

**FESCO, Ltd.**  
**5000 W. Interstate 20 - Midland, Texas 79703**

**For:** Civitas Resources  
 555 17th Street, Suite 3700  
 Denver, Colorado, 80202

**Sample:** Queen Keely State Com No. 153H  
 First Stage Separator Gas  
 Spot Gas Sample at 120 psig & 118 °F

Date Sampled: 03/08/2024 at 11:15

Job Number: 240251.107

**CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286**

| COMPONENT           | MOL%         | GPM          |
|---------------------|--------------|--------------|
| Hydrogen Sulfide*   | < 0.001      |              |
| Nitrogen            | 1.888        |              |
| Carbon Dioxide      | 0.260        |              |
| Methane             | 64.900       |              |
| Ethane              | 14.801       | 4.062        |
| Propane             | 8.835        | 2.498        |
| Isobutane           | 1.193        | 0.401        |
| n-Butane            | 3.380        | 1.093        |
| 2-2 Dimethylpropane | 0.003        | 0.001        |
| Isopentane          | 0.913        | 0.343        |
| n-Pentane           | 1.110        | 0.413        |
| Hexanes             | 0.778        | 0.329        |
| Heptanes Plus       | <u>1.939</u> | <u>0.812</u> |
| Totals              | 100.000      | 9.951        |

**Computed Real Characteristics Of Heptanes Plus:**

Specific Gravity ----- 3.452 (Air=1)  
 Molecular Weight ----- 99.36  
 Gross Heating Value ----- 5218 BTU/CF

**Computed Real Characteristics Of Total Sample:**

Specific Gravity ----- 0.907 (Air=1)  
 Compressibility (Z) ----- 0.9938  
 Molecular Weight ----- 26.12  
 Gross Heating Value  
 Dry Basis ----- 1549 BTU/CF  
 Saturated Basis ----- 1523 BTU/CF

\*Hydrogen Sulfide tested on location by: Stain Tube Method (GPA 2377)

Results: 0.013 Gr/100 CF, 0.2 PPMV or <0.0001 Mol%

Base Conditions: 15.025 PSI & 60 Deg F

Sampled By: (14) Turner  
 Analyst: BMc  
 Processor: BMc  
 Cylinder ID: X-0191

Certified: FESCO, Ltd. - Midland, Texas



Bryan McCollum 432-332-3211

**CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286  
TOTAL REPORT**

| COMPONENT              | MOL %        | GPM          | WT %         |
|------------------------|--------------|--------------|--------------|
| Hydrogen Sulfide*      | < 0.001      |              | < 0.001      |
| Nitrogen               | 1.888        |              | 2.025        |
| Carbon Dioxide         | 0.260        |              | 0.438        |
| Methane                | 64.900       |              | 39.862       |
| Ethane                 | 14.801       | 4.062        | 17.040       |
| Propane                | 8.835        | 2.498        | 14.917       |
| Isobutane              | 1.193        | 0.401        | 2.655        |
| n-Butane               | 3.380        | 1.093        | 7.522        |
| 2,2 Dimethylpropane    | 0.003        | 0.001        | 0.008        |
| Isopentane             | 0.913        | 0.343        | 2.522        |
| n-Pentane              | 1.110        | 0.413        | 3.066        |
| 2,2 Dimethylbutane     | 0.006        | 0.003        | 0.020        |
| Cyclopentane           | 0.000        | 0.000        | 0.000        |
| 2,3 Dimethylbutane     | 0.095        | 0.040        | 0.313        |
| 2 Methylpentane        | 0.230        | 0.098        | 0.759        |
| 3 Methylpentane        | 0.129        | 0.054        | 0.426        |
| n-Hexane               | 0.318        | 0.134        | 1.049        |
| Methylcyclopentane     | 0.174        | 0.062        | 0.561        |
| Benzene                | 0.174        | 0.050        | 0.520        |
| Cyclohexane            | 0.264        | 0.092        | 0.850        |
| 2-Methylhexane         | 0.044        | 0.021        | 0.169        |
| 3-Methylhexane         | 0.052        | 0.024        | 0.200        |
| 2,2,4 Trimethylpentane | 0.000        | 0.000        | 0.000        |
| Other C7's             | 0.145        | 0.065        | 0.551        |
| n-Heptane              | 0.124        | 0.059        | 0.476        |
| Methylcyclohexane      | 0.236        | 0.097        | 0.887        |
| Toluene                | 0.159        | 0.055        | 0.561        |
| Other C8's             | 0.187        | 0.089        | 0.789        |
| n-Octane               | 0.064        | 0.034        | 0.280        |
| Ethylbenzene           | 0.021        | 0.008        | 0.085        |
| M & P Xylenes          | 0.044        | 0.017        | 0.179        |
| O-Xylene               | 0.014        | 0.006        | 0.057        |
| Other C9's             | 0.110        | 0.057        | 0.532        |
| n-Nonane               | 0.026        | 0.015        | 0.128        |
| Other C10's            | 0.068        | 0.041        | 0.368        |
| n-Decane               | 0.011        | 0.007        | 0.060        |
| Undecanes (11)         | <u>0.022</u> | <u>0.014</u> | <u>0.125</u> |
| Totals                 | 100.000      | 9.951        | 100.000      |

Computed Real Characteristics of Total Sample

|                           |        |         |
|---------------------------|--------|---------|
| Specific Gravity -----    | 0.907  | (Air=1) |
| Compressibility (Z) ----- | 0.9938 |         |
| Molecular Weight -----    | 26.12  |         |

Gross Heating Value

|                       |      |        |
|-----------------------|------|--------|
| Dry Basis -----       | 1549 | BTU/CF |
| Saturated Basis ----- | 1523 | BTU/CF |

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**Sample:** Queen Keely State Com No. 153H  
 First Stage Separator Gas  
 Spot Gas Sample at 120 psig & 118 °F

Date Sampled: 03/08/2024 at 11:15

Job Number: 240251.107

**GLYCALC FORMAT**

| <b>COMPONENT</b>       | <b>MOL%</b>  | <b>GPM</b>   | <b>Wt %</b>  |
|------------------------|--------------|--------------|--------------|
| Carbon Dioxide         | 0.260        |              | 0.438        |
| Hydrogen Sulfide       | < 0.001      |              | < 0.001      |
| Nitrogen               | 1.888        |              | 2.025        |
| Methane                | 64.900       |              | 39.862       |
| Ethane                 | 14.801       | 4.062        | 17.040       |
| Propane                | 8.835        | 2.498        | 14.917       |
| Isobutane              | 1.193        | 0.401        | 2.655        |
| n-Butane               | 3.383        | 1.095        | 7.530        |
| Isopentane             | 0.913        | 0.343        | 2.522        |
| n-Pentane              | 1.110        | 0.413        | 3.066        |
| Cyclopentane           | 0.000        | 0.000        | 0.000        |
| n-Hexane               | 0.318        | 0.134        | 1.049        |
| Cyclohexane            | 0.264        | 0.092        | 0.850        |
| Other C6's             | 0.460        | 0.195        | 1.518        |
| Heptanes               | 0.539        | 0.230        | 1.957        |
| Methylcyclohexane      | 0.236        | 0.097        | 0.887        |
| 2,2,4 Trimethylpentane | 0.000        | 0.000        | 0.000        |
| Benzene                | 0.174        | 0.050        | 0.520        |
| Toluene                | 0.159        | 0.055        | 0.561        |
| Ethylbenzene           | 0.021        | 0.008        | 0.085        |
| Xylenes                | 0.058        | 0.023        | 0.236        |
| Octanes Plus           | <u>0.488</u> | <u>0.257</u> | <u>2.282</u> |
| Totals                 | 100.000      | 9.951        | 100.000      |

**Real Characteristics Of Octanes Plus:**

|                           |        |         |
|---------------------------|--------|---------|
| Specific Gravity -----    | 4.241  | (Air=1) |
| Molecular Weight -----    | 122.08 |         |
| Gross Heating Value ----- | 6511   | BTU/CF  |

**Real Characteristics Of Total Sample:**

|                           |        |         |
|---------------------------|--------|---------|
| Specific Gravity -----    | 0.907  | (Air=1) |
| Compressibility (Z) ----- | 0.9938 |         |
| Molecular Weight -----    | 26.12  |         |
| Gross Heating Value       |        |         |
| Dry Basis -----           | 1549   | BTU/CF  |
| Saturated Basis -----     | 1523   | BTU/CF  |

FLARING SUMMARY

| Battery | Date | Total Flare Vol (mcf) | Hrs Flared | Start | End |
|---------|------|-----------------------|------------|-------|-----|
|         |      |                       |            |       |     |

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

DEFINITIONS

Action 419956

**DEFINITIONS**

|  |  |
|--|--|
| Operator:<br>Civitas Permian Operating, LLC<br>555 17th Street<br>Denver, CO 80202 | OGRID:<br>332195                                       |
|  | Action Number:<br>419956                               |
|  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**DEFINITIONS**

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application:

- this application's operator, hereinafter "this operator";
- venting and/or flaring, hereinafter "vent or flare";
- any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";
- the statements in (and/or attached to) this, hereinafter "the statements in this";
- and the past tense will be used in lieu of mixed past/present tense questions and statements.

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QUESTIONS

Action 419956

**QUESTIONS**

|  |  |
|--|--|
| Operator:<br>Civitas Permian Operating, LLC<br>555 17th Street<br>Denver, CO 80202 | OGRID:<br>332195                                       |
|  | Action Number:<br>419956                               |
|  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS**

|   |  |
|---|--|
| <b>Prerequisites</b>  |  |
| <i>Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.</i> |  |
| Incident Well   | Unavailable.                               |
| Incident Facility   | [fAPP2406444915] QUEEN KEELY STATE COM CTB |

|  |   |
|--|---|
| <b>Determination of Reporting Requirements</b>   |   |
| <i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i>   |   |
| Was this vent or flare caused by an emergency or malfunction   | No  |
| Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event   | No  |
| Is this considered a submission for a vent or flare event  | Yes, minor venting and/or flaring of natural gas. |
| <i>An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.</i>   |   |
| Was there <b>at least 50 MCF</b> of natural gas vented and/or flared during this event   | Yes   |
| Did this vent or flare result in the release of <b>ANY</b> liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water | No  |
| Was the vent or flare within an incorporated municipal boundary or within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence  | No  |

|   |               |
|---|---------------|
| <b>Equipment Involved</b>                                 |               |
| Primary Equipment Involved                                | Not answered. |
| Additional details for Equipment Involved. Please specify | Not answered. |

|  |               |
|--|---------------|
| <b>Representative Compositional Analysis of Vented or Flared Natural Gas</b>   |               |
| <i>Please provide the mole percent for the percentage questions in this group.</i>   |               |
| Methane (CH4) percentage   | 65            |
| Nitrogen (N2) percentage, if greater than one percent  | 2             |
| Hydrogen Sulfide (H2S) PPM, rounded up   | 0             |
| Carbon Dioxide (CO2) percentage, if greater than one percent   | 0             |
| Oxygen (O2) percentage, if greater than one percent  | 0             |
| <i>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</i> |               |
| Methane (CH4) percentage quality requirement   | Not answered. |
| Nitrogen (N2) percentage quality requirement   | Not answered. |
| Hydrogen Sulfide (H2S) PPM quality requirement   | Not answered. |
| Carbon Dioxide (CO2) percentage quality requirement  | Not answered. |
| Oxygen (O2) percentage quality requirement   | Not answered. |

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QUESTIONS, Page 2

Action 419956

**QUESTIONS (continued)**

|  |  |
|--|--|
| Operator:<br>Civitas Permian Operating, LLC<br>555 17th Street<br>Denver, CO 80202 | OGRID:<br>332195                                       |
|  | Action Number:<br>419956                               |
|  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**QUESTIONS**

| Date(s) and Time(s)                            |            |
|--|------------|
| Date vent or flare was discovered or commenced | 12/30/2024 |
| Time vent or flare was discovered or commenced | 12:01 AM   |
| Time vent or flare was terminated              | 11:59 PM   |
| Cumulative hours during this event             | 1          |

| Measured or Estimated Volume of Vented or Flared Natural Gas              |  |
|---|--|
| Natural Gas Vented (Mcf) Details  | <i>Not answered.</i>   |
| Natural Gas Flared (Mcf) Details  | <i>Not answered.</i>   |
| Other Released Details  | Cause: Normal Operations   Tank (Any)   Natural Gas Flared   Released: 213 Mcf   Recovered: 0 Mcf   Lost: 213 Mcf. |
| Additional details for Measured or Estimated Volume(s). Please specify    | <i>Not answered.</i>   |
| Is this a gas only submission (i.e. only significant Mcf values reported) | <b>Yes, according to supplied volumes this appears to be a "gas only" report.</b>                                  |

| Venting or Flaring Resulting from Downstream Activity             |                      |
|---|----------------------|
| Was this vent or flare a result of downstream activity            | No                   |
| Was notification of downstream activity received by this operator | <i>Not answered.</i> |
| Downstream OGRID that should have notified this operator          | <i>Not answered.</i> |
| Date notified of downstream activity requiring this vent or flare | <i>Not answered.</i> |
| Time notified of downstream activity requiring this vent or flare | <i>Not answered.</i> |

| Steps and Actions to Prevent Waste   |  |
|--|--|
| For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control. | True   |
| Please explain reason for why this event was beyond this operator's control  | The location experienced normal operations and the flaring can be attributed to flash gas/tank vapors coming off the tank and going to low pressure flare. |
| Steps taken to limit the duration and magnitude of vent or flare   | Standard PM. Worked with vendor to coordinate service time and minimize downtime.  |
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare  | Standard PM. No way to avoid periodic downtime for maintenance/repairs to address unforeseen issues.   |





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ACKNOWLEDGMENTS

Action 419956

**ACKNOWLEDGMENTS**

|  |  |
|--|--|
| Operator:<br>Civitas Permian Operating, LLC<br>555 17th Street<br>Denver, CO 80202 | OGRID:<br>332195                                       |
|  | Action Number:<br>419956                               |
|  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**ACKNOWLEDGMENTS**

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.  |
| <input checked="" type="checkbox"/> | I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively. |
| <input checked="" type="checkbox"/> | I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.  |
| <input checked="" type="checkbox"/> | I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.                       |
| <input checked="" type="checkbox"/> | I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.  |

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CONDITIONS

Action 419956

**CONDITIONS**

|  |  |
|--|--|
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|  | Action Number:<br>419956                               |
|  | Action Type:<br>[C-129] Venting and/or Flaring (C-129) |

**CONDITIONS**

| Created By | Condition  | Condition Date |
|------------|--|----------------|
| jlogancdh  | If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event. | 1/13/2025      |