



C9+ Analysis

GPA 2172/API 14.5 Report with GPA 2145 Physical Properties

Sample Information

		Sample Information
Sample Name		BARNEY COMPRESSOR
Operator		Permian Resources
Lease		BARNEY COMPRESSOR
Sample Date/Time:	Effective Date:	1-17-25 11:34 AM
Sample End Date		
Laboratory		Laboratory Services and Measurement
Technician		OR
Analyzer Type		Gas Chromatograph - TCD
Analyzer Make & Model		AGILENT MICRO GC 3000
Last Calibration/Validation Date		1-13-25
Sample Temperature		
Sample Pressure		
Sample Flow Rate		
Ambient Temperature		46 F
Heat Tracing		No
Sample Type		Spot
Sampling Method		Fill and Purge
Company Collecting Sample		LSM
Sampled By		JH
Cylinder #		246
Mole, Weight, or Percent (For Flowcal DON'T EDIT)		M
Sample Calculation Method(For Flowcal DON'T EDIT)		GPA 2172/API 14.5 Report with GPA 2145 Physical Properties
Analysis Date		2025-01-17 13:09:00

Component Results

Component Name	Un-Normalized Mole%	Norm Mole%	
Nitrogen	1.3320	1.3582	
Carbon Dioxide	0.0980	0.0999	
Methane	76.3770	77.8800	
Ethane	10.5890	10.7974	
Propane	6.2890	6.4128	
isobutane	0.1160	0.1183	

Component Name	Un-Normalized Mole%	Norm Mole%	
n-Butane	0.7160	0.7301	
isopentane	0.1450	0.1479	
n-Pentane	0.9950	1.0146	
hexanes	0.5910	0.6026	
heptanes	0.5470	0.5578	
octanes	0.2130	0.2172	
nonanes+	0.0620	0.0632	
hydrogen sulfide	0.0000	0.0000	
Total:	98.0700	100.0000	

Results Summary

Result	Dry	Wet/Sat	
Total Un-Normalized Mole%	98.0700		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Gross Heating Value (BTU / Ideal cu.ft.)	1293.6	1271.1	
Gross Heating Value (BTU / Real cu.ft.)	1298.7	1276.6	
Relative Density (G), Ideal	0.7503	0.7481	
Relative Density (G), Real	0.7530	0.7511	
Compressibility (Z) Factor	0.9961	0.9957	
Total GPM	19.438	19.207	

Permian Resources Operating, LLC estimated the vented volumes using the following calculation on the oil/water characteristics of the Barney CTB.

*Daily Oil Volume (bbl) * Modeled Oil Flash Factor (MCF/bbl) + Daily Water Volume (bbl) * Modeled Water Flash Factor (MCF/bbl) – VRU Measured Volume (MCF)*

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Phone: (505) 476-3441

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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 513299

DEFINITIONS

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 513299
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

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 513299

QUESTIONS

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	Action Number: 513299
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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 ID (n#)	Unavailable.
Incident Name	Unavailable.
Incident Type	Flare
Incident Status	Unavailable.
Incident Facility	[fAPP2130655643] BARNEY CTB
<i>Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.</i>	

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	76
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	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	0
Nitrogen (N2) percentage quality requirement	0
Hydrogen Sulfide (H2S) PPM quality requirement	0
Carbon Dioxide (CO2) percentage quality requirement	0
Oxygen (O2) percentage quality requirement	0

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QUESTIONS, Page 2

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QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	02/20/2025
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	Cause: Equipment Failure Tank (Any) Natural Gas Vented Released: 329 Mcf Recovered: 0 Mcf Lost: 329 Mcf.
Natural Gas Flared (Mcf) Details	Not answered.
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	No
Downstream OGRID that should have notified this operator	0
Date notified of downstream activity requiring this vent or flare	
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	Equipment Failure
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

☒	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
☒	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
☒	I hereby certify the statements in this amending 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.
☒	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.
☒	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
clevans	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	10/8/2025