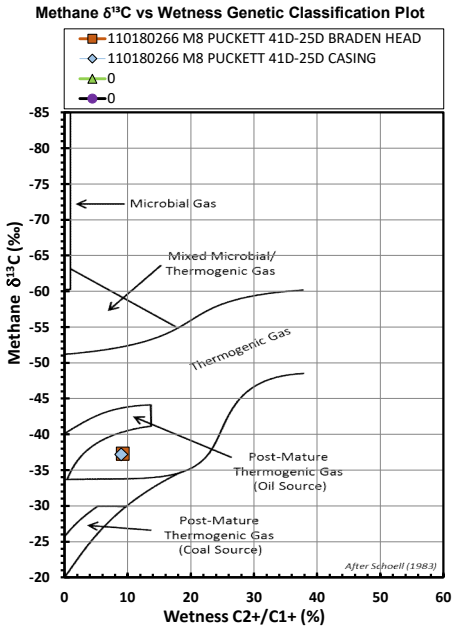
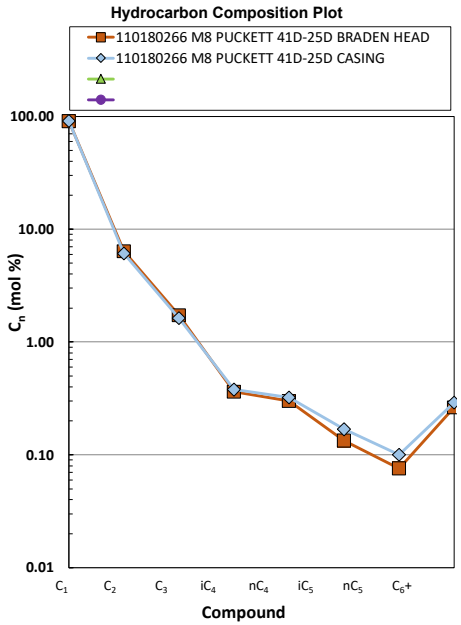
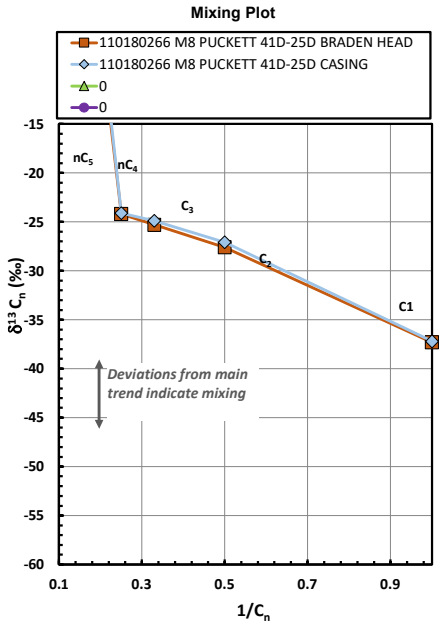
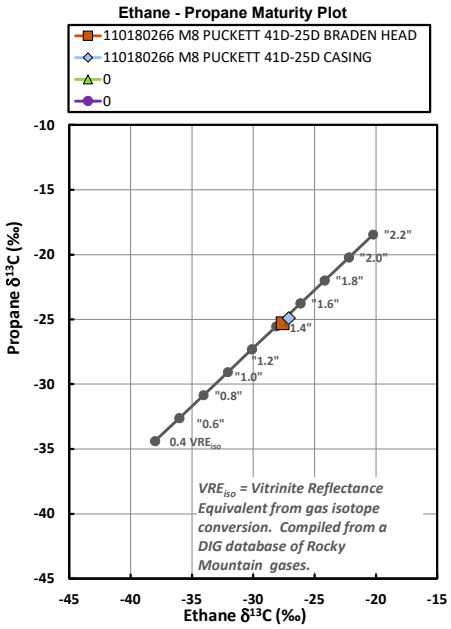
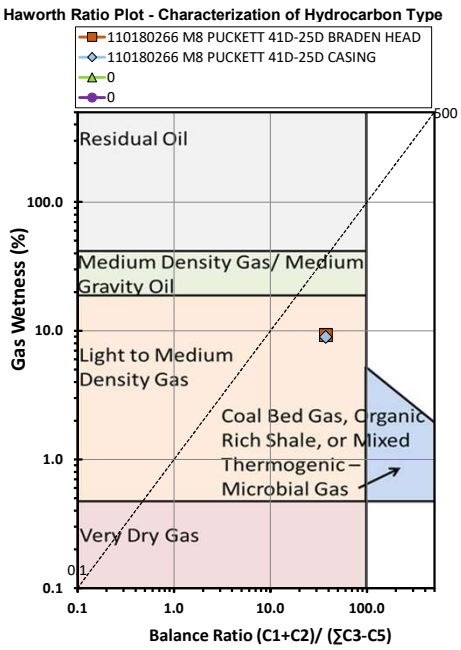
EMPACT

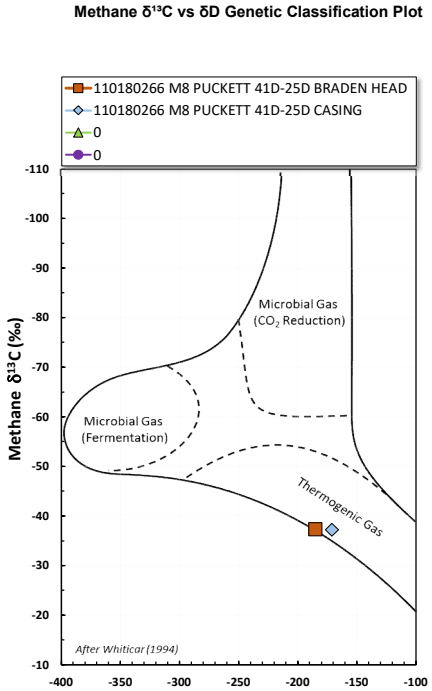

Methane δ13C vs Wetness Genetic Classification Plot
110180266 M8 PUCKETT 41D-25D BRADEN HEAD
110180266 M8 PUCKETT 41D-25D CASING
0
0
Microbial Gas
Mixed Microbial/ Thermogenic Gas
Thermogenic Gas
Post-Mature Thermogenic Gas (Oil Source)
Post-Mature Thermogenic Gas (Coal Source)
After Schoell (1983)
Methane δ13C (‰)
Wetness C2+/C1+ (%)

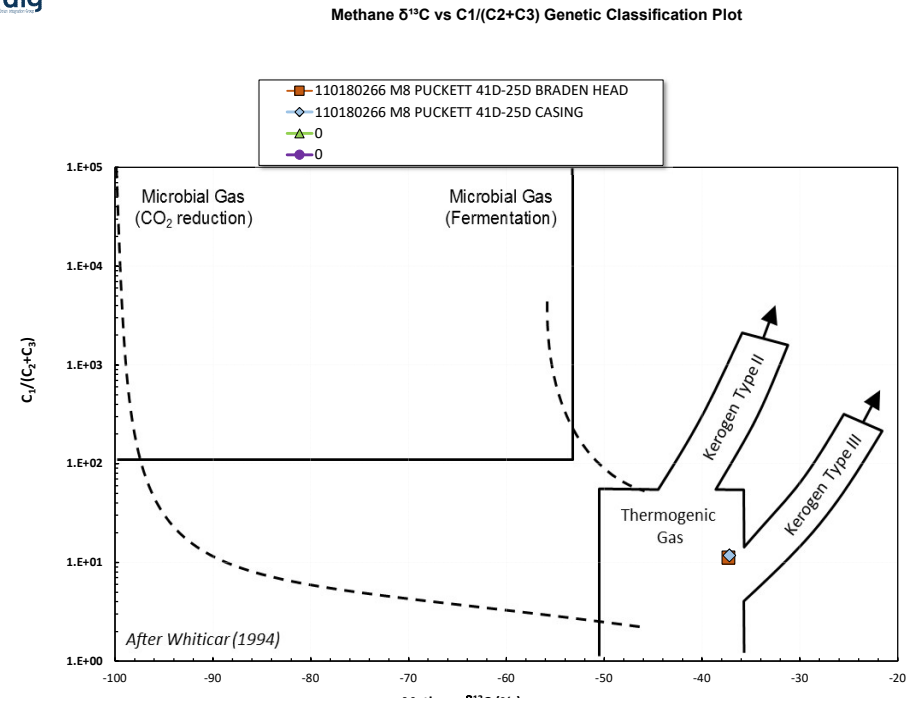

Hydrocarbon Composition Plot
110180266 M8 PUCKETT 41D-25D BRADEN HEAD
110180266 M8 PUCKETT 41D-25D CASING
Cn (mol %)
Compound


Mixing Plot
110180266 M8 PUCKETT 41D-25D BRADEN HEAD
110180266 M8 PUCKETT 41D-25D CASING
Deviations from main trend indicate mixing
δ13 Cn (‰)
1/Cn


Ethane - Propane Maturity Plot
110180266 M8 PUCKETT 41D-25D BRADEN HEAD
110180266 M8 PUCKETT 41D-25D CASING
VREiso = Vitrinite Reflectance Equivalent from gas isotope conversion. Compiled from a DIG database of Rocky Mountain gases.
Propane δ13C (‰)
Ethane δ13C (‰)


Haworth Ratio Plot - Characterization of Hydrocarbon Type
110180266 M8 PUCKETT 41D-25D BRADEN HEAD
110180266 M8 PUCKETT 41D-25D CASING
Residual Oil
Medium Density Gas/ Medium Gravity Oil
Light to Medium Density Gas
Coal Bed Gas, Organic Rich Shale, or Mixed Thermogenic – Microbial Gas
Very Dry Gas
Gas Wetness (%)
Balance Ratio (C1+C2)/ (∑C3-C5)


Methane δ13C vs δD Genetic Classification Plot
110180266 M8 PUCKETT 41D-25D BRADEN HEAD
110180266 M8 PUCKETT 41D-25D CASING
Microbial Gas (CO2 Reduction)
Microbial Gas (Fermentation)
Thermogenic Gas
After Whiticar (1994)
Methane δ13C (‰)


Methane δ13C vs C1/(C2+C3) Genetic Classification Plot
110180266 M8 PUCKETT 41D-25D BRADEN HEAD
110180266 M8 PUCKETT 41D-25D CASING
Microbial Gas (CO2 reduction)
Microbial Gas (Fermentation)
Kerogen Type II
Kerogen Type III
Thermogenic Gas
After Whiticar (1994)
C1/(C2+C3)