



# Certificate of Analysis

Number: 6030-24060239-001A

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

Ed McCasland  
 Durango Midstream  
 10077 Grogans Mill Rd Suite 300  
 The Woodlands, TX 77380

June 13, 2024

Station Name: ArrowHead Inlet PSI	Sampled By: JQ
Station Number: 95997	Sample Of: Gas Spot
Station Location: Durango	Sample Date: 06/13/2024
Type of Sample: Spot-Cylinder	Sample Conditions: 36 psig, @ 86 °F
Heat Trace Used: N/A	Effective Date: 06/13/2024
Sampling Method: Fill and Purge	Flow Rate:
Last Inst. Cal.: 06/06/2024 14:17 PM	Method: GPA 2286
Analyzed: 06/13/2024 12:43:49 by EBH	Instrument: 6030_GC2 (Agilent GC-7890B)

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia	
Hydrogen Sulfide	0.0000	0.0000	0.0000		GPM TOTAL C2+ 6.045
Nitrogen	2.1790	2.1970	2.8490		GPM TOTAL C3+ 2.821
Methane	75.4630	76.0853	56.5010		GPM TOTAL iC5+ 0.583
Carbon Dioxide	0.2940	0.2964	0.6040		
Ethane	11.9800	12.0788	16.8120	3.224	
Propane	5.4720	5.5171	11.2610	1.517	
Iso-butane	0.6850	0.6907	1.8580	0.225	
n-Butane	1.5640	1.5769	4.2420	0.496	
Iso-pentane	0.4010	0.4043	1.3500	0.148	
n-Pentane	0.3740	0.3771	1.2590	0.137	
Hexanes Plus	0.7700	0.7764	3.2640	0.298	
	99.1820	100.0000	100.0000	6.045	

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.7484	3.1358
Calculated Molecular Weight	21.60	90.82
Compressibility Factor	0.9963	

**GPA 2172 Calculation:**

**Calculated Gross BTU per ft³ @ 14.65 psia & 60°F**

Real Gas Dry BTU	1264	4788
Water Sat. Gas Base BTU	1242	4704
Ideal, Gross HV - Dry at 14.65 psia	1259.6	4788.0
Ideal, Gross HV - Wet	1237.5	0.000

**Comments:** H2S Field Content 0 ppm

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.



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June 13, 2024

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 Station Number: 95997  
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 Type of Sample: Spot-Cylinder  
 Heat Trace Used: N/A  
 Sampling Method: Fill and Purge

Sampled By: JQ  
 Sample Of: Gas Spot  
 Sample Date: 06/13/2024  
 Sample Conditions: 36 psig, @ 86 °F  
 Method: GPA 2286  
 Analyzed: 06/13/2024 12:42:07 by EBH

**Analytical Data**

Components	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	0.00000	0.000	
Nitrogen	2.19697	2.849	
Methane	76.08539	56.501	
Carbon Dioxide	0.29642	0.604	
Ethane	12.07880	16.812	3.224
Propane	5.51713	11.261	1.517
Iso-Butane	0.69065	1.858	0.225
n-Butane	1.57690	4.242	0.496
Iso-Pentane	0.40431	1.350	0.148
n-Pentane	0.37708	1.259	0.137
i-Hexanes	0.16156	0.629	0.064
n-Hexane	0.07853	0.313	0.032
Benzene	0.10513	0.380	0.029
Cyclohexane	0.10186	0.394	0.035
i-Heptanes	0.11373	0.482	0.045
n-Heptane	0.02092	0.097	0.010
Toluene	0.05449	0.232	0.018
i-Octanes	0.08225	0.396	0.036
n-Octane	0.00570	0.030	0.003
Ethylbenzene	0.00606	0.030	0.002
Xylenes	0.01093	0.055	0.004
i-Nonanes	0.01629	0.090	0.008
n-Nonane	0.00348	0.021	0.002
Decanes Plus	0.01542	0.115	0.010
	<u>100.00000</u>	<u>100.000</u>	<u>6.045</u>



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June 13, 2024

Station Name: ArrowHead Inlet PSI  
Station Number: 95997  
Station Location: Durango  
Type of Sample: Spot-Cylinder  
Heat Trace Used: N/A  
Sampling Method: Fill and Purge

Sampled By: JQ  
Sample Of: Gas Spot  
Sample Date: 06/13/2024  
Sample Conditions: 36 psig, @ 86 °F  
Method: GPA 2286  
Analyzed: 06/13/2024 12:42:07 by EBH

Calculated Physical Properties	Total	C10+
Calculated Molecular Weight	21.60	160.68
<b>GPA 2172 Calculation:</b>		
<b>Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia &amp; 60°F</b>		
Real Gas Dry BTU	1264.2	8666.1
Water Sat. Gas Base BTU	1242.1	8483.0
Relative Density Real Gas	0.7484	5.5478
Compressibility Factor	0.9963	
Ideal, Gross HV - Wet	1237.5	
Ideal, Gross HV - Dry at 14.65 psia	1259.6	
Net BTU Dry Gas - real gas	1148	
Net BTU Wet Gas - real gas	1128	

**Comments:** H2S Field Content 0 ppm

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

**Indicate Event Type Flare Event Type (1=SSM, 2=Emerg, 3=Malf, 4=Excess)**

**Data Entry - New Mexico Flaring - Flare Event Indicators**

Report Run Date:

Date	EDDY, NM > Arrowhead CS > n. FL-1 > Volume of Gas to Flare_Hourly (mscf)
01/09/2025 12:00 AM	30.115
01/09/2025 1:00 AM	96.840
01/09/2025 2:00 AM	194.107
01/09/2025 3:00 AM	159.285
01/09/2025 4:00 AM	40.265
01/09/2025 5:00 AM	35.433
01/09/2025 6:00 AM	34.884
01/09/2025 7:00 AM	22.282
01/09/2025 8:00 AM	0.000
01/09/2025 9:00 AM	0.000
01/09/2025 10:00 AM	0.000
01/09/2025 11:00 AM	0.000
01/09/2025 12:00 PM	0.000
01/09/2025 1:00 PM	0.000
01/09/2025 2:00 PM	0.000
01/09/2025 3:00 PM	0.000
01/09/2025 4:00 PM	0.000
01/09/2025 5:00 PM	0.000
01/09/2025 6:00 PM	0.000
01/09/2025 7:00 PM	0.000
01/09/2025 8:00 PM	0.002
01/09/2025 9:00 PM	0.001
01/09/2025 10:00 PM	0.001
01/09/2025 11:00 PM	0.000

613.210

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 419503

**DEFINITIONS**

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 419503
	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 419503

**QUESTIONS**

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 419503
	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	[fAPP2123229442] Frontier Field Services Gathering System
<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	75
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	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.

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QUESTIONS, Page 2

Action 419503

**QUESTIONS (continued)**

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 419503
	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	01/09/2025
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	12:00 AM
Cumulative hours during this event	8

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	<i>Not answered.</i>
Natural Gas Flared (Mcf) Details	<i>Not answered.</i>
Other Released Details	Cause: High Line Pressure   Pipeline (Any)   Natural Gas Flared   Released: 613 Mcf   Recovered: 0 Mcf   Lost: 613 Mcf.
Additional details for Measured or Estimated Volume(s). Please specify	<i>Not answered.</i>
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>Yes, according to supplied volumes this appears to be a "gas only" report.</b>

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	<i>Not answered.</i>
Downstream OGRID that should have notified this operator	<i>Not answered.</i>
Date notified of downstream activity requiring this vent or flare	
Time notified of downstream activity requiring this vent or flare	<i>Not answered.</i>

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	High inlet pressure forcing station to flare for safety reasons.
Steps taken to limit the duration and magnitude of vent or flare	Resumed normal operations once pressures were safe to do so.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Resumed normal operations once pressures were safe to do so. high pressures result in flaring for safety reasons. Recurrence likely when pressures are high.





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ACKNOWLEDGMENTS

Action 419503

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	Action Number: 419503
	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.

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CONDITIONS

Action 419503

**CONDITIONS**

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 419503
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**CONDITIONS**

Created By	Condition	Condition Date
sorozco	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.	1/10/2025