

## **Ferry Maintenance Report**

Vessel: Queen of Alberni

Date: July 3, 2013

Reporter: Chris Sundstrom

Other Personnel: Tyson Carswell (UVIC)

### **Reason for Visit**

1. Diagnose system error (no change in wet instrument readings)

### **Observations**

1. No appreciable water inside the cabinet (less than 1 teaspoon of condensation).
2. Power cycled and system restarted, Marlene called to check data.
3. Data checked at Tsawassen Ferry Terminal. Data still bad.
4. Re-open housing and run system repeatedly. Optode, CTD and ECO Triplet removed and examined.
5. ECO Triplet switched in orientation as no flow was occurring to the ECO Triplet; diagnosis of the air in the ECO Triplet housing forming an air lock.
6. Close examination of the intake pipe at the pump exit showed massive air entrainment in the intake line and repeated cavitation. Diagnosis that the intake line is plugged.
7. Open lower sea chest to examine valving and piping, examine entire intake system for leaks. None found.
8. Unable to proceed with system disassembly due to time constraints and lack of large tools for disassembly of the intake system. System closed up and pump shut down in software.

### **Actions Taken**

1. The Optode, ECO Triplet and CTD were removed and drained as part of the investigation. No specific cleaning actions were taken.

### **Future Actions**

1. Return to vessel with tools and time to disassemble intake system.