

333 Main Street Shelby, Montana 59474 / P.O. Box 10640 Bozeman, MT 59179

(406) 460-0903

TO: Jim Griswold, OCD

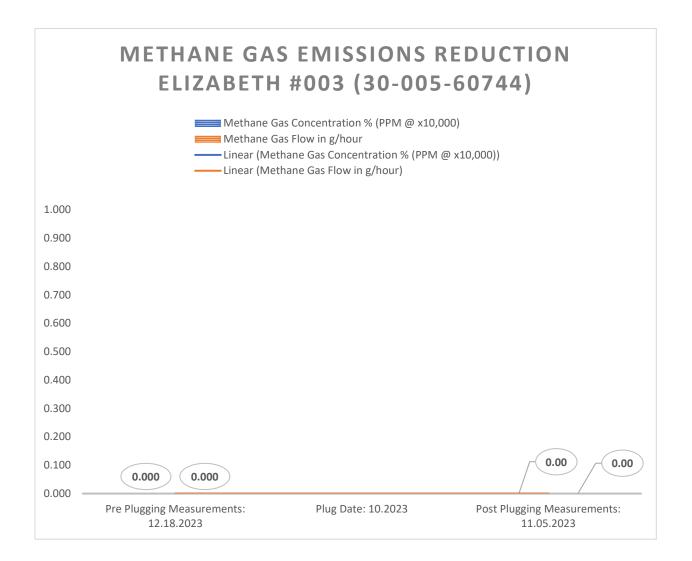
FROM: Curtis Shuck, WDNM

DATE: December 31, 3023

RE: Elizabeth #003 (30-005-60744) Post Plugging Methane Emission Reduction Report

#### **MEMORANDUM**

Well Done New Mexico LLC performed Post Plugging Orphan Well Methane Emission Testing, Gas Sampling & Analysis on the Elizabeth #003 (30-005-60744) on November 5, 2023. The following are the conclusions:









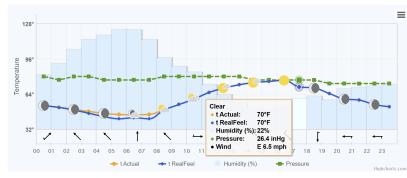


| D MINIMATOR                          | Tecural Date Artelysis                       | 675.                     | www.permi<br>397.3713 2609 W Ma | anis.com<br>riand Hobbs NM 88240   |  | C6+ Gas Analysis Repor                    |  |
|--------------------------------------|--|--------------------------|---------------------------------|--|--|---|--|
| 15558G                               | Elizab                                       | Elizabeth #003 Post Plug |                                 |  | Plugged Well                           |   |  |
| Sample Point Code                    |  |                          | Sample Point Name               |  |  | Sample Point Location                     |  |
| Laboratory Services                  |  | 2023078637               |                                 | NA   |  | CES - Spot                                |  |
| Source Laborato                      | iry  | Lab File                 | No                              | Container Identity   |  | Sampler                                   |  |
| USA                                  |  | USA                      |                                 | USA  |  | New Mexico                                |  |
| District                             |  | Area Name                |                                 | Field Name   |  | Facility Name                             |  |
| Nov 5, 2023 16:                      | 50   |                          | 2023 16:50                      | No   | 6, 2023 10:38                          | Nov 20, 2023                              |  |
| Date Sampled                         |  | Dat                      | e Effective                     |  | Date Received                          | Date Reported                             |  |
|                                      |  | System Admi              |                                 |  |  |   |  |
| Ambient Temp (°F)                    | low Rate (Mcf)                               | Analys                   | t                               | Press PSI @ Temp<br>Source Condition   |  |   |  |
| Well Done Found                      | ation  |                          |                                 |  |  | NG  |  |
| Operator                             |  |                          |                                 |  | La                                     | b Source Description                      |  |
| Component                            | Normalized<br>Mol %                          | Un-Normalized<br>Mol %   | GPM                             |  | Gross Heating Value:                   | s (Real, BTU/ft³)<br>14.73 PSI @ 60.00 ŰF |  |
| H2S (H2S)                            | 0.0000                                       | 0                        |                                 | Dry  | Saturated                              | Dry Saturated                             |  |
| Nitrogen (N2)                        | 99.9270                                      | 99.927                   |                                 | 1.8  | 2.6                                    | 1.8 2.6                                   |  |
| CO2 (CO2)                            | 0.0380                                       | 0.038                    |                                 | Calculated Total Sample Properties  GPA2145-16 *Calculated at Contract Conditions  Relative Density Real  0.9681  Notecular Weight  Notecular Weight |  |   |  |
| Methane (C1)                         | 0.0000                                       | 0                        |                                 |  |  | Relative Density Ideal                    |  |
|                                      | 0.0000                                       | 0                        | 0.0000                          |  |  | 0.9682                                    |  |
| Ethane (C2)                          | _  |                          |                                 |  | 28.0423                                |   |  |
| Propane (C3)                         | 0.0000                                       | 0                        | 0.0000                          | -  | C6+ Group P                            | ronerties                                 |  |
| I-Butane (IC4)                       | 0.0000                                       | 0                        | 0.0000                          | Assumed Composition  |  |   |  |
| N-Butane (NC4)                       | 0.0000                                       | 0                        | 0.0000                          | C6 - 60.00   | 0% C7 - 30.0                           | 00% C8 - 10.000%                          |  |
| I-Pentane (IC5)                      | 0.0000                                       | 0                        | 0.0000                          | Field H2S  |  |   |  |
| N-Pentane (NC5)                      | 0.0000                                       | 0                        | 0.0000                          | ] [  | 0 PPI                                  | 4   |  |
| Hexanes Plus (C6+)                   | 0.0350                                       | 0.035                    | 0.0150                          | PROTREND STATE   | IS:                                    | DATA SOURCE:                              |  |
| TOTAL                                | 100.0000                                     | 100.0000                 | 0.0150                          |  | ator on Nov 22, 202                    |   |  |
| hod(s): Gas C6+ - GPA 2261, Extended | Gas - GPA 2286, Calcular<br>Analyzer Informa |                          |                                 | PASSED BY VALII Close enough to VALIDATOR:   | DATOR REASON:<br>be considered reasons | onable.                                   |  |
| evice Type: Gas Chromato             | graph Device                                 |                          | -                               | Ashley Russell<br>VALIDATOR COM  | MENTS.                                 |   |  |

# November 05, 2023

|         | Atmospheric conditions<br>and temperature °F | RealFeel °F | Atmospheric<br>pressure inHg | Wind speed<br>mph | Humidity |
|---------|--|-------------|------------------------------|-------------------|----------|
| Night   | ( +52°                                       | +52°        | 26.4                         | <b>▼</b> № 6.3    | 47%      |
| Morning | +45°   | +41°        | 26.4                         | ▲ NW 4.3          | 64%      |
| Day     | <b>(</b> +73°                                | +73°        | 26.5                         | ► SE 7.2          | 19%      |
| Evening | ( +64°                                       | +64°        | 26.3                         | <b>∢</b> sw 5.1   | 21%      |

Hourly forecast for 05.11.2023



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| 15558G  |                          | Elizabeth #003 Post Plug           |             | Plu                                      | Plugged Well            |                   |                            |
|---|--------------------------|------------------------------------|-------------|--|-------------------------|-------------------|----------------------------|
| Sample Point Code                                   | Sample Point Name        |                                    | _           | Sample Po                                | int Location            |                   |                            |
|   |                          |                                    |             |  |                         |                   |                            |
| Laboratory Serv                                     | ices                     | 20230786                           | 637         | NA                                       |                         | CES - Spo         | t                          |
| Source Laborator                                    | γ                        | Lab File No                        |             | Container Identity                       | Sampler                 |                   |                            |
| USA   |                          | USA                                |             | USA                                      |                         | New Mexico        |                            |
| District  |                          | Area Name                          |             | Field Name                               |                         | Facility Name     | 2                          |
| Nov 5, 2023 16:5                                    | 0                        | Nov 5,                             | 2023 16:50  | Nov 6                                    | , 2023 10:38            | Nov               | / 20, 2023                 |
| Date Sampled  |                          | Date                               | e Effective | Da                                       | te Received             | Da                | te Reported                |
|   |                          | System Admir                       | nistrator   |  |                         |                   |                            |
| Ambient Temp (°F) F                                 | ow Rate (Mcf)            | Analyst                            |             | Press PSI @ Temp °F<br>Source Conditions |                         |                   |                            |
| Well Done Founda                                    | tion                     |                                    |             |  |                         | NG                |                            |
| Operator  |                          |                                    |             |  | L                       | ab Source Descrip | otion                      |
| Component   | Normalized<br>Mol %      | Un-Normalized<br>Mol %             | GPM         | Gro<br>14.696 PSI @                      | oss Heating Value       |                   | <b>ft³)</b><br>⊑@ 60.00 °F |
| H2S (H2S)   | 0.0000                   | 0                                  |             | Dry<br>1.8                               | Saturated 2.6           | Dry<br>1.8        | Saturated 2.6              |
| Nitrogen (N2)                                       | 99.9270                  | 99.927                             |             |  | alculated Total Sa      |                   |                            |
| CO2 (CO2)   | 0.0380                   | 0.038                              |             |  | PA2145-16 *Calculated   |                   |                            |
| Methane (C1)  | 0.0000                   | 0                                  |             | Relative Del                             |                         |                   | Density Ideal<br>.9682     |
| Ethane (C2)   | 0.0000                   | 0                                  | 0.0000      | Molecular                                | Weight                  | 0.                | .9002                      |
| Propane (C3)  | 0.0000                   | 0                                  | 0.0000      | 28.0                                     | 423                     |                   |                            |
| I-Butane (IC4)                                      | 0.0000                   | 0                                  | 0.0000      | <b>7</b>                                 | C6+ Group I             | -                 |                            |
| N-Butane (NC4)                                      | 0.0000                   | 0                                  | 0.0000      | C6 - 60.000%                             | Assumed Coi 6 C7 - 30.0 | •                 | C8 - 10.000%               |
| I-Pentane (IC5)                                     | 0.0000                   | 0                                  | 0.0000      |  | Field H                 |                   |                            |
| N-Pentane (NC5)                                     | 0.0000                   | 0                                  | 0.0000      |  | 0 PP                    | M                 |                            |
| Hexanes Plus (C6+)                                  | 0.0350                   | 0.035                              | 0.0150      | PROTREND STATUS:                         |                         | DATA SO           | OURCE:                     |
| TOTAL   | 100.0000                 | 100.0000                           | 0.0150      | Passed By Validato                       |                         |                   |                            |
| Method(s): Gas C6+ - GPA 2261, Extended             | Gas - GPA 2286, Calculat | tions - GPA 2172                   |             | PASSED BY VALIDAT Close enough to be     |                         | sonable.          |                            |
| ,   | Analyzer Informa         | tion                               |             | VALIDATOR:                               |                         |                   |                            |
| Device Type: Gas Chromatog<br>Device Model: GC-2014 | •                        | Make: Shimadzi<br>al Date: Nov 20, |             | Ashley Russell  VALIDATOR COMME          | NTS:                    |                   |                            |

Nov 22, 2023 7:08 a

OK

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

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 302392

#### **DEFINITIONS**

| Operator:                | OGRID:   |
|--------------------------|--|
| CANYON E & P COMPANY     | 269864   |
| 251 O'Connor Ridge Blvd. | Action Number:                                     |
| Irving, TX 75038         | 302392   |
|                          | Action Type:                                       |
|                          | [UF-OMA] Post-Plug Methane Monitoring (UF-OMA-MMB) |

## **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 302392

# **QUESTIONS**

| Operator:            | OGRID:   |
|----------------------|--|
| CANYON E & P COMPANY | 269864   |
| · ·                  | Action Number:                                     |
| Irving, TX 75038     | 302392   |
|                      | Action Type:                                       |
|                      | [UF-OMA] Post-Plug Methane Monitoring (UF-OMA-MMB) |

## QUESTIONS

| Prerequisites              |                               |  |
|----------------------------|-------------------------------|--|
| [OGRID] Well Operator      | [269864] CANYON E & P COMPANY |  |
| [API] Well Name and Number | [30-005-60744] ELIZABETH #003 |  |
| Well Status                | Plugged (not released)        |  |

| Monitoring Event Information                   |                              |  |
|--|------------------------------|--|
| Please answer all the questions in this group. |                              |  |
| Reason For Filing                              | Post-Plug Methane Monitoring |  |
| Date of monitoring                             | 11/05/2023                   |  |
| Latitude                                       | 33.64097                     |  |
| Longitude                                      | -104.02693                   |  |

| 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)                       | 1.0          |  |
| Average flow temperature in degrees Celsius (°C)  | 22.4         |  |
| Average gauge flow pressure in kilopascals (kPag) | 0.0          |  |
| 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 |  |