



Certificate of Analysis

Number: 2500-21110053-001A

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

Tony Walton
Civitas (formerly Bonanza Creek)
4301 Industrial Parkway
Evans, CO 80620

Nov. 11, 2021

Station Name: Kunsemiller 5-61-20-0801B2B Inj
Station Number: 19524_GL
Station Location: Hawkins P2 5-61-20
Sample Point: Tube
Analyzed: 11/11/2021 13:23:47 by RGA

Sampled By: Wally Young
Sample Of: Gas Spot
Sample Date: 11/03/2021 12:30
Sample Conditions: 897.25 psig, @ 135.89 °F
Method: GPA-2261M
Cylinder No: 2500-00913

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.73 psia		
Hydrogen Sulfide	0.0007	0.001		GPM TOTAL C2+	6.831
Nitrogen	0.8213	1.020		GPM TOTAL C3+	3.439
Carbon Dioxide	2.2903	4.468		GPM TOTAL iC5+	0.403
Methane	72.6868	51.691			
Ethane	12.6335	16.840	3.392		
Propane	7.6434	14.941	2.114		
Iso-butane	0.7263	1.871	0.239		
n-Butane	2.1576	5.559	0.683		
Iso-pentane	0.3313	1.060	0.122		
n-Pentane	0.4061	1.299	0.148		
Hexanes Plus	0.3027	1.250	0.133		
	100.0000	100.000	6.831		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7818	3.2176
Calculated Molecular Weight	22.56	93.19
Compressibility Factor	0.9959	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1297	5141
Water Sat. Gas Base BTU	1275	5052
Comments: H2S Field Content 7 ppm		

Ryleigh Jacobs

Data reviewed by: Ryleigh Jacobs, Laboratory Analyst

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