

Anaerobic-Aerobic Treatment of Grey water; Continuous and Batch Operations

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- Introduction
- Methodology
- Results and Discussion
- Conclusions

Introduction

Anaerobic-Aerobic

Treatment of Grey water;

Continuous and Batch
Operations

Objectives

- Treatment Grey Water on-site ?
- Simple and Affordable Technology?
- Technology Potentials ?
- The Optimum Operation Conditions ?

Methodology

- Grey Water Source ✓
- Experiment Setup
- Approaches



Black water

Grey water

16/02/2007

Methodology

- Grey Water Source
- Experiment Setup ✓
- Approaches



Inlet point

Anaerobic

Aerobic

03/08/2006



Anaerobic

Aerobic

18/06/2006



Water Level Controller

03/08/2006



Surface Distribution System

16/08/2007

A photograph showing a close-up of a wooden structure, possibly a boat hull or a large wooden container. A clear plastic tube is connected to a blue component, likely a pump or filter, which is partially submerged in the water. The text "External Oxygen Sources" is overlaid in red. The date "11/05/2008" is visible in the bottom right corner in yellow.

External Oxygen Sources

11/05/2008



18/06/2006



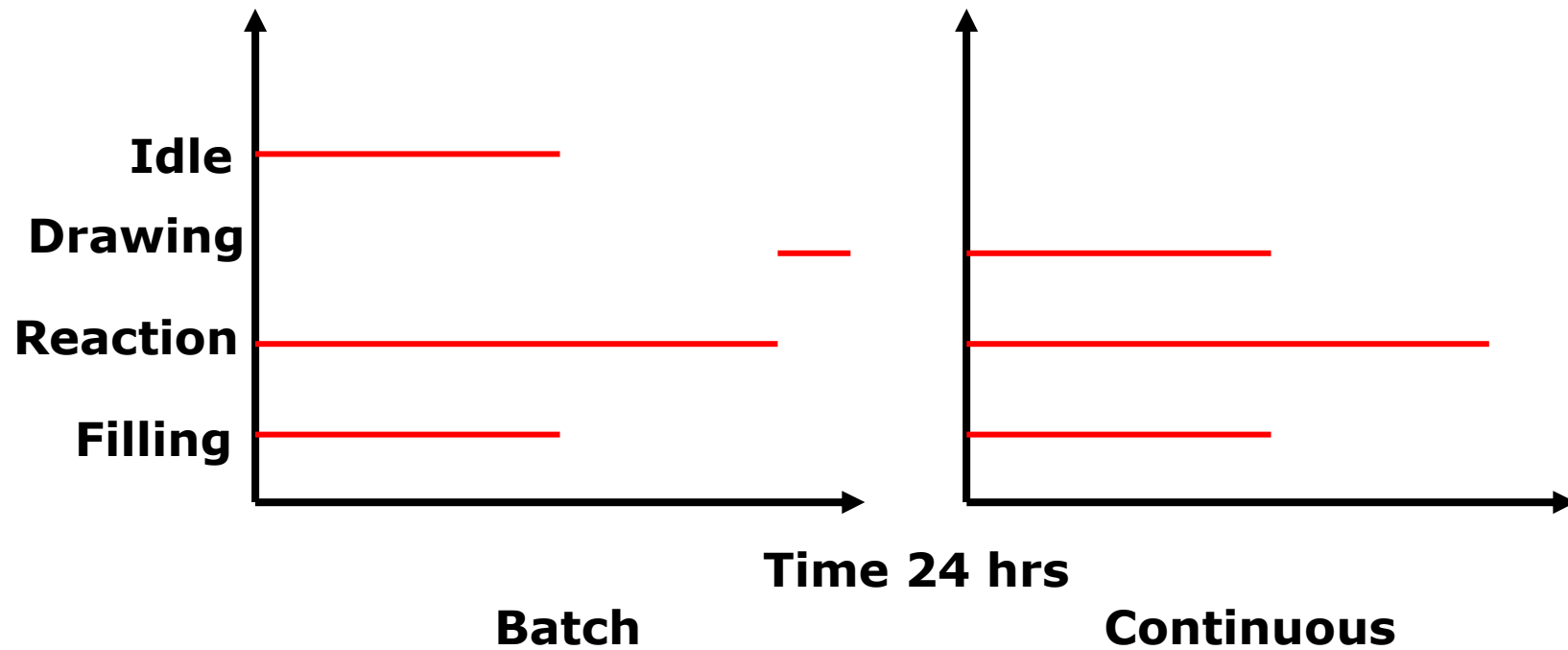
03/08/2006

Methodology

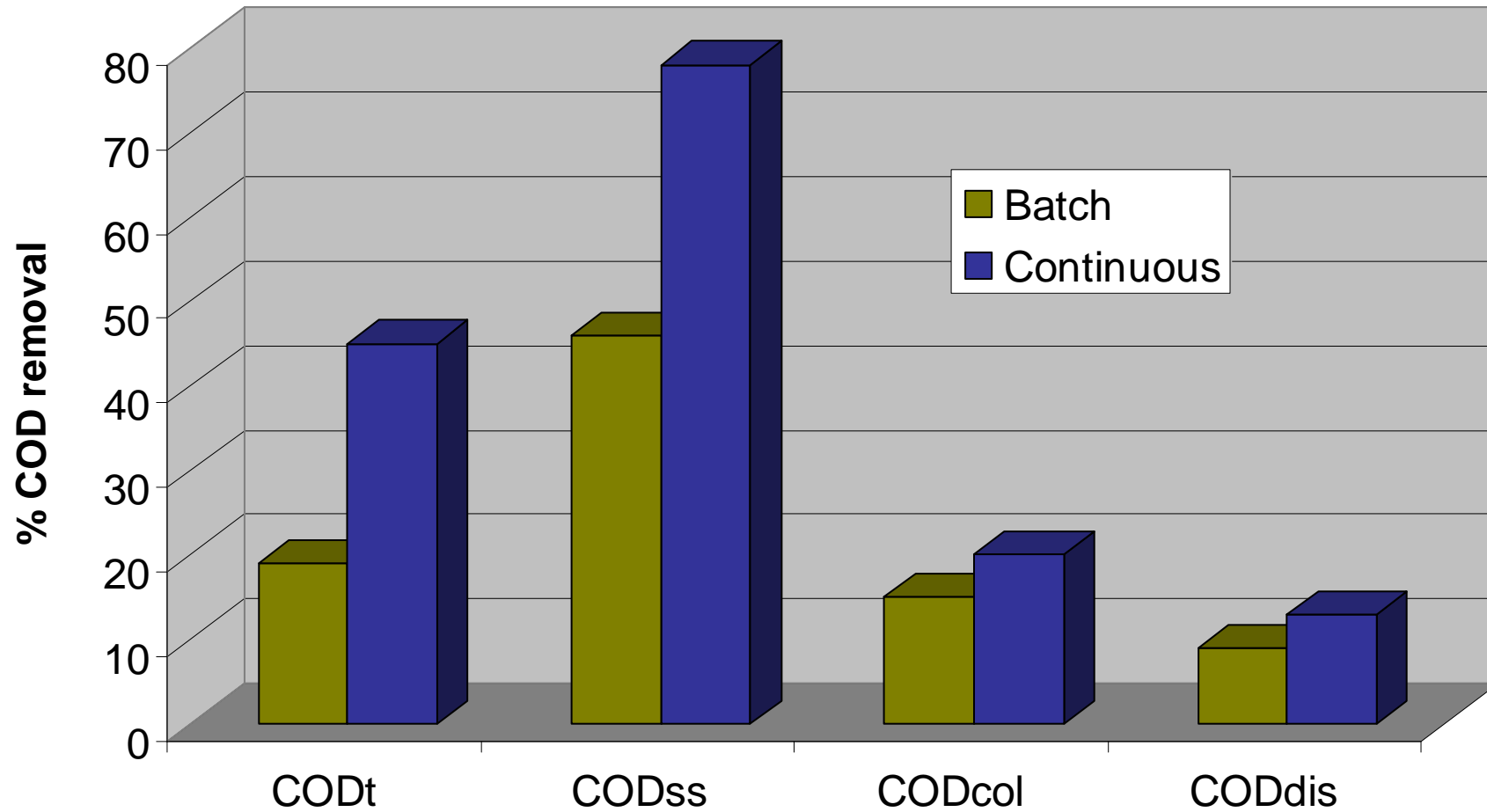
- Grey Water Source
- Experiment Setup
- Approaches ✓

Methodology

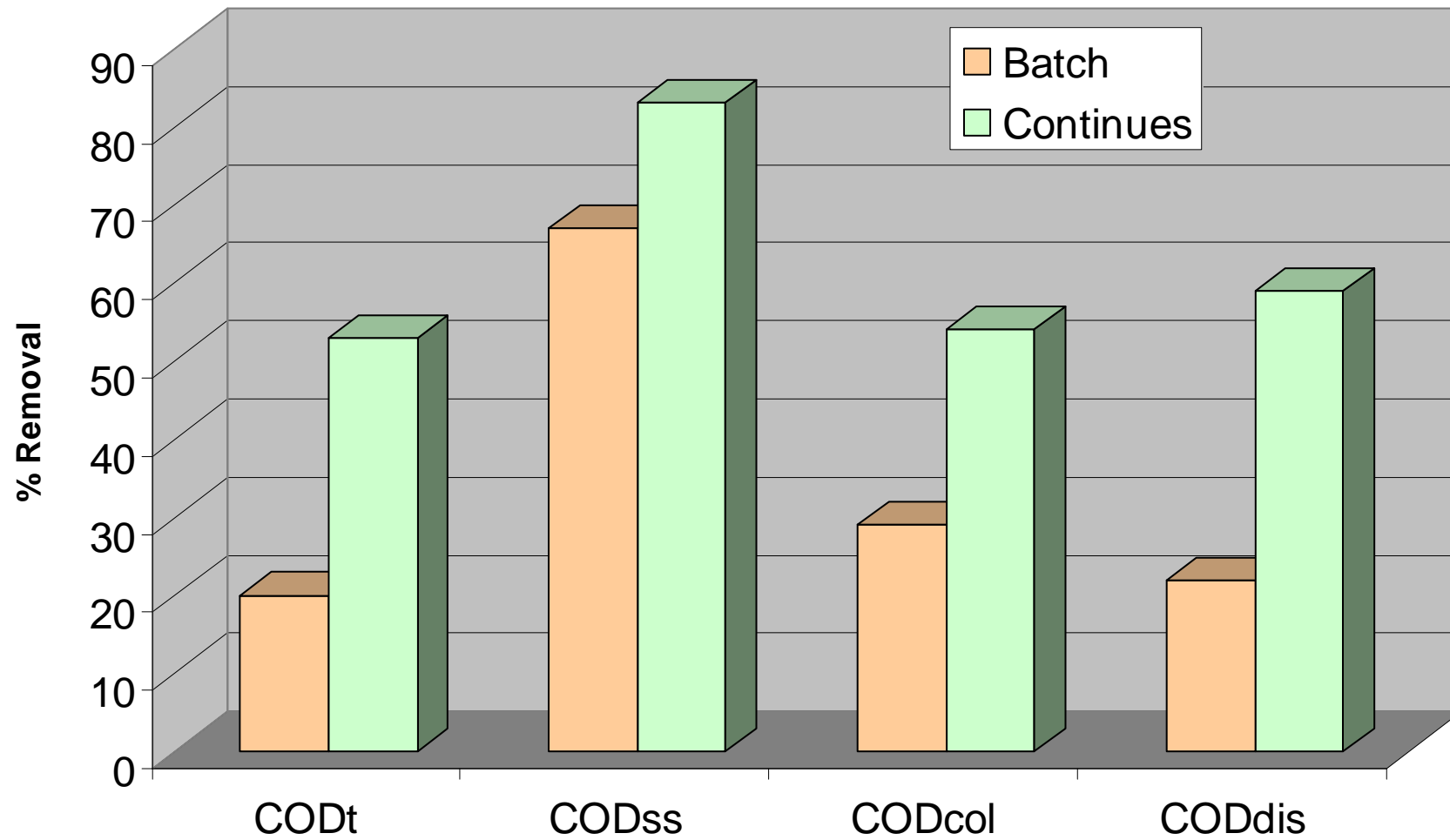
Operation Cycles



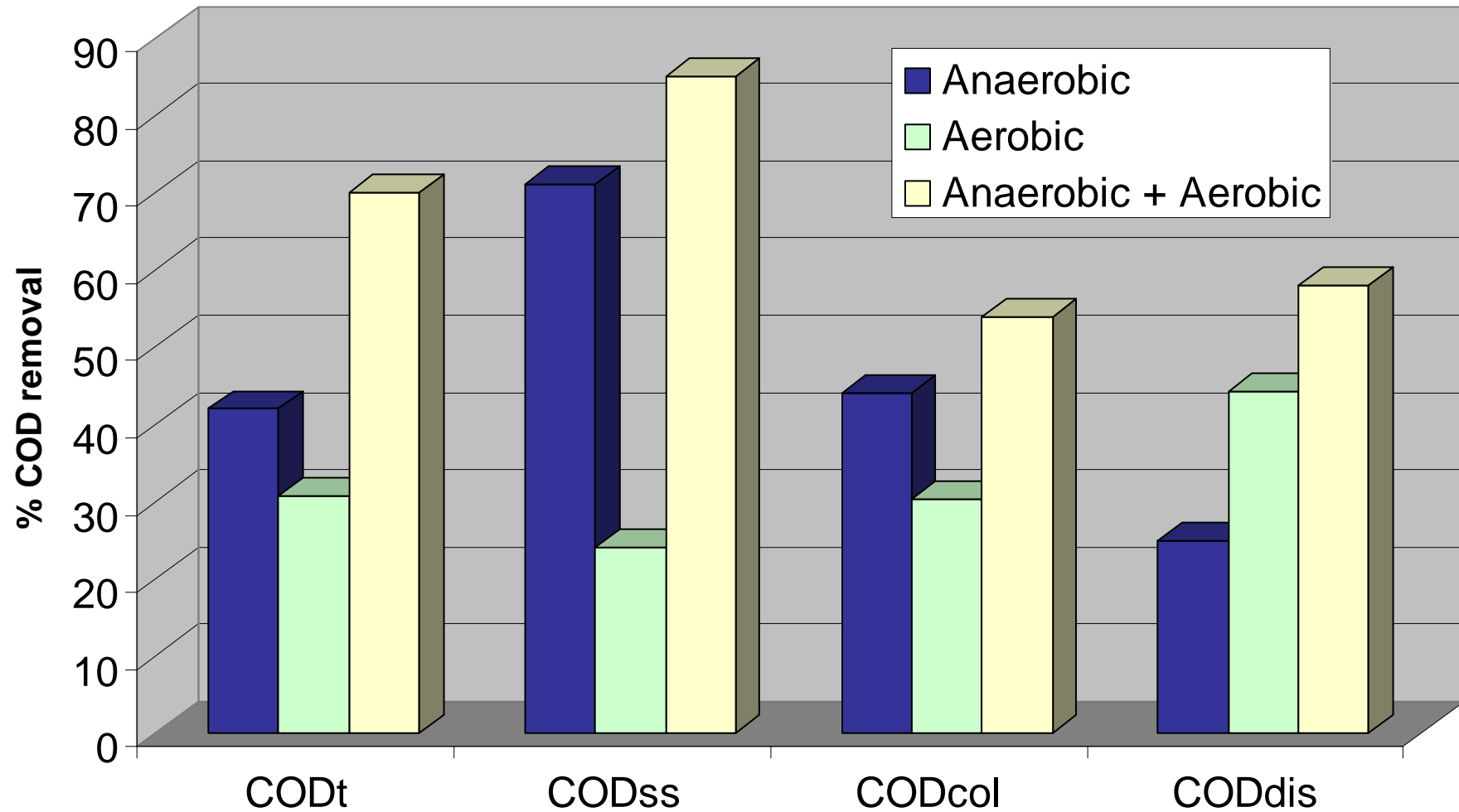
Results: Anaerobic



Results: Aerobic



Results: Anaerobic + Aerobic



Conclusion

- Potential of Anaerobic and Aerobic Units
 - 70% of grey water pollutants
 - 40% Anaerobically
 - the rest Aerobically
- Operation; Continuous is better than Batch

Conclusion

- ❑ On-Site treatment is promising
- ❑ Simple and affordable treatment technology
- ❑ Different qualities is produced to be used for different purposes

**Acknowledge the
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for Financing this
Research**

Thank you for the



Attention