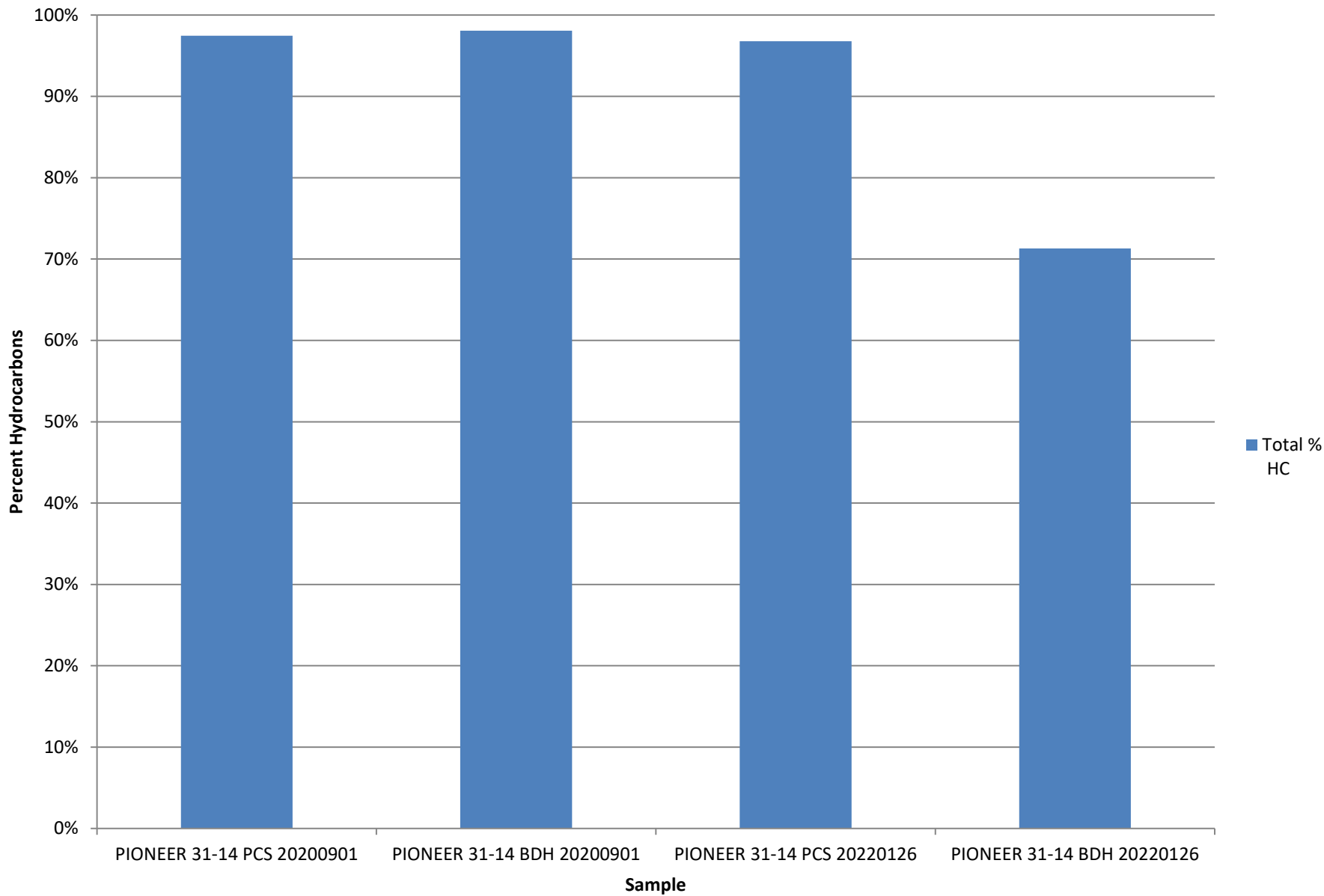
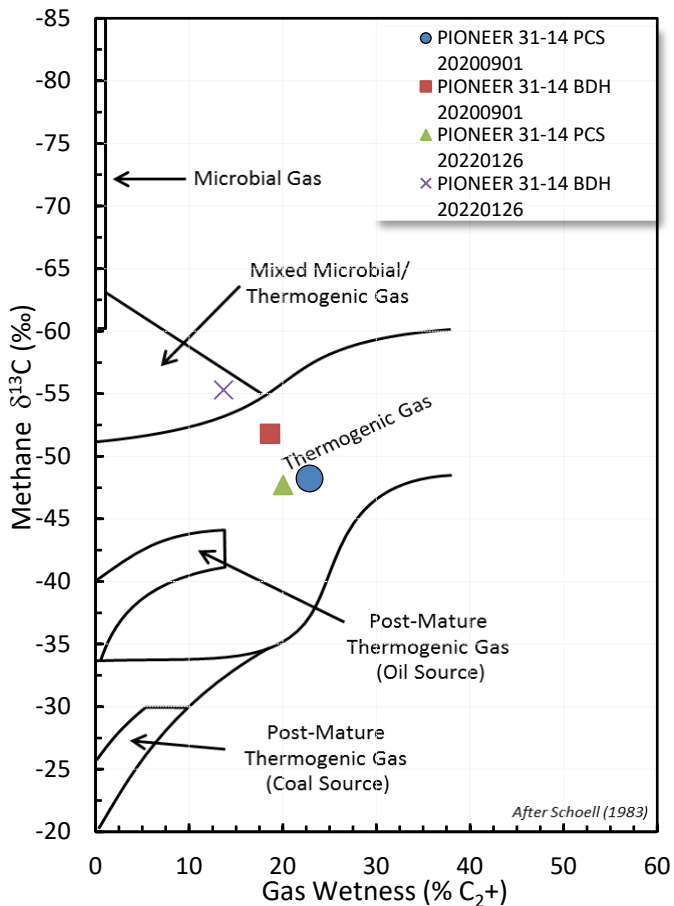


Total Percent Hydrocarbons

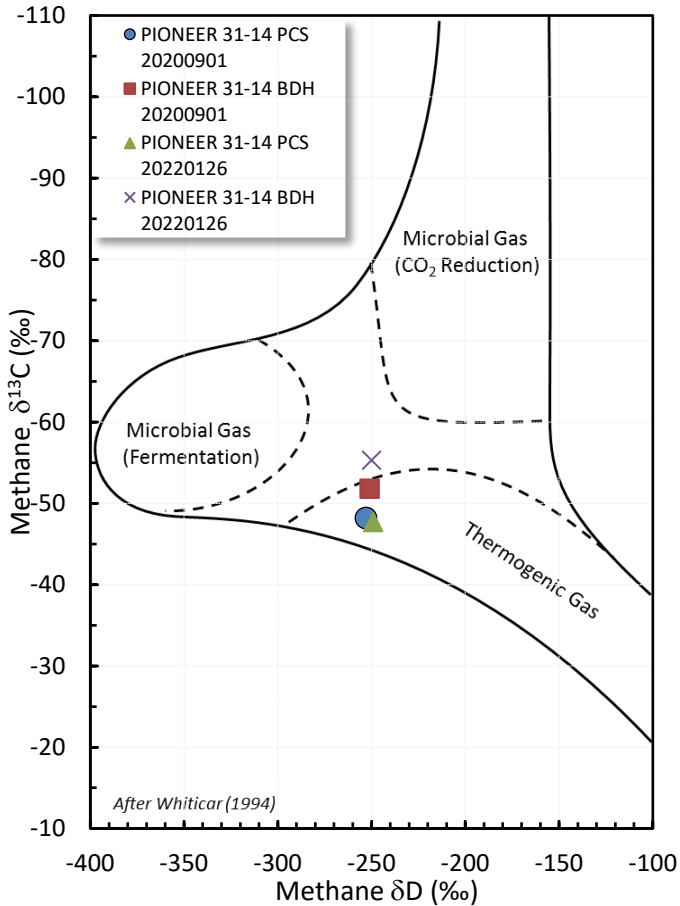


Stable Isotope Interpretive Plots

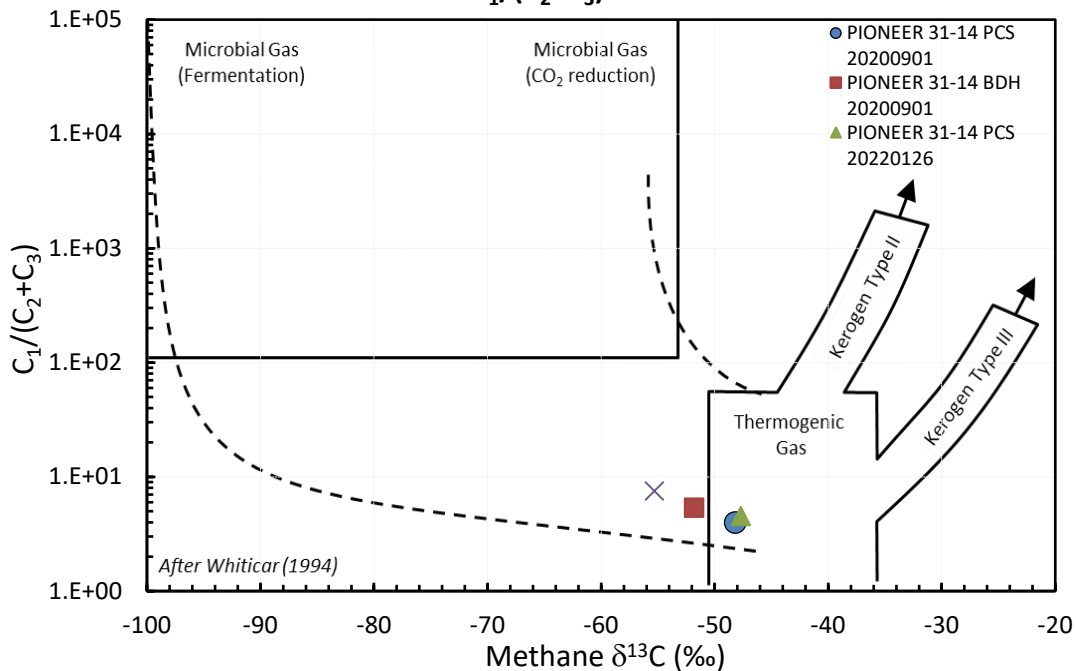
Methane vs Gas Wetness Genetic Classification



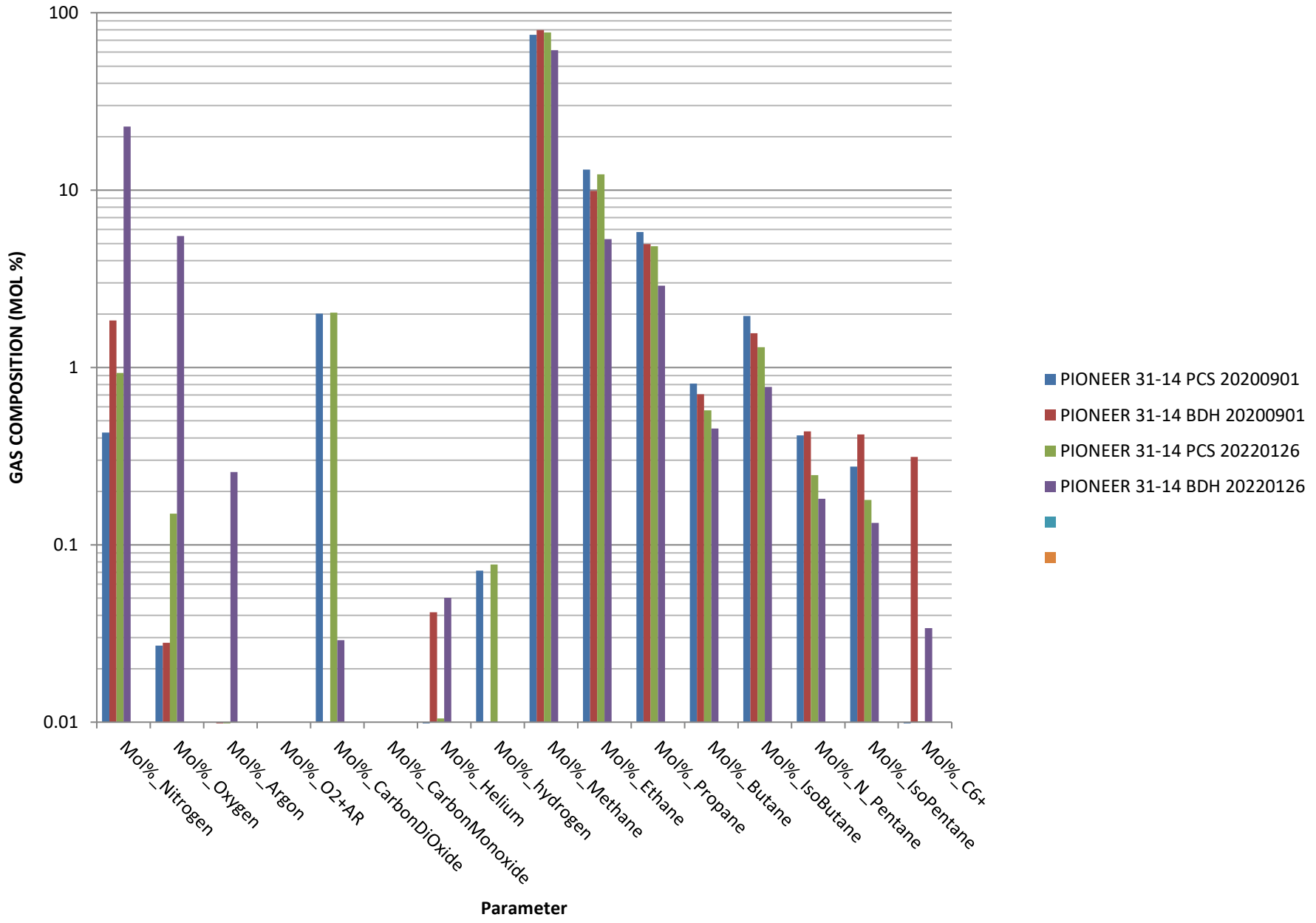
Methane $\delta^{13}\text{C}$ vs δD Genetic Classification Plot



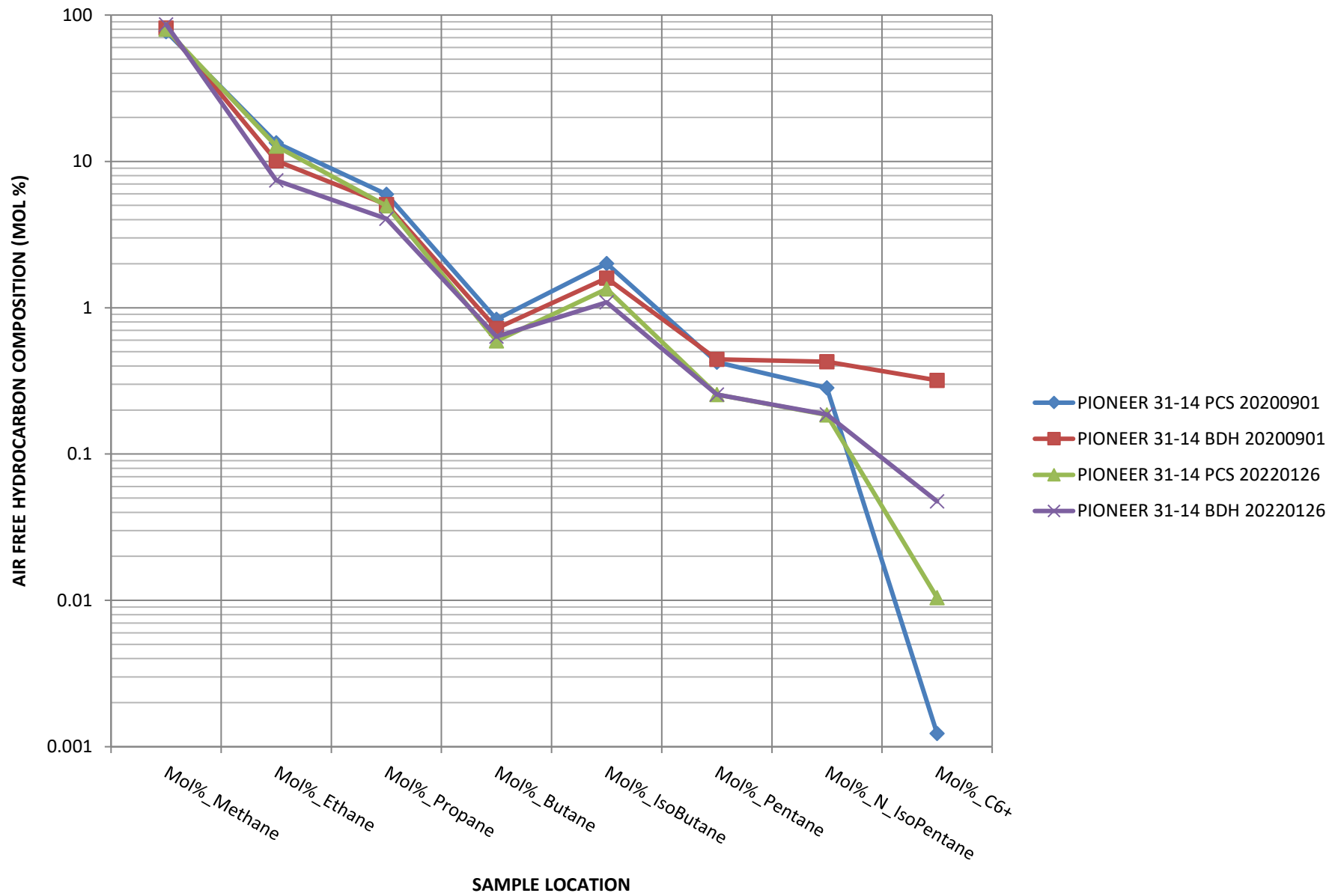
Methane $\delta^{13}\text{C}$ vs $\text{C}_1/(\text{C}_2+\text{C}_3)$ Genetic Classification Plot

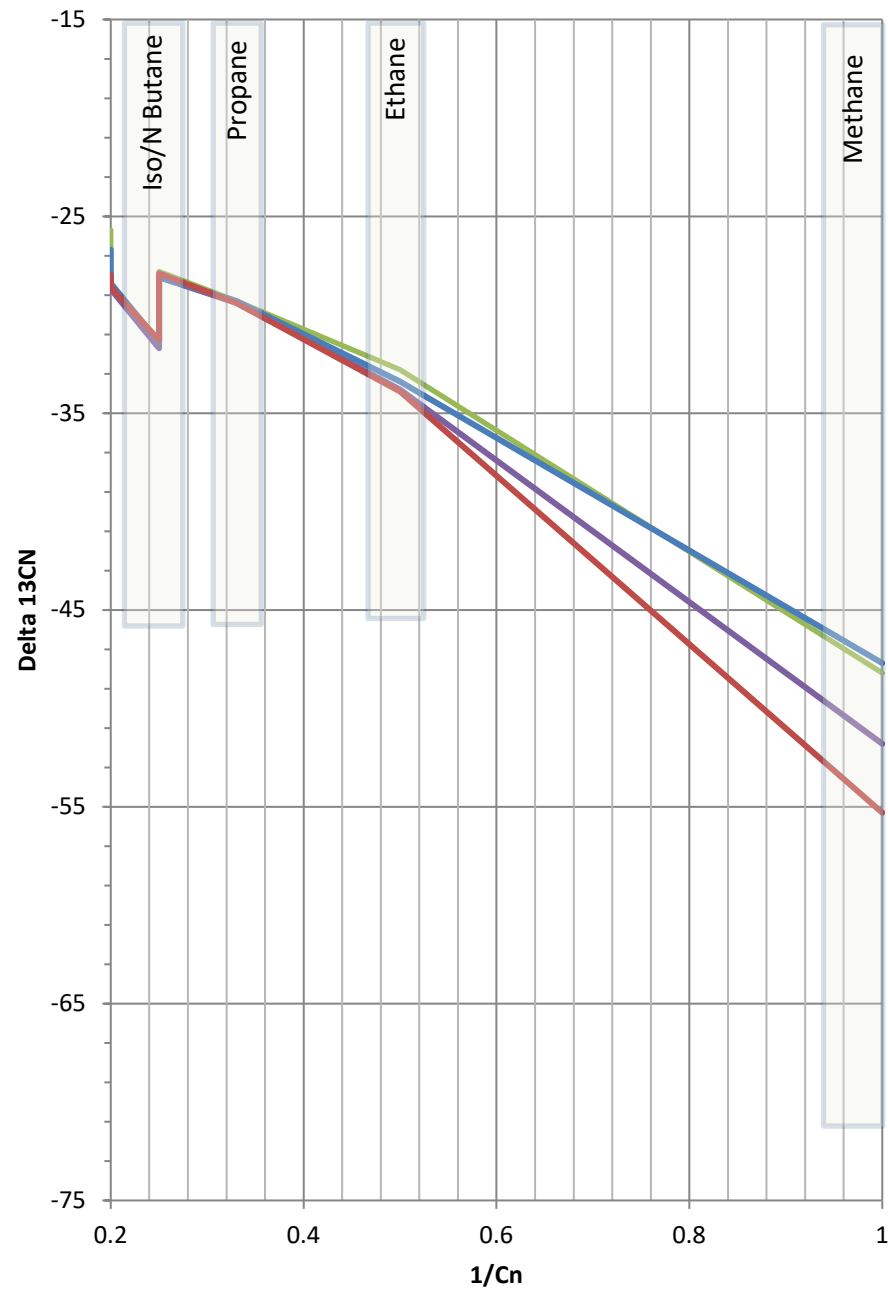


GAS COMPOSITION



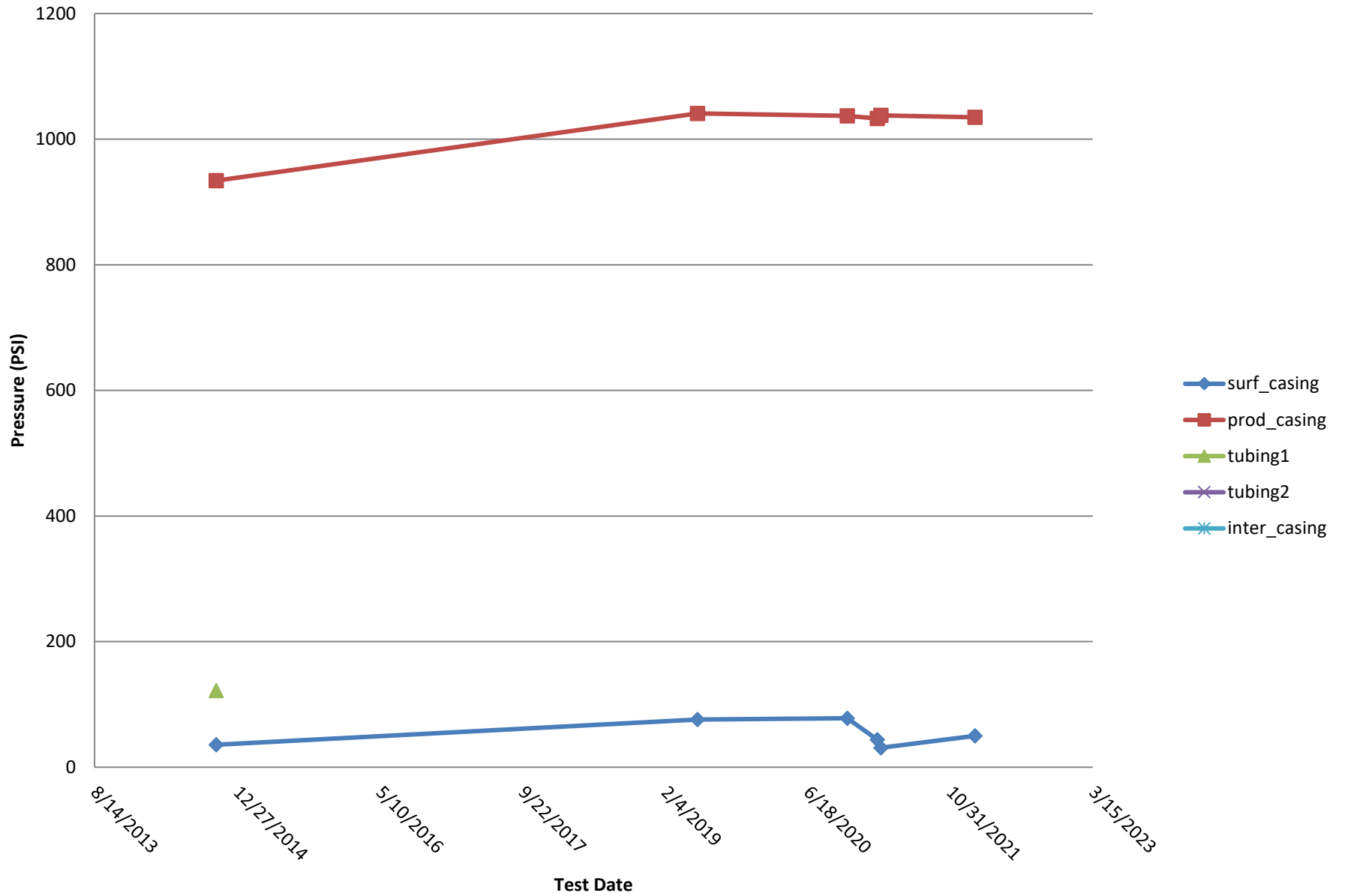
HYDROCARBON COMPOSITION



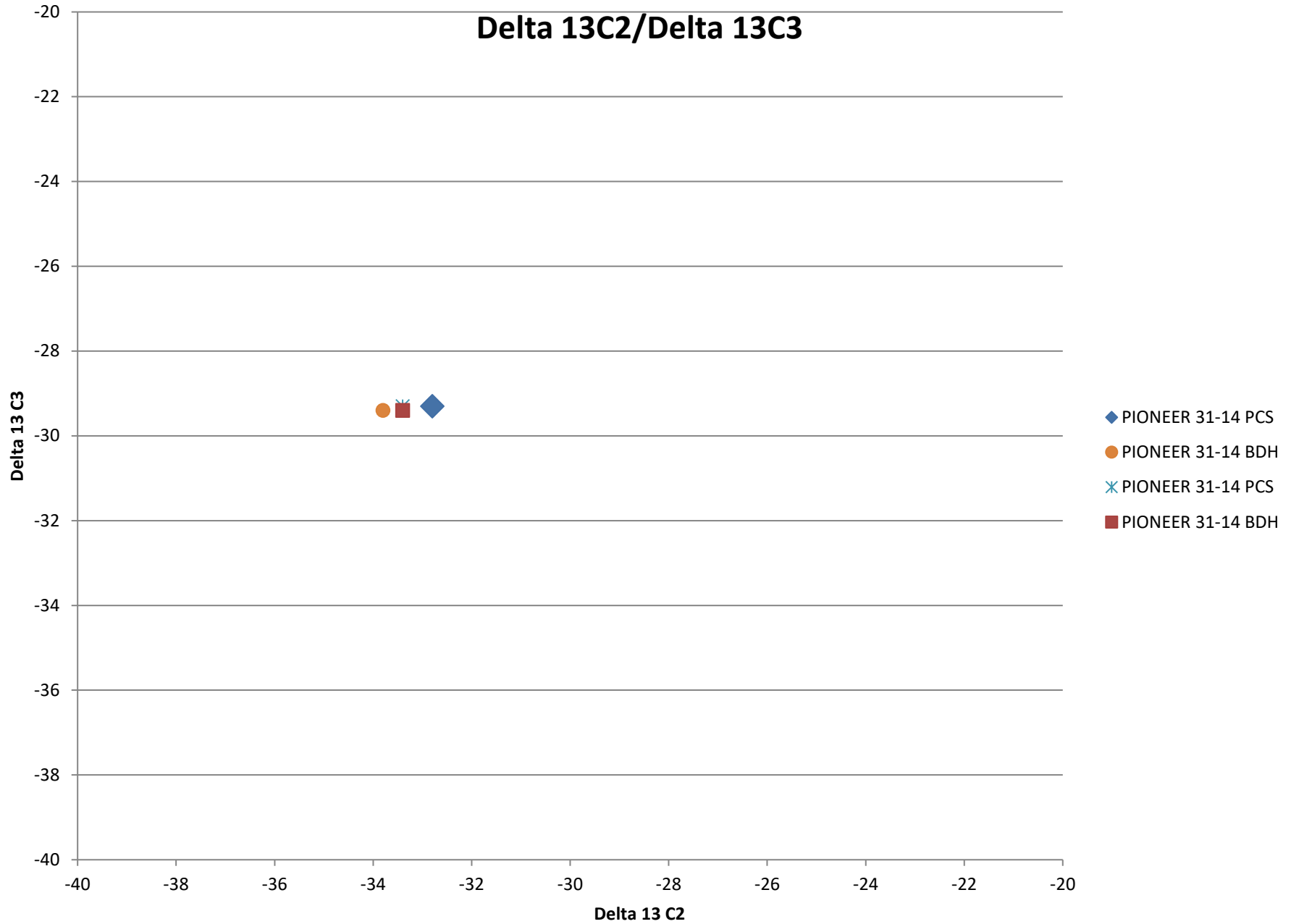


- PIONEER 31-14 PCS
- PIONEER 31-14 BDH
- PIONEER 31-14 PCS
- PIONEER 31-14 BDH

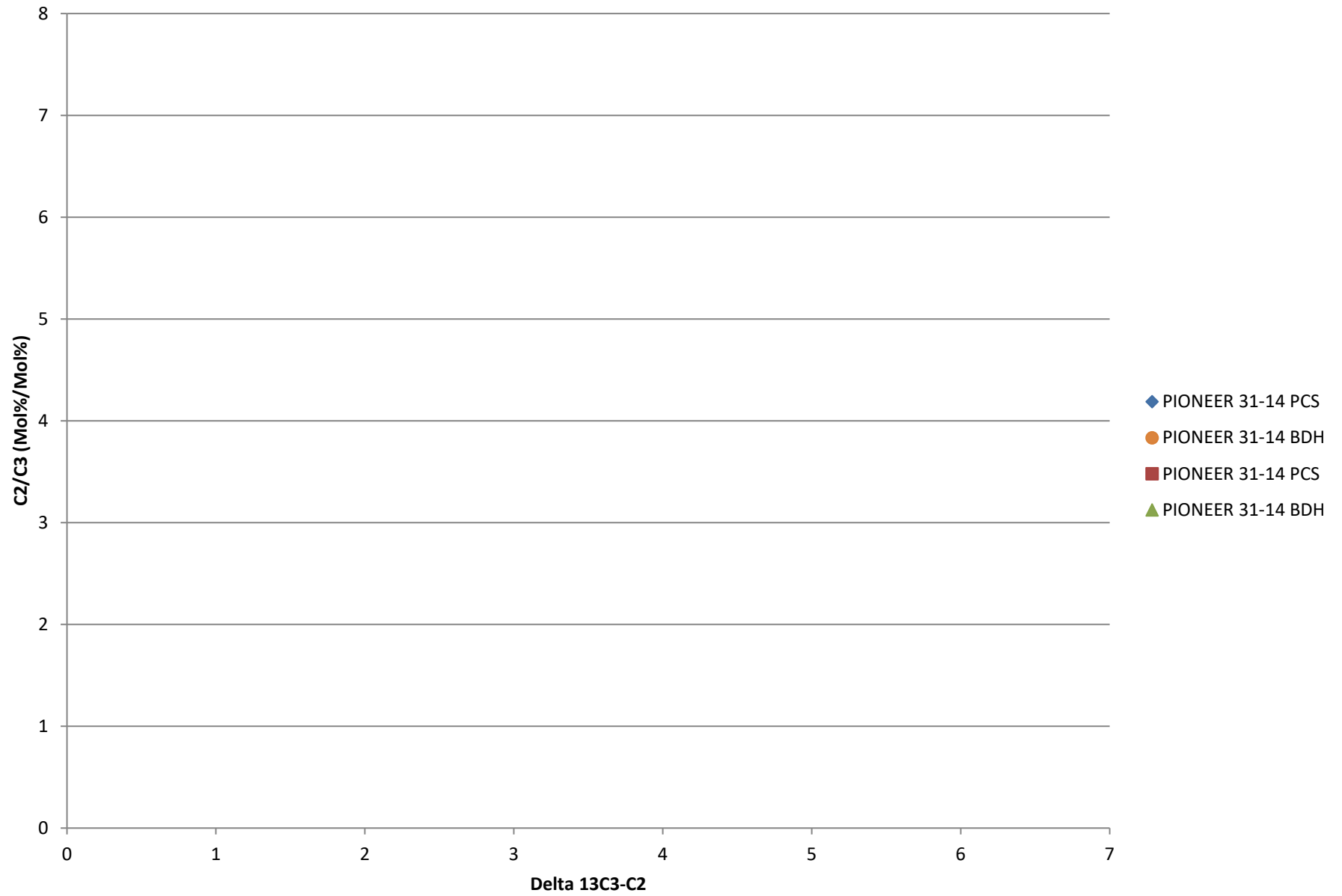
Bradenhead Test Summary



Delta 13C2/Delta 13C3



Delta13 C2/C3 vs. Delta 13C3-C2



Delta 13 IC4/ Delta NC4

