



# Certificate of Analysis

Number: 2500-21090085-001A

**Greeley Laboratory**  
2881 S. 31st Ave  
Unit 6-8  
Greeley, CO 80631

Tony Walton  
Bonanza Creek  
4301 Industrial Parkway  
Evans, CO 80620

Sep. 17, 2021

Station Name: SWT 36 GL VRU Master  
Station Number: 66010179  
Station Location: SA K-1 Pad  
Sample Point: Meter Run  
Analyzed: 09/17/2021 07:36:18 by RGA

Sampled By: Patrick Purcell  
Sample Of: Gas Spot  
Sample Date: 09/10/2021 14:15  
Sample Conditions: 521.76 psig, @ 118.79 °F  
Method: GPA-2261M  
Cylinder No: 2500-01885

## Analytical Data

Components	Mol. %	Wt. %	GPM at 14.73 psia	
Hydrogen Sulfide	0.0001	ND		GPM TOTAL C2+ 6.691
Nitrogen	0.8235	1.025		GPM TOTAL C3+ 3.406
Carbon Dioxide	2.2835	4.465		GPM TOTAL iC5+ 0.465
Methane	73.2783	52.225		
Ethane	12.2369	16.347	3.285	
Propane	7.4292	14.554	2.055	
Iso-butane	0.7066	1.825	0.232	
n-Butane	2.0655	5.333	0.654	
Iso-pentane	0.3141	1.007	0.115	
n-Pentane	0.3756	1.204	0.137	
Hexanes Plus	0.4867	2.015	0.213	
	100.0000	100.000	6.691	

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.7801	3.2176
Calculated Molecular Weight	22.51	93.19
Compressibility Factor	0.9959	
<b>GPA 2172 Calculation:</b>		
<b>Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia &amp; 60°F</b>		
Real Gas Dry BTU	1295	5141
Water Sat. Gas Base BTU	1273	5052
<b>Comments:</b> H2S Field Content 1.00 ppm		

Data reviewed by: Carson Souther, Laboratory Analyst

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