

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

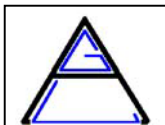
GPM Propane+ (Real): 12.103

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	
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

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

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

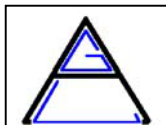
Sp. Gravity (Real): 0.8822
 Field Gravity:
 Lab Gravitometer:

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

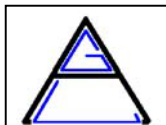
Sp. Gravity (Real): 0.8858
 Field Gravity:
 Lab Gravitometer:

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 426256

DEFINITIONS

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 426256
	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 426256

QUESTIONS

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 426256
	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 426256

QUESTIONS (continued)

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 426256
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	01/19/2025
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	24

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: High Line Pressure Pipeline (Any) Natural Gas Flared Released: 159 Mcf Recovered: 0 Mcf Lost: 159 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	HLP
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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ACKNOWLEDGMENTS

Action 426256

ACKNOWLEDGMENTS

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 426256
	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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CONDITIONS

Action 426256

CONDITIONS

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 426256
	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.	1/29/2025