

11/02 Alkalinity, Regime

b. 42] 1) Yes, denser form is stable at greater P

2) $G = G^e + \sqrt{f} [P_f - P_0]$ for each form so

$$G_A - G_C + [V_A - V_C](P_f - P_0) = G_{AP} - G_{CP}$$

$$\Rightarrow P_f = P_0 - \frac{\Delta G}{V_A - V_C}$$

$$= 4.0 \times 10^3 \text{ bar}$$

$$V_A = 3.416041 \times 10^{-5} \text{ m}^3$$

$$V_C = 3.693356 \times 10^{-5} \text{ m}^3$$

3) NO₂ See phase diagram or temp dependence of ΔG/H