



# Certificate of Analysis

Number: 6030-24100001-004A

**Artesia Laboratory**  
 200 E Main St.  
 Artesia, NM 88210  
 Phone 575-746-3481

Paul Martinez  
 Earthstone  
 801 Cherry St, Suite 1200  
 Fort Worth, TX 76102

Station Name:	Gramma Ridge 34 SC 8H LG	Report Date:	10/02/2024
Station Number:	89410075	Sampled By:	Hunter Palma
Station Location:	Chisholm	Sample Of:	Gas Spot
Sample Point:	meter run	Sample Date:	09/25/2024 02:45
Type of Sample:	Spot-Cylinder	Sample Conditions:	578.6 psig, @ 95.6 °F Ambient: 78 °F
Heat Trace Used:	N/A	Received Date:	10/01/2024
Sampling Method:	Fill and Purge	Login Date:	10/01/2024
Sampling Company:	SPL	Effective Date:	09/25/2024 02:45
Instrument:	6030_GC6 (Inficon GC-3000 Micro)	Flow Rate:	1082.646 MSCFD
Last Inst. Cal.:	09/30/2024 07:34:12	Method:	GPA-2261M
Analyzed:	10/02/2024 11:47:27 by EBH	Cylinder No:	1111-000245

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia	
Hydrogen Sulfide	0.0000	0.0005	0.0008		GPM TOTAL C2+ 5.305
Nitrogen	2.2855	2.2669	3.0565		GPM TOTAL C3+ 2.331
Methane	78.9308	78.2896	60.4516		GPM TOTAL iC5+ 0.316
Carbon Dioxide	0.5683	0.5637	1.1941		
Ethane	11.1777	11.0869	16.0458	2.974	
Propane	5.0269	4.9861	10.5825	1.378	
Iso-butane	0.6280	0.6229	1.7426	0.204	
n-Butane	1.3814	1.3702	3.8332	0.433	
Iso-pentane	0.2802	0.2779	0.9650	0.102	
n-Pentane	0.2719	0.2697	0.9366	0.098	
Hexanes Plus	0.2678	0.2656	1.1913	0.116	
	100.8185	100.0000	100.0000	5.305	

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.7195	3.2176
Calculated Molecular Weight	20.78	93.19
Compressibility Factor	0.9966	

**GPA 2172 Calculation:**

**Calculated Gross BTU per ft³ @ 14.73 psia & 60°F**

Real Gas Dry BTU	1219.8	5141.1
Water Sat. Gas Base BTU	1199.1	5051.6
Ideal, Gross HV - Dry at 14.73 psia	1215.7	5141.1
Ideal, Gross HV - Wet	1194.5	5051.6

**Comments:** H2S Field Content: 5 ppm

*Mostaq Ahamed*

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated. The test results apply to the sample as received.

# **PERMIAN**

RESOURCES

Permian Resources meters all flared volumes, and volumes reported on C-129's in connection with flaring events are based on the available meter readings. While Permian Resources reports metered volumes on C-129 submissions, PR reviews the metered data for accuracy, reconciles any discovered discrepancies, and, where appropriate, submits amended C-129 reported volumes post-reconciliation to ensure accurate reporting.

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 555629

**DEFINITIONS**

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 555629
	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 555629

**QUESTIONS**

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	Action Number: 555629
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**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	[APP2123832175] GRAMA RIDGE EAST 34 STATE COM SOUTH BATTERY

<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	Yes
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	78
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	1
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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Action 555629

**QUESTIONS (continued)**

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**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	02/09/2026
Time vent or flare was discovered or commenced	06:00 AM
Time vent or flare was terminated	06:00 PM
Cumulative hours during this event	12

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Midstream Emergency Maintenance   Pipeline (Any)   Natural Gas Flared   Released: 198 Mcf   Recovered: 0 Mcf   Lost: 198 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	DKL down at libby
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
jdoolingpr	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.	2/18/2026