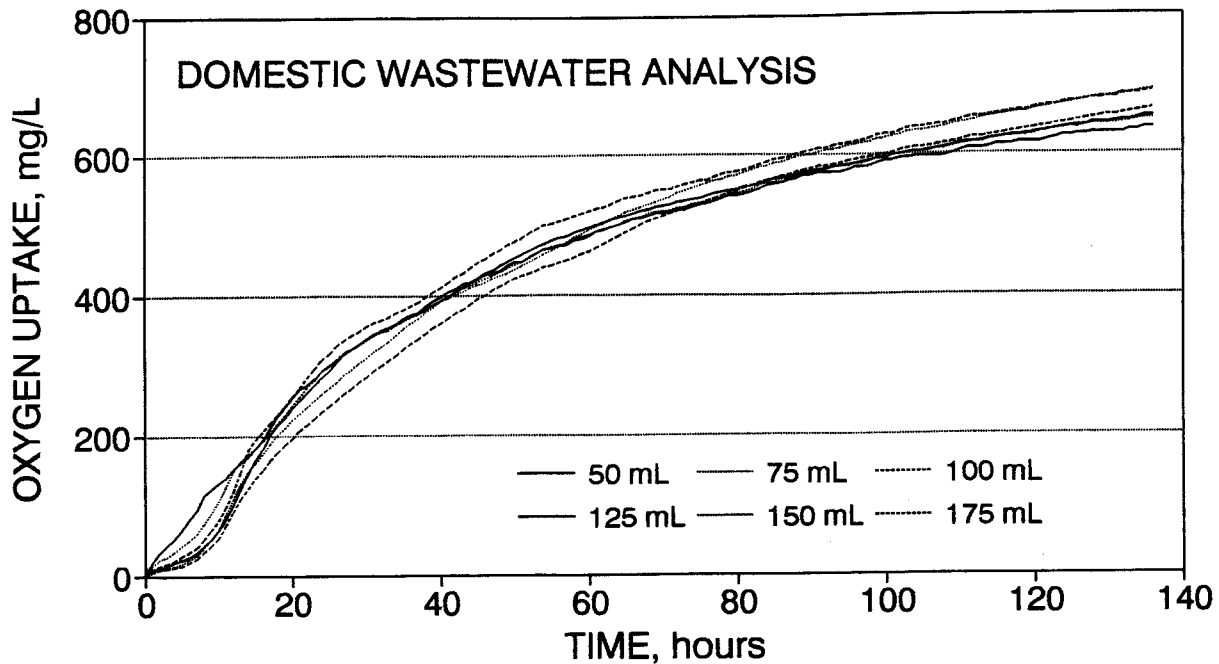


APPLICATION: BIOCHEMICAL OXYGEN DEMAND MEASUREMENT



Waste Type: Domestic sewage containing industrial waste

COD: 920 mg/L

Objective: To determine if a toxic substance was present in the wastewater as determined from serial dilutions.

Test Setup: A series of dilutions consisting of 50, 75, 100, 125, 150, and 175 mL of test wastewater were added to respective 500 mL respirometer flasks along with nutrients, minerals, and buffers. TCMP was added to eliminate interference from nitrification. Oxygen uptake was measured over a five-day test period using a CHALLENGE AER-200 respirometer.

Analysis: After adjustment for dilution the oxygen uptake was essentially the same in all test reactors and the cumulative oxygen uptake after five days represented approximately 80% of the COD. These tests thereby indicate that the waste was highly biodegradable and that no toxic substance was present.