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William J. Deutsch

GROUNDWATER GEOCHEMISTRY

Fundamentals and Applications to Contamination

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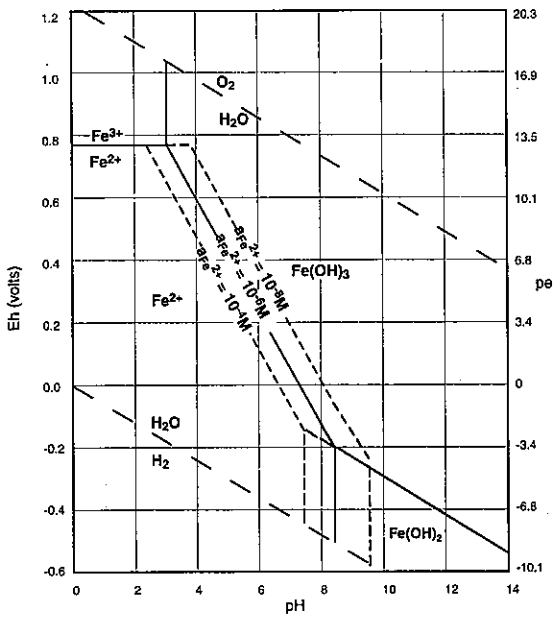

Figure 2-1 Eh-pH diagram for selected iron species.

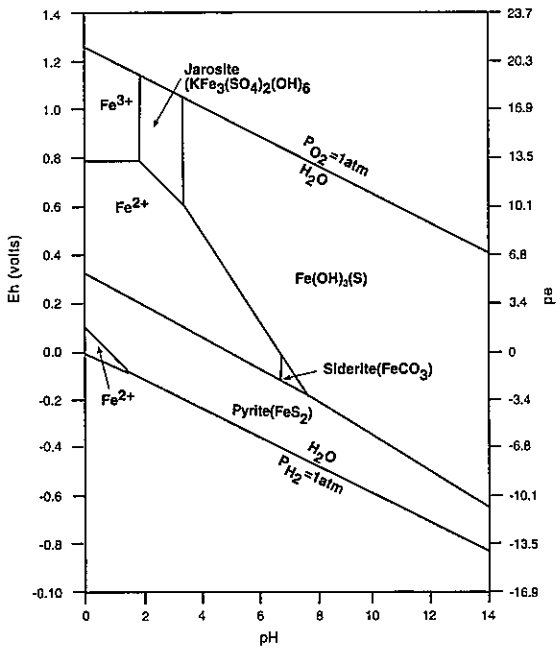

Figure 2-2 pe-ph diagram of the iron system ($a_{Fe} = a_{K+} = 10^{-4}$ M; $a_s = 10^{-2}$ M; $P_{CO_2} = 0.01$ atm).

Lower stability limit of water

$$H_2^0 \leftrightarrow 2H^+ + 2e^- \quad E^0 = 0.00 \text{ volts} \tag{2-18}$$

$$Eh = -0.059pH \quad (pH_2 = 1 \text{ atm}) \tag{2-19}$$