



**ARMSTRONG GAS LABS, INC.**

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

**GAS ANALYSIS REPORT**

Analysis No.: 440246  
 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	3.9436	0.000	0.038		<b>Producer: Centennial</b> <b>Well / Sta. Name: RAIDER FEDERAL COM 101H</b> <b>Sta. No.: 5795</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002543408</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 01/31/24 Date to Lab: 01/31/24 Date Analyzed: 02/01/24 Effective Date:  Sample Press. (PSIG): 97 Line Press. (PSIG): 97 Sample Temp. (F): 78 Fl. Gas Temp. (F): 78 Amb. Temp. (F): 64  Del. To: Sampled By: JL Cylinder No.: 743
Methane	65.5013	659.492	0.363		
CO2	13.0445	0.000	0.198		
Ethane	9.0501	159.658	0.094	2.416	
H2S	0.0500	0.000	0.001		
Propane	4.8263	121.054	0.073	1.327	
Iso-Butane	0.5578	18.082	0.011	0.182	
Butane	1.4627	47.568	0.029	0.460	
Iso-Pentane	0.4403	17.561	0.011	0.161	
Pentane	0.4542	18.151	0.011	0.164	
Hexanes C6+	0.6692	34.217	0.022	0.292	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1075.784</b>	<b>0.852</b>	<b>5.002</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 500.0  
 Field H2S (Grains): 31.47

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9961566  
 Z Factor (Act.): 0.9961566

Dry BTU w/ H2S: 1080.26
Sat BTU w/ H2S: 1061.77
As Del. BTU w/ H2S: 1080.25

**Dry BTU W/O H2S (Real): 1079.94**  
**Sat. BTU W/O H2S (Real): 1061.46**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1079.94**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8545**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.002**  
**GPM Propane+ (Real): 2.586**  
**GPM IC5+ (Real): 0.617**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**

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 416536

**DEFINITIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 416536
	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 416536

**QUESTIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 416536
	Action Type: [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	[fAPP2220951259] Raider 21 Battery 1

<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	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 <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	66
Nitrogen (N2) percentage, if greater than one percent	4
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	13
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 (continued)**

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	Action Number: 416536
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	12/19/2024
Time vent or flare was discovered or commenced	06:00 AM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	18

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: 54 Mcf   Recovered: 0 Mcf   Lost: 54 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 Offline
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

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**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

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**CONDITIONS**

Created By	Condition	Condition Date
cmevans	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.	1/2/2025