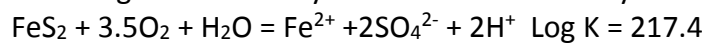


Answer on Question #81853 – Chemistry – General Chemistry

Solve for $O_2(aq)$. Because we will have measured pH directly, we can use that value and an assumption of equilibrium with pyrite to calculate the dissolved oxygen ($O_2(aq)$) with the following reaction and your observed chemistry:



$$pH = 6.6$$

Solution:

$$pH = -\log [H^+]$$

$$[H^+] = 10^{-pH} = 10^{-6.6} = 2.5 \times 10^{-7}$$

$$3.5O_2 - 2H^+$$

$$xO_2 - 2.5 \times 10^{-7}$$

$$x = 4.4 \times 10^{-7}$$