

CHM 152 Group Work 6

Create a functional Galvanic cell given the following: On the left side of the cell there is 1.00M iron(III) nitrate solution with a solid iron electrode. On the right side, there is 1.00M cobalt(II) nitrate solution with a solid cobalt electrode. Draw the cell and label the anode, cathode, metals, solutions, and all parts of the cell. Write and balance the half reactions and overall cell reaction. Calculate the cell potential E° , ΔG° and K . Indicate where all charged particles flow in the cell and what they are. Calculate the cell potential if the cell contained 0.25M iron(III) nitrate and 1.75M cobalt(II) nitrate. Finally write the short hand notation for the cell. Reduction potentials can be found in Appendix D.