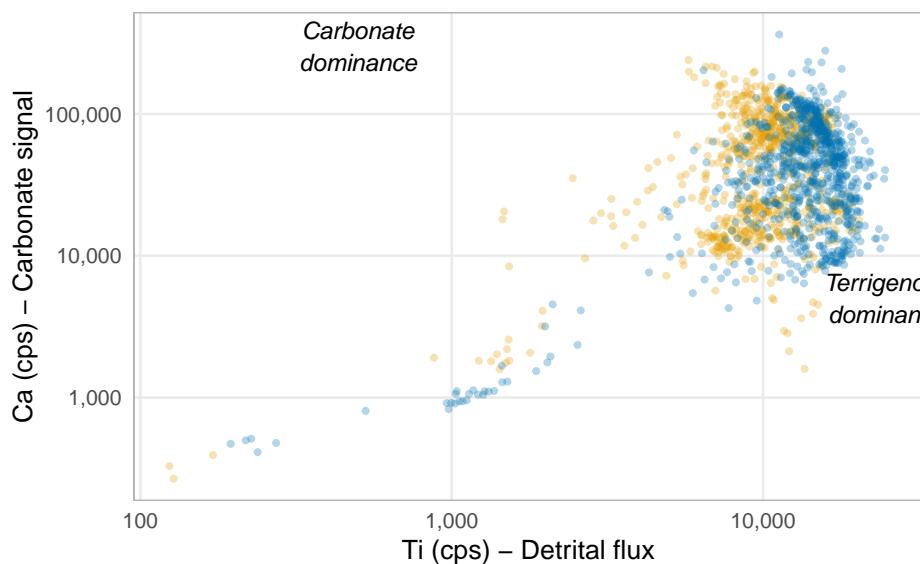


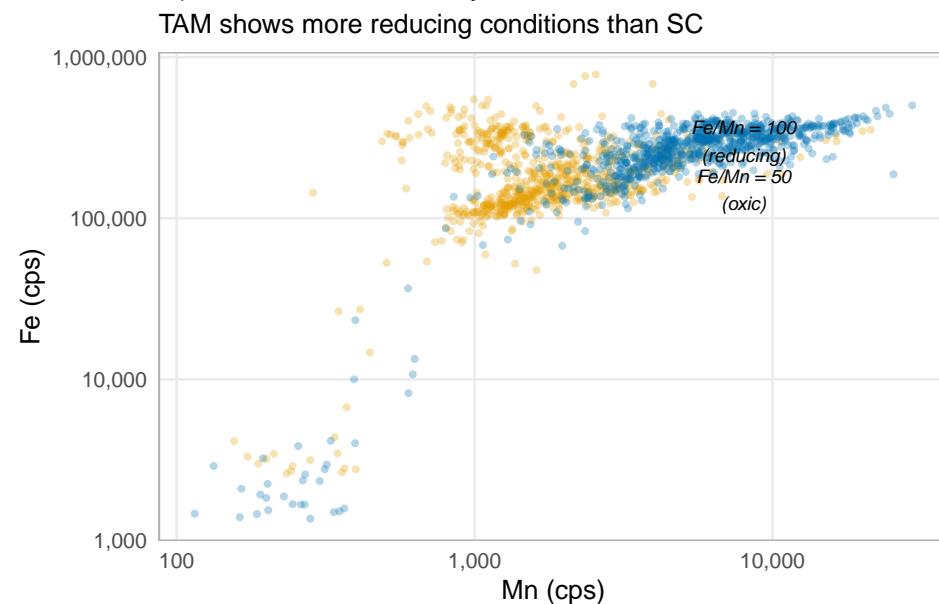
## Figure S4: Proxy Cross–Plots with Interpretive Framework

Geochemical relationships supporting proxy interpretation in Pebas Formation

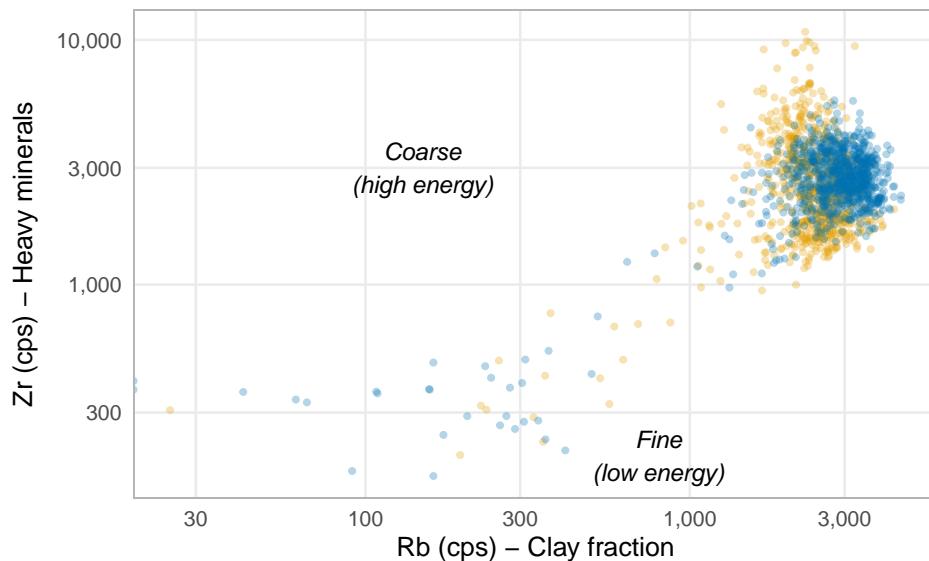
A) Ca vs Ti: Carbonate–Detrital Mixing



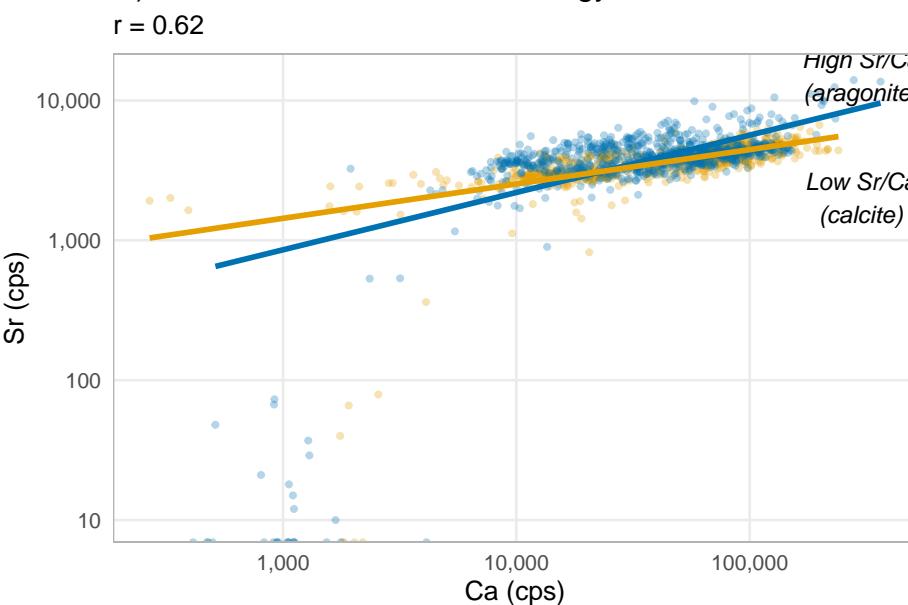
B) Fe vs Mn: Redox Systematics



C) Zr vs Rb: Grain Size Systematics



D) Sr vs Ca: Carbonate Mineralogy



Core — SC — TAM