Ferry Maintenance Report

Vessel: Queen of Alberni

Date: June 18, 2013

Reporter: Paul Macoun

Other Personnel: Denis Hedji, Chuning Wang (UBC)

Reason for Visit

1. Clean instruments and check for leaks
2. System orientation to Chuning

Observations

1. Condensation on all plumbing and ½ cm of water in the bottom of the box – the leak detect sensor was just above water line
2. Leak tracks suggest the 90 degree elbow fittings on the ECO-triplet housing are a potential source (note, these fittings were not updated 2 months prior due to the confined area around them)
3. Blue-green staining was found in a couple of receptacles on the Seabird in-line connector
4. Sea-chest beneath the floor was found to be dry
5. Minor fouling of the plumbing lines between the reservoir and the various instruments
6. Wetlabs and Optode cavities were both contaminated with sediment/mud, with the ECO-triplet being the worst off
7. The Seabird CT sensor was also half full of sediment with a few barnacles near the intake
8. The cell antenna is corroded and the thin wire antenna has broken off
9. The MET antenna has the potential to block the radiometers view of the sun

Actions Taken

1. All surfaces within the instrument enclosure were carefully dried
2. The Seabird connector was cleaned with Iso-propynol
3. All instruments were thoroughly cleaned

4. The ECO-triplet was relocated in the instrument box; from horizontal to vertical, with plumbing on the bottom
5. The new style of plumbing connector (o-ring) was fitted to the ECO-triplet housing
6. The Optode was flipped in its bracket, so that it too had plumbing facing down
7. New, longer inlet/outlet tubes with the o-ring connectors were introduced in between the reservoir and the ECO-triplet housing
8. The system was powered up, logged onto to confirm operational, and watched for 10 minutes to confirm there were no leaks
9. The inlet hose in between the valve and instrument box was measured (3m)
10. The height of the radiometers above sea level was estimated using a GPS with pressure port (20 m)
11. The relative dimensions between the MET instruments and the radiometers was measured

Future Actions

1. Purchase a new cell antenna for the Rogers modem
2. Move the MET pole to the other side of the radiometers
3. Pull the CTD sensor for re-calibration and replace bulkhead at stainless box