



Test Report

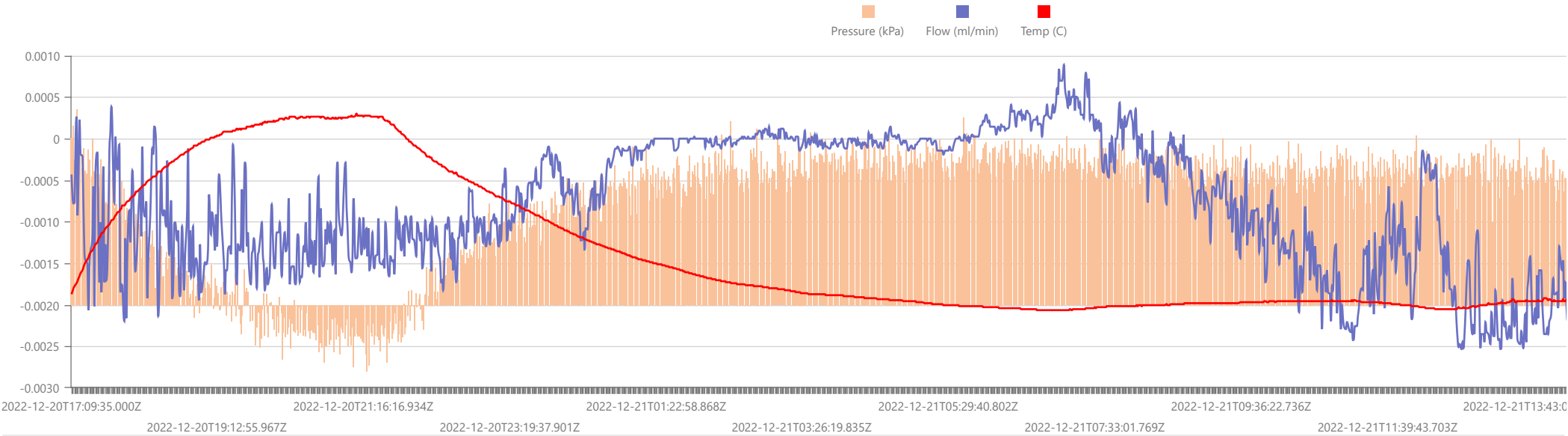
|   |  |
|---|--|
| Start Date: Tue Dec 20 2022 17:09:35 GMT+0000 (Coordinated Universal Time)<br>End Date: Wed Dec 21 2022 18:02:14 GMT+0000 (Coordinated Universal Time)<br>Device: VB100-0049<br>Well Licensee: NMOCD<br>Well Name: GRAVES 001<br>UWI: 30-005-60327<br>Well License Number: 30-005-60327<br>Surface Location: CHAVES COUNTY<br>Bottom Hole Location: UNKNOWN | Test Operator: F.V.<br>Authorized By: NMOCD<br>Test Reason: IJJA/PRE PLUG<br>Scope Of Work: 12-hr<br>AFE Number: 52100-0000072998<br>GPS: 33.63720,-104.06102<br>Notes: MONITORING CASING FLOW<br>Prepared By: Curtis Shuck, QMS |
|---|--|

Flow / Pressure Test

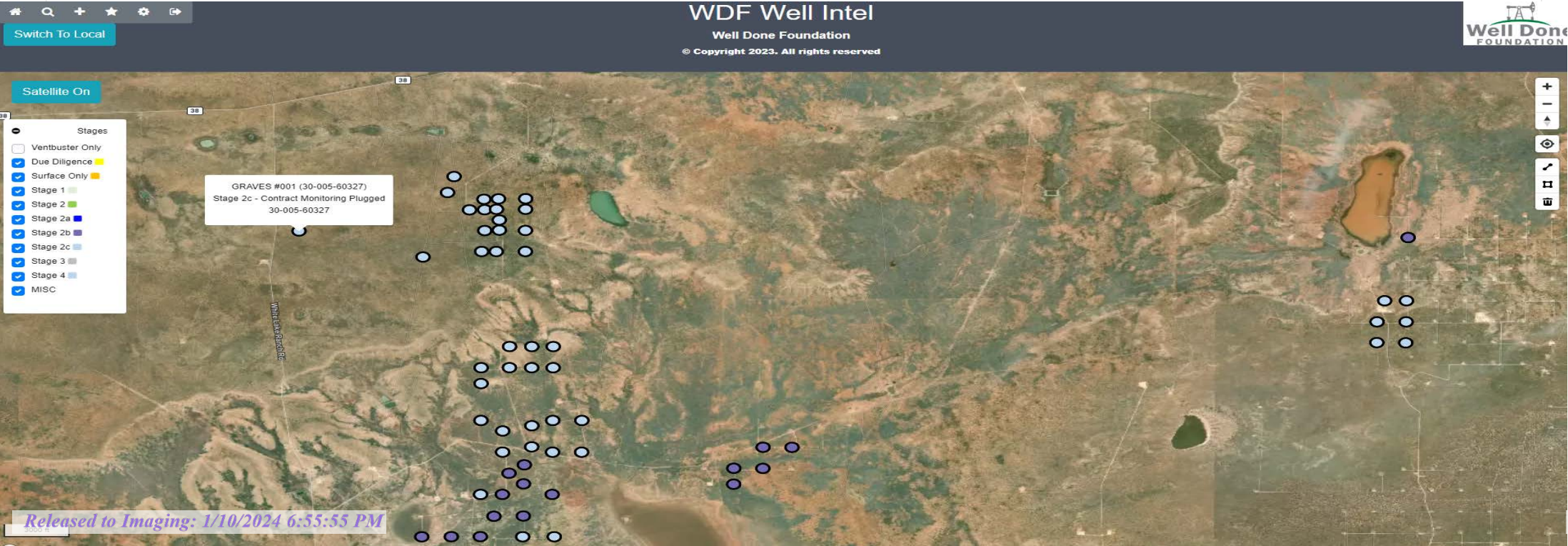
|  |                                     |                                    |  |                               |
|--|-------------------------------------|------------------------------------|--|-------------------------------|
| Flow Duration<br>24 hrs 51 minutes<br>Duration | Average Flowrate<br>-0.0010<br>m3/d | Average Pressure<br>2.5199<br>kPag | Average Flow Temperature<br>5.8268<br>°C | Average CH4 Mass<br>0.00 g/hr |
|--|-------------------------------------|------------------------------------|--|-------------------------------|

**Methane Calculation:** 717 grams CH4 per cubic meter (717 g/m<sup>3</sup> x -0.0010 m<sup>3</sup>/day = -0.72 g/day total /24 = -0.03 g/hour x 0 (methane concentration) = **0.00 g/hour CH4**). **Methane, gas** weighs 0.000717 *gram per cubic centimeter* or 0.717 *kilgram per cubic meter*, i.e. density of *methane, gas* is equal to 0.717 kg/m<sup>3</sup>; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In imperial or US customary measurement system, the density is equal to 0.0448 *pound per cubic foot* [lb/ft<sup>3</sup>], or 0.0004144 *ounce per cubic inch* [oz/inch<sup>3</sup>].

Flow / Pressure / Temperature Timeseries



| # | Date       | Note   |
|---|------------|--|
| 1 | 2023-11-05 | ces: On location with WDF Measure1 to perform Post Plug Methane Emission Reduction Reporting. Field Gas Analysis confirmed 0% CH4. Collect Gas Sample for Lab Analysis. Photos. Green Ribbon. WILDCAT OUT! |
| 2 | 2022-12-21 | Rig down VB49.   |
| 3 | 2022-12-20 | Egv: on location today took pictures of location n,e,s,w took a 4 gas monitor sample and gas sample and pictures of both rigged up vb 49 and took a picture of the rig up                                  |











| Component          | Normalized Mol % | Un-Normalized Mol % | GPM    | Gross Heating Values (Real, BTU/ft³)          |              |                        |           |
|--------------------|------------------|---------------------|--------|---|--------------|------------------------|-----------|
| H2S (H2S)          | 0.0000           | 0                   |        | 14.696 PSI @ 60.00 Å°F                        |              | 14.73 PSI @ 60.00 Å°F  |           |
|                    |                  |                     |        | Dry   | Saturated    | Dry                    | Saturated |
|                    |                  |                     |        | 26.3  | 26.7         | 26.4                   | 26.8      |
| Nitrogen (N2)      | 99.3530          | 99.3524             |        | Calculated Total Sample Properties            |              |                        |           |
| CO2 (CO2)          | 0.0620           | 0.06156             |        | GPA2145-16 *Calculated at Contract Conditions |              |                        |           |
| Methane (C1)       | 0.0000           | 0                   |        | Relative Density Real                         |              | Relative Density Ideal |           |
|                    |                  |                     |        | 0.9781  |              | 0.9782                 |           |
| Ethane (C2)        | 0.0180           | 0.01833             | 0.0050 | Molecular Weight                              |              |                        |           |
|                    |                  |                     |        | 28.3324                                       |              |                        |           |
| Propane (C3)       | 0.0450           | 0.04536             | 0.0120 | C6+ Group Properties                          |              |                        |           |
| I-Butane (IC4)     | 0.0100           | 0.00957             | 0.0030 | Assumed Composition                           |              |                        |           |
| N-Butane (NC4)     | 0.0550           | 0.05522             | 0.0170 | C6 - 60.000%                                  | C7 - 30.000% | C8 - 10.000%           |           |
| I-Pentane (IC5)    | 0.0360           | 0.03621             | 0.0130 |   |              |                        |           |
| N-Pentane (NC5)    | 0.0400           | 0.04009             | 0.0140 | Field H2S                                     |              |                        |           |
|                    |                  |                     |        | 0 PPM   |              |                        |           |
| Hexanes Plus (C6+) | 0.3810           | 0.38126             | 0.1650 | PROTREND STATUS:                              |              |                        |           |
|                    |                  |                     |        | Passed By Validator on Dec 27, 2022           |              |                        |           |
| TOTAL              | 100.0000         | 100.0000            | 0.2290 | DATA SOURCE:                                  |              |                        |           |
|                    |                  |                     |        | Imported                                      |              |                        |           |

| Source    | Date                 | Notes          |
|-----------|----------------------|----------------|
| Luis Cano | Dec 27, 2022 8:46 am | Methane: 0 PPM |

**December 20, 2022**

Hourly forecast for 20.12.2022

| Atmospheric conditions<br>and temperature °F | RealFeel °F | Atmospheric<br>pressure inHg | Wind speed<br>mph | Humidity |
|--|-------------|------------------------------|-------------------|----------|
|--|-------------|------------------------------|-------------------|----------|

|         |   |      |      |      |          |     |
|---------|---|------|------|------|----------|-----|
| Night   |  | +30° | +23° | 26.5 | ▲ S 5.8  | 61% |
| Morning |  | +30° | +25° | 26.4 | ▲ S 4.7  | 81% |
| Day     |  | +48° | +46° | 26.3 | ▲ S 4.7  | 30% |
| Evening |  | +39° | +36° | 26.2 | ▼ SW 3.8 | 44% |

The chart displays four data series over a 24-hour period:

- t Actual** (Orange line with circles): Represents the actual temperature. It starts at approximately 32°F, remains relatively stable until 10:00, then rises to a peak of about 52°F at 16:00, before declining to around 32°F by 23:00.
- t RealFeel** (Blue line with circles): Represents the real feel temperature. It starts at approximately 24°F, rises steadily to a peak of about 54°F at 16:00, and then declines to around 24°F by 23:00.
- Humidity (%)** (Light blue bars): Represents the relative humidity. It starts at approximately 30%, peaks at about 40% around 17:00, and then declines to around 20% by 23:00.
- Pressure** (Green line with circles): Represents the atmospheric pressure. It starts at approximately 30 inHg, remains relatively stable until 10:00, then rises to a peak of about 32 inHg at 16:00, and then declines to around 30 inHg by 23:00.

The chart also includes a background bar chart showing the temperature range for each hour, indicated by the light blue bars. The y-axis is labeled 'Temperature' and ranges from 16° to 64°. The x-axis is labeled with hours from 00 to 23. The legend at the bottom identifies the four data series: t Actual, t RealFeel, Humidity (%), and Pressure.





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## C6+ Gas Analysis Report

|  |                          |                       |
|--|--------------------------|-----------------------|
| 15555G                                   | Graves #001 Pre Plugging | Graves #001 Casing    |
| Sample Point Code                        | Sample Point Name        | Sample Point Location |
| Laboratory Services                      | 2022061773               | Tedlar Bag            |
| Source Laboratory                        | Lab File No              | Container Identity    |
| USA                                      | USA                      | USA                   |
| District                                 | Area Name                | Field Name            |
| Dec 20, 2022 09:55                       | Dec 20, 2022 09:55       | Dec 22, 2022 15:10    |
| Date Sampled                             | Date Effective           | Date Received         |
| Torrance                                 |                          |                       |
| Ambient Temp (°F)                        | Flow Rate (Mcf)          | Analyst               |
| Press PSI @ Temp °F<br>Source Conditions |                          |                       |
| Well Done Foundation                     | NG                       |                       |
| Operator                                 | Lab Source Description   |                       |

| Component          | Normalized Mol % | Un-Normalized Mol % | GPM    |
|--------------------|------------------|---------------------|--------|
| H2S (H2S)          | 0.0000           | 0                   |        |
| Nitrogen (N2)      | 99.3530          | 99.3524             |        |
| CO2 (CO2)          | 0.0620           | 0.06156             |        |
| Methane (C1)       | 0.0000           | 0                   |        |
| Ethane (C2)        | 0.0180           | 0.01833             | 0.0050 |
| Propane (C3)       | 0.0450           | 0.04536             | 0.0120 |
| I-Butane (IC4)     | 0.0100           | 0.00957             | 0.0030 |
| N-Butane (NC4)     | 0.0550           | 0.05522             | 0.0170 |
| I-Pentane (IC5)    | 0.0360           | 0.03621             | 0.0130 |
| N-Pentane (NC5)    | 0.0400           | 0.04009             | 0.0140 |
| Hexanes Plus (C6+) | 0.3810           | 0.38126             | 0.1650 |
| TOTAL              | 100.0000         | 100.0000            | 0.2290 |

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 26, 2022 |

| Gross Heating Values (Real, BTU/ft³) |           |                       |           |
|--------------------------------------|-----------|-----------------------|-----------|
| 14.696 PSI @ 60.00 Å°F               |           | 14.73 PSI @ 60.00 Å°F |           |
| Dry                                  | Saturated | Dry                   | Saturated |
| 26.3                                 | 26.7      | 26.4                  | 26.8      |

| Calculated Total Sample Properties            |                        |
|---|------------------------|
| GPA2145-16 *Calculated at Contract Conditions |                        |
| Relative Density Real                         | Relative Density Ideal |
| 0.9781  | 0.9782                 |
| Molecular Weight                              |                        |
| 28.3324                                       |                        |

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

|           |
|-----------|
| Field H2S |
| 0 PPM     |

## PROTREND STATUS:

Passed By Validator on Dec 27, 2022

## DATA SOURCE:

Imported

## PASSED BY VALIDATOR REASON:

Close enough to be considered reasonable.

## VALIDATOR:

Luis Cano

## VALIDATOR COMMENTS:

OK

| Source    | Date                 | Notes          |
|-----------|----------------------|----------------|
| Luis Cano | Dec 27, 2022 8:46 am | Methane: 0 PPM |

**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 302397

DEFINITIONS

|   |   |
|---|---|
| Operator:<br>CANYON E & P COMPANY<br>251 O'Connor Ridge Blvd.<br>Irving, TX 75038 | OGRID:<br>269864  |
|   | Action Number:<br>302397  |
|   | Action Type:<br>[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 302397

QUESTIONS

|   |   |
|---|---|
| Operator:<br>CANYON E & P COMPANY<br>251 O'Connor Ridge Blvd.<br>Irving, TX 75038 | OGRID:<br>269864  |
|   | Action Number:<br>302397  |
|   | Action Type:<br>[UF-OMA] Pre-Plug Methane Monitoring (UF-OMA-MMA) |

QUESTIONS

|                            |                               |
|----------------------------|-------------------------------|
| <b>Prerequisites</b>       |                               |
| [OGRID] Well Operator      | [269864] CANYON E & P COMPANY |
| [API] Well Name and Number | [30-005-60327] GRAVES #001    |
| Well Status                | Plugged (not released)        |

|   |                             |
|---|-----------------------------|
| <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                                    | 12/20/2022                  |
| Latitude  | 33.63720                    |
| Longitude   | -104.06102                  |

|   |              |
|---|--------------|
| <b>Monitoring Event Details</b>                       |              |
| <i>Please answer all the questions in this group.</i> |              |
| Flow rate in cubic meters per day (m³/day)            | 0.00         |
| Test duration in hours (hr)                           | 24.9         |
| Average flow temperature in degrees Celsius (°C)      | 5.8          |
| Average gauge flow pressure in kilopascals (kPag)     | 2.5          |
| Methane concentration in part per million (ppm)       | 0            |
| Methane emission rate in grams per hour (g/hr)        | 0.00         |
| Testing Method  | Steady State |

|   |                          |
|---|--------------------------|
| <b>Monitoring Contractor</b>                          |                          |
| <i>Please answer all the questions in this group.</i> |                          |
| Name of monitoring contractor                         | Well Done New Mexico LLC |