane Emission Averaging Analysis

O'Brien Orphan Well CH₄ Averaging - Applied to the 10 Wells Outside Sample Set - CES

Prepared: 3.30.2023

Well Name	Well #	API #	County	Purchase Order	Gas Sample	CH ₄ /PPM	Total LELs/PPM	CH ₄ Flow @ m3/day	Methane Emission @ g/hour	Post Plug CH ₄
O'Brien Deming 13	1	30-005-60922	Chaves	52100-72995	19-Feb	1,380	8,390	0.02	0.001	0
O'Brien Deming 6	1	30-005-60634	Chaves	52100-72995	18-Dec	0	5,800	0.000	0.000	0
O'Brien Deming 6	2	30-005-60730	Chaves	52100-72995	18-Dec	0	3,110	0.000	0.000	0
O'Brien Fee 18	1	30-005-60619	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 18	2	30-005-60640	Chaves	52100-72995	21-Feb	493,430	764,050	2.400	35.378	0
O'Brien Fee 18	3	30-005-60725	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 18	4	30-005-60902	Chaves	52100-72995	19-Feb	0	4,100	0.000	0.000	0
O'Brien Fee 18	6	30-005-61246	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	1	30-005-60528	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	2	30-005-60565	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	3	30-005-60566	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	4	30-005-60654	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	5	30-005-60716	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	6	30-005-60804	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	7	30-005-60905	Chaves	52100-72995	21-Feb	8,610	11,520	0.04	0.01	0
O'Brien Fee 19	8	30-005-61021	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 24	1	30-005-60803	Chaves	52100-72995	19-Feb	160,400	252,660	0	0	0
O'Brien Fee 24	2	30-005-60923	Chaves	52100-72995	21-Feb	8,360	8,891	0.14	0.035	0
O'Brien Fee 25	5	30-005-60655	Chaves	52100-72995	23-Feb	44,050	133,860	0.01	0.013	0
O'Brien Lightcap 7	1	30-005-60815	Chaves	52100-72998	18-Dec	0	3,680	0	0 Not Plugged	0
O'Brien Lightcap 7	2	30-005-60816	Chaves	52100-72998	19-Dec	0	3,230	0	0	0
O'Brien LLL	1	30-005-62194	Chaves	52100-72998	20-Dec	510	2,128	0	0	0
O'Brien P	1	30-005-62192	Chaves	52100-72998	21-Dec	0	9,070	0	0 Not Plugged	0
O'Brien P	2	30-005-62247	Chaves	52100-72998	21-Dec	141,550	202,980	0	0	0
O'Brien P	3	30-005-62267	Chaves	52100-72998	21-Dec	609,570	709,530	7.13	129.843	0
O'Brien R	1	30-005-62190	Chaves	52100-72998	20-Dec	0	2,580	0	0	0
Total O'Brien Wells	26	O'Brien Well Sample Set Applied 16	% of Total O'Brien Wells Tested 61.54	% of Total O'Brien Wells Averaged 38.46	Sample Total CH₄ PPM 1,467,860	Sample Total Explosive Gas PPM 2,125,579	Sample Total Flow m3/day 9.7400	Sample Total CH₄ Emission g/hour 165.2800	Total O'Brien CH₄ Emission g/hour 181.960	
					Sample Avg CH₄ PPM 91,741.25	Sample Avg Explosive Gas PPM 132,849	Sample Average Flow m3/day 0.6088	Sample Avg CH₄ Emission g/hour 1.6680		

- ¹ Methane Calculation: 717 grams CH₄ per cubic meter (717 x 0.6088 m3/day = 436.51 g/day total /24 = 18.19 g/hour x 0.091741 (methane concentration) = **1.67 g/hour CH₄**). **Methane, gas** weighs 0.000717 gram per cubic centimeter or 0.717 kilogram per cubic meter, i.e. density of methane, gas is equal to 0.717 kg/m³; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In Imperial or US customary measurement system, the density is equal to 0.044 pound per cubic foot [lb/ft³].

O'Brien Orphan Well CH4 Averaging - Applied to the 10 Wells Outside Sample Set - CES

Prepared: 3.30.3023

Well Name	Well #	API #	County	Purchase Order	Gas Sample	CH4/PPM	Total LELs/PPM	CH4 Flow @ m3/day	Methane Emission @ g/hour	Post Plug CH4
O'Brien Deming 13	1	30-005-60922	Chaves	52100-72995	19-Feb	1,380	8,390	0.02	0.001	0
O'Brien Deming 6	1	30-005-60634	Chaves	52100-72995	18-Dec	0	5,800	0.000	0.000	0
O'Brien Deming 6	2	30-005-60730	Chaves	52100-72995	18-Dec	0	3,110	0.000	0.000	0
O'Brien Fee 18	1	30-005-60619	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 18	2	30-005-60640	Chaves	52100-72995	21-Feb	493,430	764,050	2.400	35.378	0
O'Brien Fee 18	3	30-005-60725	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 18	4	30-005-60902	Chaves	52100-72995	19-Feb	0	4,100	0.000	0.000	0
O'Brien Fee 18	6	30-005-61246	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	1	30-005-60528	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	2	30-005-60565	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	3	30-005-60566	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	4	30-005-60654	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	5	30-005-60716	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	6	30-005-60804	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 19	7	30-005-60905	Chaves	52100-72995	21-Feb	8,610	11,520	0.04	0.01	0
O'Brien Fee 19	8	30-005-61021	Chaves	52100-72995		91,741.25	132,849	0.6088	1.668	0
O'Brien Fee 24	1	30-005-60803	Chaves	52100-72995	19-Feb	160,400	252,660	0	0	0
O'Brien Fee 24	2	30-005-60923	Chaves	52100-72995	21-Feb	8,360	8,891	0.14	0.035	0
O'Brien Fee 25	5	30-005-60655	Chaves	52100-72995	23-Feb	44,050	133,860	0.01	0.013	0
O'Brien Lightcap 7	1	30-005-60815	Chaves	52100-72998	18-Dec	0	3,680	0	0 Not Plugged	0
O'Brien Lightcap 7	2	30-005-60816	Chaves	52100-72998	19-Dec	0	3,230	0	0	0
O'Brien LLL	1	30-005-62194	Chaves	52100-72998	20-Dec	510	2,128	0	0	0
O'Brien P	1	30-005-62192	Chaves	52100-72998	21-Dec	0	9,070	0	0 Not Plugged	0
O'Brien P	2	30-005-62247	Chaves	52100-72998	21-Dec	141,550	202,980	0	0	0
O'Brien P	3	30-005-62267	Chaves	52100-72998	21-Dec	609,570	709,530	7.13	129.843	0
O'Brien R	1	30-005-62190	Chaves	52100-72998	20-Dec	0	2,580	0	0	0
Total O'Brien Wells		O'Brien Well Sample Set Applied	% of Total O'Brien Wells Tested	% of Total O'Brien Wells Averaged		Sample Total CH4 PPM	Sample Total Explosive Gas PPM	Sample Total Flow m3/day	Sample Total CH4 Emission g/hour	Total O'Brien CH4 Emission g/hour
26		16	61.54	38.46		1,467,860	2,125,579	9.7400	165.2800	181.960
						Sample Avg CH4 PPM	Sample Avg Explosive Gas PPM	Sample Average Flow m3/day	Sample Avg CH4 Emission g/hour	
						91,741.25	132,849	0.6088	1.6680	

• ¹ Methane Calculation: 717 grams CH₄ per cubic meter (717 x 0.6088 m³/day = 436.51 g/day total /24 = 18.19 g/hour x 0.091741 (methane concentration) = 1.67 g/hour CH₄). Methane, gas weighs 0.000717 gram per cubic centimeter or 0.717 kilogram per cubic meter, i.e. density of methane, gas is equal to 0.717 kg/m³; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In Imperial or US customary measurement system, the density is equal to 0.044 pound per cubic foot [lb/ft³].

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 295395

DEFINITIONS

Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 295395
	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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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

QUESTIONS

Action 295395

QUESTIONS

Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 295395
	Action Type: [UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA)

QUESTIONS

Prerequisites	
[OGRID] Well Operator	[269864] CANYON E & P COMPANY
[API] Well Name and Number	[30-005-61020] O'BRIEN FEE 18 #005
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	02/19/2023
Latitude	33.61726
Longitude	-104.02675

Monitoring Event Details

Please answer all the questions in this group.

Flow rate in cubic meters per day (m³/day)	0.00
Test duration in hours (hr)	42.6
Average flow temperature in degrees Celsius (°C)	14.5
Average gauge flow pressure in kilopascals (kPag)	1.1
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	Well Done New Mexico LLC
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