ENGR 340-Introduction to Environmental Engineering

To: Professor Deborah Sills

From: Zwelani Ngwenya

Re: Non-Linear Curve fitting- Oxygen Depletion Kinetics

First Data Set



Figure 1: Measured dissolved oxygen concentration in mg/L over time in minutes fitted in second order equation with reaction rate coefficient of k = 0.14 L mg-1min-1.

Second Data Set



Figure 2: Measured dissolved oxygen concentration in mg/L over time in minutes fitted in zero order equation with reaction rate coefficient of k = 0.3 mg L-1min-1

Third Data Set

Figure 3: Measured dissolved oxygen concentration in mg/L over time in minutes fitted in a first order equation with reaction rate coefficient of k = 0.11 min-1