



# Certificate of Analysis

Number: 6030-26022710-001A

**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:	PAKSE SOUTH FC 221H -- Meter Run	Report Date:	03/04/2026
Station Number:	89410101	Sampled By:	Francisco Romero
Station Location:	Chisholm	Sample Of:	Gas
Sample Point:	Meter Run	Sample Type:	Spot
Type of Sample:	Spot-Cylinder	Sample Conditions:	106 psig, @ 101 °F Ambient: 75 °F
Heat Trace Used:	N/A	Sample Date:	02/26/2026 12:00
Sampling Method:	Fill and Purge	Received Date:	02/27/2026
Sampling Company:	SPL	Login Date:	02/27/2026
Cylinder No:	1111-002595	Effective Date:	03/01/2026
Instrument:	6030_GC6 (Inficon GC-3000 Micro)	Flow Rate:	1024.280 MSCFD
Last Inst. Cal.:	03/02/2026 08:00:55	Sampling Method:	Purge/Fill
Analyzed:	03/02/2026 08:56:23 by CDW	Heating Method:	N/A
		Method:	GPA-2261M

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Hydrogen Sulfide	0.000	0.000	0.000		GPM TOTAL C2+	6.650
Nitrogen	3.218	3.192	4.026		GPM TOTAL C3+	3.256
Methane	73.877	73.283	52.936		GPM TOTAL iC5+	0.620
Carbon Dioxide	0.210	0.208	0.412			
Ethane	12.749	12.646	17.121	3.394		
Propane	6.502	6.450	12.806	1.783		
Iso-butane	0.755	0.749	1.960	0.246		
n-Butane	1.934	1.918	5.019	0.607		
Iso-pentane	0.416	0.413	1.342	0.152		
n-Pentane	0.437	0.433	1.407	0.158		
Hexanes Plus	0.714	0.708	2.971	0.310		
	100.812	100.000	100.000	6.650		

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.7695	3.2176
Calculated Molecular Weight	22.21	93.19
Compressibility Factor	0.9961	

**GPA 2172 Calculation:**  
**Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F**

Real Gas Dry BTU	1291	5141
Water Sat. Gas Base BTU	1269	5052

**Comments:** H2S Field Content: 0 %

*Mostaq Ahammad*

Mostaq Ahammad, Petroleum Chemist

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 582899

**DEFINITIONS**

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 582899
	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.

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**

QUESTIONS

Action 582899

**QUESTIONS**

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 582899
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**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 ID (n#)	Unavailable.
Incident Name	Unavailable.
Incident Type	Flare
Incident Status	Unavailable.
Incident Facility	[fAPP2333859751] Pakse South Fed Com Facility
<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>	

<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, major 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

<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	74
Nitrogen (N2) percentage, if greater than one percent	3
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	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.

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**

QUESTIONS, Page 2

Action 582899

**QUESTIONS (continued)**

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 582899
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	04/29/2026
Time vent or flare was discovered or commenced	06:00 AM
Time vent or flare was terminated	04:00 PM
Cumulative hours during this event	10

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: 536 Mcf   Recovered: 0 Mcf   Lost: 536 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	
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	Trace had compression units down
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



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**

ACKNOWLEDGMENTS

Action 582899

**ACKNOWLEDGMENTS**

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 582899
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<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.

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oecd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 582899

**CONDITIONS**

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 582899
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**CONDITIONS**

Created By	Condition	Condition Date
jdoolingpr	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.	5/7/2026