

Lab #: 998329

Job #: 65228

Sample Name: Benjamin Federal 33-4B (K28NW) Casing

Company: QB Energy Operating, LLC

API/Well: 05-045-20182

Container: IsoTube Single Valve

Location: Federal Lease # COC-54737

Sampling Point: 420552

Date Sampled: 09/09/2025

Date Received: 01/09/2026

Date Reported: 02/16/2026

Component	Chemical mol%	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{18}\text{O}$ ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide	nd				
Helium	0.0043				
Hydrogen	0.0599				
Argon	nd				
Oxygen	0.068				
Nitrogen	0.27				
Carbon Dioxide	2.22	-3.5			
Methane	86.25	-39.9	-191		
Ethane	7.01	-28.4			
Ethylene	nd				
Propane	2.39	-25.8			
Propylene	nd				
Iso-butane	0.531	-26.3			
N-butane	0.527	-24.8			
Iso-pentane	0.225	-25.8			
N-pentane	0.161	-25.3			
Hexanes +	0.278				

Total BTU/cu.ft. dry @ 60° F & 14.73psia, calculated: 1124

Specific gravity, calculated: 0.663

Remarks:

Billing Code: 204665, Major/Minor Code: 8000..126