

ARMSTRONG GAS LABS, INC.

P.O. Box 988
 Monahans, Texas 79756
 (432) 943-8844 (FAX) 943-8855

GAS ANALYSIS REPORT

Analysis No.: 342063
 Customer: Centennial

| <u>Component</u> | <u>Mol. %</u> | <u>(Ideal)</u> <u>BTU</u> | <u>(Ideal)</u> <u>SG</u> | <u>(Real)</u> <u>GPM</u> | |
|------------------|-----------------|------------------------------|-----------------------------|-----------------------------|--|
| Nitrogen | 0.5538 | 0.000 | 0.005 | | Producer: Centennial Well / Sta. Name: PACMAN 26 FED COM 301H-602H VRU Sta. No.: 99679 Formation: Field: New Mexico County: API Number: N/L Spot / Composite: SP Date / Time On: Date / Time Off: 06/25/24 Date to Lab: 07/02/24 Date Analyzed: 07/03/24 Effective Date: Sample Press. (PSIG): 58 Line Press. (PSIG): 58 Sample Temp. (F): 141 Fl. Gas Temp. (F): 141 Amb. Temp. (F): 81 Del. To: Sampled By: IF Cylinder No.: 448 |
| Methane | 38.0753 | 383.357 | 0.211 | | |
| CO2 | 4.1179 | 0.000 | 0.063 | | |
| Ethane | 18.4720 | 325.876 | 0.192 | 4.965 | |
| H2S | 0.0300 | 0.000 | 0.000 | | |
| Propane | 19.2872 | 483.766 | 0.294 | 5.340 | |
| Iso-Butane | 3.3965 | 110.105 | 0.068 | 1.117 | |
| Butane | 8.6069 | 279.904 | 0.173 | 2.727 | |
| Iso-Pentane | 2.5294 | 100.882 | 0.063 | 0.930 | |
| Pentane | 2.3338 | 93.262 | 0.058 | 0.850 | |
| Hexanes C6+ | 2.5972 | 132.799 | 0.084 | 1.139 | |
| Hydrogen | N/A | | | | |
| Helium | N/A | | | | |
| Oxygen | N/A | | | | |
| CO | N/A | | | | |
| Totals | 100.0000 | 1909.951 | 1.210 | 17.068 | |

Field H2O (#/mm):

Field H2S (PPM): 300.0
 Field H2S (Grains): 18.88

Pressure Base: 14.65
Temp. Base: 60

Z Factor (Dry): 0.9893212
 Z Factor (Act.): 0.9893212

| |
|-----------------------------|
| Dry BTU w/ H2S: 1930.76 |
| Sat BTU w/ H2S: 1897.92 |
| As Del. BTU w/ H2S: 1930.76 |

Dry BTU W/O H2S (Real): 1930.57
Sat. BTU W/O H2S (Real): 1897.73
H2O (# / mmcf): 0.0
AS DEL. BTU W/O H2S (Real): 1930.57

BTU Calc: Dry

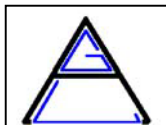
Sp. Gravity (Real): 1.2228
 Field Gravity:
 Lab Gravitometer:

GPM Ethane+ (Real): 17.068
GPM Propane+ (Real): 12.103
GPM IC5+ (Real): 2.919

GPA 2145 / 2172

Fld. Remarks: TAG: NO API PER WHITNEY

Lab Remarks: HIGH TEMP



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GAS ANALYSIS REPORT

Analysis No.: 342064
 Customer: Centennial

| <u>Component</u> | <u>Mol. %</u> | <u>(Ideal)</u> <u>BTU</u> | <u>(Ideal)</u> <u>SG</u> | <u>(Real)</u> <u>GPM</u> | |
|------------------|-----------------|------------------------------|-----------------------------|-----------------------------|--|
| Nitrogen | 3.1760 | 0.000 | 0.031 | | Producer: Centennial Well / Sta. Name: QUESO BLANCO 13 STATE COM 302H Sta. No.: N/L Formation: Field: New Mexico County: API Number: 3002552447 Spot / Composite: SP Date / Time On: Date / Time Off: 06/29/24 Date to Lab: 07/02/24 Date Analyzed: 07/03/24 Effective Date: Sample Press. (PSIG): 144 Line Press. (PSIG): 144 Sample Temp. (F): 112 Fl. Gas Temp. (F): 112 Amb. Temp. (F): 91 Del. To: Sampled By: IF Cylinder No.: 849 |
| Methane | 63.3425 | 637.757 | 0.351 | | |
| CO2 | 9.6793 | 0.000 | 0.147 | | |
| Ethane | 11.6897 | 206.225 | 0.121 | 3.123 | |
| H2S | 0.0800 | 0.000 | 0.001 | | |
| Propane | 6.8220 | 171.111 | 0.104 | 1.877 | |
| Iso-Butane | 0.8148 | 26.414 | 0.016 | 0.266 | |
| Butane | 2.1387 | 69.552 | 0.043 | 0.673 | |
| Iso-Pentane | 0.5542 | 22.104 | 0.014 | 0.202 | |
| Pentane | 0.5693 | 22.750 | 0.014 | 0.206 | |
| Hexanes C6+ | 1.1335 | 57.958 | 0.036 | 0.494 | |
| Hydrogen | N/A | | | | |
| Helium | N/A | | | | |
| Oxygen | N/A | | | | |
| CO | N/A | | | | |
| Totals | 100.0000 | 1213.870 | 0.879 | 6.841 | |

Field H2O (#/mm):

Field H2S (PPM): 800.0
 Field H2S (Grains): 50.35

Pressure Base: 14.65
Temp. Base: 60

Z Factor (Dry): 0.9954867
 Z Factor (Act.): 0.9954867

| |
|-----------------------------|
| Dry BTU w/ H2S: 1219.88 |
| Sat BTU w/ H2S: 1199.03 |
| As Del. BTU w/ H2S: 1219.88 |

Dry BTU W/O H2S (Real): 1219.37

Sat. BTU W/O H2S (Real): 1198.53

H2O (# / mmcf): 0.0

AS DEL. BTU W/O H2S (Real): 1219.37

BTU Calc: Dry

Sp. Gravity (Real): 0.8822

Field Gravity:

Lab Gravitometer:

GPM Ethane+ (Real): 6.841

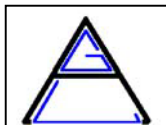
GPM Propane+ (Real): 3.718

GPM IC5+ (Real): 0.902

GPA 2145 / 2172

Fld. Remarks:

Lab Remarks: CP @ LAB 120 PSIG



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GAS ANALYSIS REPORT

Analysis No.: 342065
 Customer: Centennial

| <u>Component</u> | <u>Mol. %</u> | <u>(Ideal)</u> <u>BTU</u> | <u>(Ideal)</u> <u>SG</u> | <u>(Real)</u> <u>GPM</u> | |
|------------------|-----------------|------------------------------|-----------------------------|-----------------------------|---|
| Nitrogen | 2.9697 | 0.000 | 0.029 | | Producer: Centennial Well / Sta. Name: QUESO BLANCO 13 STATE COM 301H Sta. No.: N/L Formation: Field: New Mexico County: API Number: 3002552446 Spot / Composite: SP Date / Time On: Date / Time Off: 06/29/24 Date to Lab: 07/02/24 Date Analyzed: 07/03/24 Effective Date: Sample Press. (PSIG): 145 Line Press. (PSIG): 145 Sample Temp. (F): 118 Fl. Gas Temp. (F): 118 Amb. Temp. (F): 103 Del. To: Sampled By: IF Cylinder No.: 769 |
| Methane | 62.5669 | 629.948 | 0.347 | | |
| CO2 | 10.9683 | 0.000 | 0.167 | | |
| Ethane | 11.7190 | 206.742 | 0.122 | 3.130 | |
| H2S | 0.1000 | 0.000 | 0.001 | | |
| Propane | 6.7811 | 170.085 | 0.103 | 1.866 | |
| Iso-Butane | 0.8027 | 26.021 | 0.016 | 0.262 | |
| Butane | 2.1021 | 68.362 | 0.042 | 0.662 | |
| Iso-Pentane | 0.5538 | 22.088 | 0.014 | 0.202 | |
| Pentane | 0.5708 | 22.810 | 0.014 | 0.207 | |
| Hexanes C6+ | 0.8656 | 44.260 | 0.028 | 0.377 | |
| Hydrogen | N/A | | | | |
| Helium | N/A | | | | |
| Oxygen | N/A | | | | |
| CO | N/A | | | | |
| Totals | 100.0000 | 1190.316 | 0.882 | 6.706 | |

Field H2O (#/mm):

Field H2S (PPM): 1,000.0
 Field H2S (Grains): 62.93

Pressure Base: 14.65
Temp. Base: 60

Z Factor (Dry): 0.9955397
 Z Factor (Act.): 0.9955397

| |
|-----------------------------|
| Dry BTU w/ H2S: 1196.29 |
| Sat BTU w/ H2S: 1175.84 |
| As Del. BTU w/ H2S: 1196.29 |

Dry BTU W/O H2S (Real): 1195.65
Sat. BTU W/O H2S (Real): 1175.21
H2O (# / mmcf): 0.0
AS DEL. BTU W/O H2S (Real): 1195.65

BTU Calc: Dry

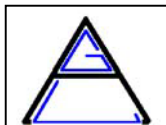
Sp. Gravity (Real): 0.8858
 Field Gravity:
 Lab Gravitometer:

GPM Ethane+ (Real): 6.706
GPM Propane+ (Real): 3.576
GPM IC5+ (Real): 0.786

GPA 2145 / 2172

Fld. Remarks:

Lab Remarks:



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GAS ANALYSIS REPORT

Analysis No.: 342066
 Customer: Centennial

| <u>Component</u> | <u>Mol. %</u> | <u>(Ideal)</u> <u>BTU</u> | <u>(Ideal)</u> <u>SG</u> | <u>(Real)</u> <u>GPM</u> | |
|------------------|-----------------|------------------------------|-----------------------------|-----------------------------|---|
| Nitrogen | 3.3170 | 0.000 | 0.032 | | Producer: Centennial Well / Sta. Name: SOLOMON FED COM 105H INJ Sta. No.: T230497409 Formation: Field: NEW MEXICO County: API Number: N/L Spot / Composite: SP Date / Time On: Date / Time Off: 06/25/24 Date to Lab: 07/02/24 Date Analyzed: 07/03/24 Effective Date: Sample Press. (PSIG): 986 Line Press. (PSIG): 986 Sample Temp. (F): 129 Fl. Gas Temp. (F): 129 Amb. Temp. (F): 101 Del. To: Sampled By: IF Cylinder No.: 759 |
| Methane | 72.6573 | 731.542 | 0.402 | | |
| CO2 | 8.5278 | 0.000 | 0.130 | | |
| Ethane | 8.3424 | 147.173 | 0.087 | 2.226 | |
| H2S | 0.0002 | 0.000 | 0.000 | | |
| Propane | 4.1572 | 104.272 | 0.063 | 1.143 | |
| Iso-Butane | 0.5322 | 17.252 | 0.011 | 0.174 | |
| Butane | 1.2708 | 41.328 | 0.026 | 0.400 | |
| Iso-Pentane | 0.3658 | 14.589 | 0.009 | 0.133 | |
| Pentane | 0.3409 | 13.623 | 0.008 | 0.123 | |
| Hexanes C6+ | 0.4884 | 24.973 | 0.016 | 0.213 | |
| Hydrogen | N/A | | | | |
| Helium | N/A | | | | |
| Oxygen | N/A | | | | |
| CO | N/A | | | | |
| Totals | 100.0000 | 1094.752 | 0.784 | 4.412 | |

Field H2O (#/mm):

Field H2S (PPM): 2.0
 Field H2S (Grains): 0.13

Pressure Base: 14.65
Temp. Base: 60

Z Factor (Dry): 0.9965539
 Z Factor (Act.): 0.9965539

| |
|-----------------------------|
| Dry BTU w/ H2S: 1098.54 |
| Sat BTU w/ H2S: 1079.73 |
| As Del. BTU w/ H2S: 1098.54 |

Dry BTU W/O H2S (Real): 1098.54
Sat. BTU W/O H2S (Real): 1079.73
H2O (# / mmcf): 0.0
AS DEL. BTU W/O H2S (Real): 1098.54

BTU Calc: Dry

Sp. Gravity (Real): 0.7859
 Field Gravity:
 Lab Gravitometer:

GPM Ethane+ (Real): 4.412
GPM Propane+ (Real): 2.186
GPM IC5+ (Real): 0.469

GPA 2145 / 2172

Fld. Remarks: TAG: NO API PER WHITNEY
Lab Remarks: CP @ LAB 800 PSIG / HIGH TEMP

Volumes associated with this C-129 filing are estimations and may be subject to change as data is reconciled. The operator's current practice consists of metering volumes and report in accordance with NMAC 19.15.27.

For inquiries regarding this filing, please contact the operator.

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 458525

DEFINITIONS

| | |
|---|--|
| Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701 | OGRID: 372165 |
| | Action Number: 458525 |
| | Action Type: [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 458525

QUESTIONS

| | |
|---|--|
| Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701 | OGRID: 372165 |
| | Action Number: 458525 |
| | Action Type: [C-129] Venting and/or Flaring (C-129) |

QUESTIONS

| | |
|---|-----------------------------------|
| Prerequisites | |
| <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 | [fAPP2220949621] Pac-Man 36 CTB 1 |

| | |
|--|---|
| Determination of Reporting Requirements | |
| <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 | Yes |
| 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 at least 50 MCF of natural gas vented and/or flared during this event | Yes |
| Did this vent or flare result in the release of ANY 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 |

| | |
|---|---------------|
| Equipment Involved | |
| Primary Equipment Involved | Not answered. |
| Additional details for Equipment Involved. Please specify | Not answered. |

| | |
|--|---------------|
| Representative Compositional Analysis of Vented or Flared Natural Gas | |
| <i>Please provide the mole percent for the percentage questions in this group.</i> | |
| Methane (CH4) percentage | 38 |
| Nitrogen (N2) percentage, if greater than one percent | 1 |
| Hydrogen Sulfide (H2S) PPM, rounded up | 0 |
| Carbon Dioxide (CO2) percentage, if greater than one percent | 4 |
| 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 458525

QUESTIONS (continued)

| | |
|---|--|
| Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701 | OGRID: 372165 |
| | Action Number: 458525 |
| | Action Type: [C-129] Venting and/or Flaring (C-129) |

QUESTIONS

| Date(s) and Time(s) | |
|--|------------|
| Date vent or flare was discovered or commenced | 04/27/2025 |
| Time vent or flare was discovered or commenced | 06:00 AM |
| Time vent or flare was terminated | 02:00 PM |
| Cumulative hours during this event | 8 |

| Measured or Estimated Volume of Vented or Flared Natural Gas | |
|---|--|
| Natural Gas Vented (Mcf) Details | Not answered. |
| Natural Gas Flared (Mcf) Details | Cause: Equipment Failure Tank (Any) Natural Gas Flared Released: 53 Mcf Recovered: 0 Mcf Lost: 53 Mcf. |
| Other Released Details | Not answered. |
| Additional details for Measured or Estimated Volume(s). Please specify | Not answered. |
| Is this a gas only submission (i.e. only significant Mcf values reported) | Yes, according to supplied volumes this appears to be a "gas only" report. |

| 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 | Not answered. |
| Downstream OGRID that should have notified this operator | Not answered. |
| Date notified of downstream activity requiring this vent or flare | Not answered. |
| Time notified of downstream activity requiring this vent or flare | Not answered. |

| 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 | VRU Down Ldar shooting CTB |
| Steps taken to limit the duration and magnitude of vent or flare | open valves to divert gas to a second midstream company to relieve pressure off the line |
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare | Clear consistent communication with midstream provider |

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Oil Conservation Division
1220 S. St Francis Dr.
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ACKNOWLEDGMENTS

Action 458525

ACKNOWLEDGMENTS

| | |
|---|--|
| Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701 | OGRID: 372165 |
| | Action Number: 458525 |
| | Action Type: [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 complete 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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Santa Fe, NM 87505

CONDITIONS

Action 458525

CONDITIONS

| | |
|---|--|
| Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701 | OGRID: 372165 |
| | Action Number: 458525 |
| | Action Type: [C-129] Venting and/or Flaring (C-129) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| cdowning | 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. | 5/5/2025 |