

Lab #: 998360

Job #: 65232

Sample Name: Federal 7-11C (7D) Casing

Company: QB Energy Operating, LLC

API/Well: 05-045-12467

Container: IsoTube Single Valve

Location: Federal Lease # COC-23443

Sampling Point: 285436

Date Sampled: 09/24/2025

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	0.0787				
Argon	0.0073				
Oxygen	0.16				
Nitrogen	0.53				
Carbon Dioxide	nd				
Methane	89.97	-39.4	-189		
Ethane	5.90	-28.5			
Ethylene	0.0005				
Propane	1.85	-26.4			
Propylene	nd				
Iso-butane	0.351	-26.3			
N-butane	0.399	-25.5			
Iso-pentane	0.162	-26.1			
N-pentane	0.131	-25.5			
Hexanes +	0.470				

Total BTU/cu.ft. dry @ 60° F & 14.73psia, calculated: 1123

Specific gravity, calculated: 0.631

Remarks:

Insufficient CO2 concentration for carbon isotope analysis.

Billing Code: 201209, Major/Minor Code: 8000..126