Ferry Maintenance Report

Vessel: Queen of Alberni

Date: April 11, 2014

Arrival: 12:45PM sailing to Tsawassen. We signed in at terminal supervisor at Duke Point.

Reporter: Akash Sastri/Chris Sundstrom Staff: Chris Sundstrom, Akash Sastri

Reason for Visit

Regular instrument servicing

Observations

- 1.—There were no signs of moisture or leaks In the Instrument Box.
- 2.—The AADI optode had very little or no debris or sediment within the housing.
- 3.—The BBFL2 had a minor partial layer of sediment in the housing and minor fouling on the sensing surface. Minor fouling was noticed on the "bottom" surface of the horizontal housing.
- 4.—The Seabird 45 CT sensor was relatively clean, with only minor sediment within the sensor.
- 5.—The sea chest showed no signs of leaks.
- 6.—The inline filter (sea strainer) was checked and cleaned and some small debris particles were removed from the bottom of the strainer.

Actions Taken

- 1—Opened both boxes and observed function. Both were working well, no leaks anywhere.
- 2.—Powered down and disassembled instruments in lower assembly.
- 3.—Cleaned and checked over instruments in Engineering room. Tried three new methods for cleaning and determined that all had their benefits and detriments. Further trials will determine the best product.
- 4.—Ran pre- and post- calibration with standard solutions and with Orange test stick and white substitute test stick for CDOM fluorescence and Chl fluorescence.
- 5.—Re-assembled the instruments in the lower box.

- 6.—Checked over Sea chest and valves, no leaks apparent.
- 7.—Checked and cleaned the sea strainer.
- 8.—Turned ON the system.
- 9.—No leaks in instrument housing and checked flow output at sea strainer. Flow was good. Visually confirmed flow direction at the BBFL2 and confirmed the volume filled with water and began draining correctly.

10. Signed out at Engineering room.

Future Actions

- 1. Contact Engineering on Q of A for potential assistance in removal of interfering antenna on 2nd bridge (which seems to be non-functional).
- 2. Bring labels for all ONC equipment.

Discussion of Test Procedures and Results

The test procedures used are documented in the supplemental report, which also provides preliminary analysis of the data and its consequences.

PICTURES



Figure 1: Seabird CT Before Cleaning

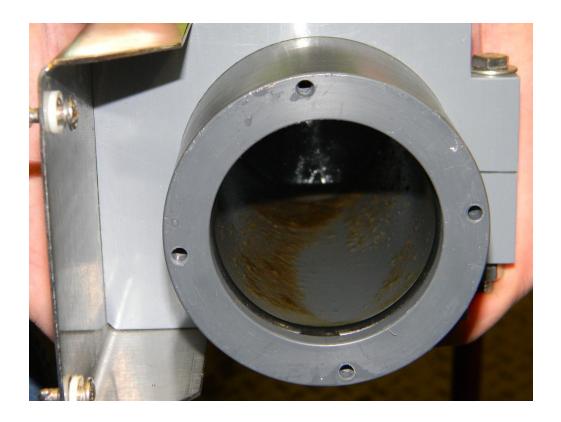


Figure 2: Biofouling within BBFL2 Housing



Figure 3: Positioning of Test Stick within Housing (13.5cm into housing)



Figure 4: Sea Strainer Condition