



Certificate of Analysis

Number: 2500-21090044-011A

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

Tony Walton
Bonanza Creek
4301 Industrial Parkway
Evans, CO 80620

Sep. 13, 2021

Station Name: NPF 31-34-22 HNB GPM
Station Number: 68004619
Station Location: NPF K-22 Pad
Sample Point: Meter Tube Run
Analyzed: 09/13/2021 13:49:06 by RGA

Sampled By: Russ Fox
Sample Of: Gas Spot
Sample Date: 09/03/2021 11:40
Sample Conditions: 151.77 psig, @ 80.90 °F
Method: GPA-2261M
Cylinder No: 2500-00935

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.73 psia	
Hydrogen Sulfide	0.0001	ND		GPM TOTAL C2+ 8.079
Nitrogen	0.3572	0.422		GPM TOTAL C3+ 4.024
Carbon Dioxide	2.3905	4.436		GPM TOTAL iC5+ 0.685
Methane	68.8924	46.602		
Ethane	15.0971	19.141	4.055	
Propane	7.8706	14.634	2.178	
Iso-butane	0.9428	2.311	0.310	
n-Butane	2.6885	6.589	0.851	
Iso-pentane	0.5237	1.593	0.192	
n-Pentane	0.6635	2.018	0.242	
Hexanes Plus	0.5736	2.254	0.251	
	100.0000	100.000	8.079	

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.8223	3.2176
Calculated Molecular Weight	23.72	93.19
Compressibility Factor	0.9954	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1366	5141
Water Sat. Gas Base BTU	1343	5052
Comments: 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.