

# Ocean Networks Canada

## Ferry Maintenance Report – Queen of Alberni



Vessel: Queen of Alberni

Date: Aug 16th, 2016

Arrival: 07:30 @ Duke Point terminal, Nanaimo

Reporter: Rowan Fox

Staff: Will Glatt, Stephen Phillips, Rowan Fox

### Reason for Visit

Standard cleaning on the Seakeeper system. Stephen Phillips joined for taking water samples on the return trip.

### Observations

1. No signs of damage in instrument box or mass leaking in tray. Dessicant was very dry
2. Tubing was slightly fouled with algae.
3. Optode and BBFL2 covered in algae but cleaned off.
4. Upper deck: met station may have rotated around by 45 degrees since Dec 2015. See photos. Also see QoA reports: 20160401 (obvious turn), 20151216 (suspected turn) , 20150506 (parallel to ship).

### Actions Taken

1. Arrived at the terminal at 0730, parked in long term parking. Terminal was very busy, which required us to change our usual routine.
2. Boarded the ship, met with the Chief Steward. Signed in with the engine room.
3. Shut down seakeeper computer. Begin disassembly of seakeeper.
4. Cleaned the optode & BBFL2. Benchmarks are uploaded into the instruments' device folders on Alfresco. Both instruments responded well to their standards. Optode read 90% saturation and 0% saturation, BBFL2 read ~500 counts for Chl/Diet Coke, as well as for CDOM/Sprite Zero.
5. Reassembled instruments after cleaning.
6. Installed new tubing.
7. Opened up the floor plate to inspect the gate valves and sea strainer.
8. Cleaned Sea Strainer. Found that the SeaStrainer was installed backwards. Flipped the sea strainer around so that flow goes into the "in" side rather than the "out" side.
9. Turned both gate valves a small amount to confirm they are still moveable.
10. Powered up system, checked for leaks and data acquisition. No water leaks, but noted significant, minute bubbles in both the TSG and BBFL2 tubes. Little to no bubbles in optode tubes. Rather strange we could not find the reason for this. To monitor in the future.
11. Stephen took water samples on the return trip.
12. Tested whether we could disconnect the leak detect circuit in order to prevent accidental system shutdowns. Success: future work can prevent leak detect trips by unplugging the leak detect circuit at the box.

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13. Moved the computer monitor so that it could be seen from the main space. Much better for viewing and working on.
14. With help of the chief steward and a deckhand, went to the upper decks to inspect met station. Found that the met station pole is no longer parallel to the ship, but 45 degrees to the counter clockwise. Future trip needs to return this to proper location and reinforce it.
15. Old dessicant was still dry, so we put it back in the plumbing box.
16. Closed up plumbing and computer boxes after water sampling was complete.

#### **Future Actions (High Priority in Red)**

1. Met station needs to be reinforced and turned back to parallel to ship. Data are not impacted, since compass and wind speed sensor are already low quality.
2. Check for bubbles in system.
- 3.

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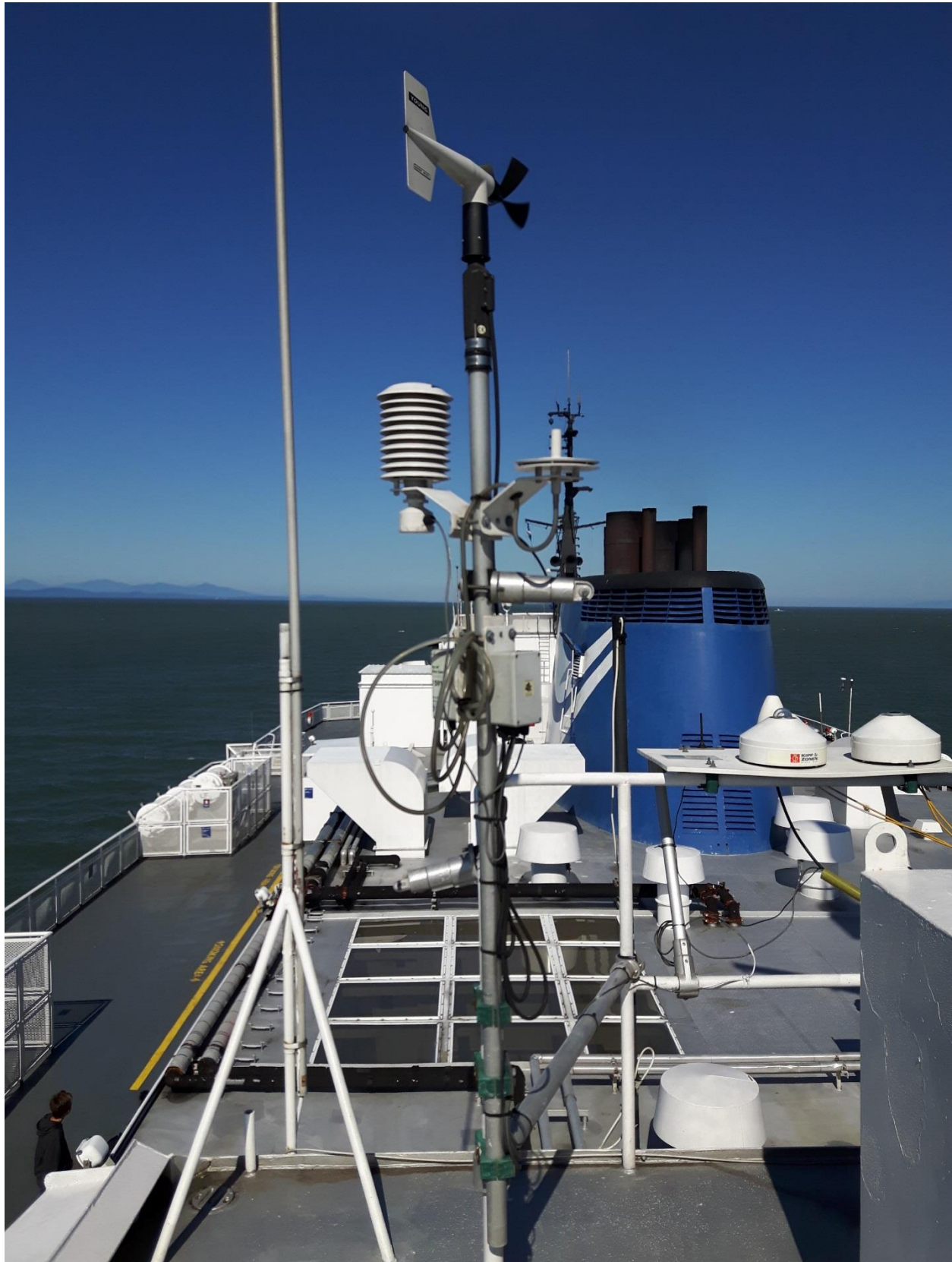


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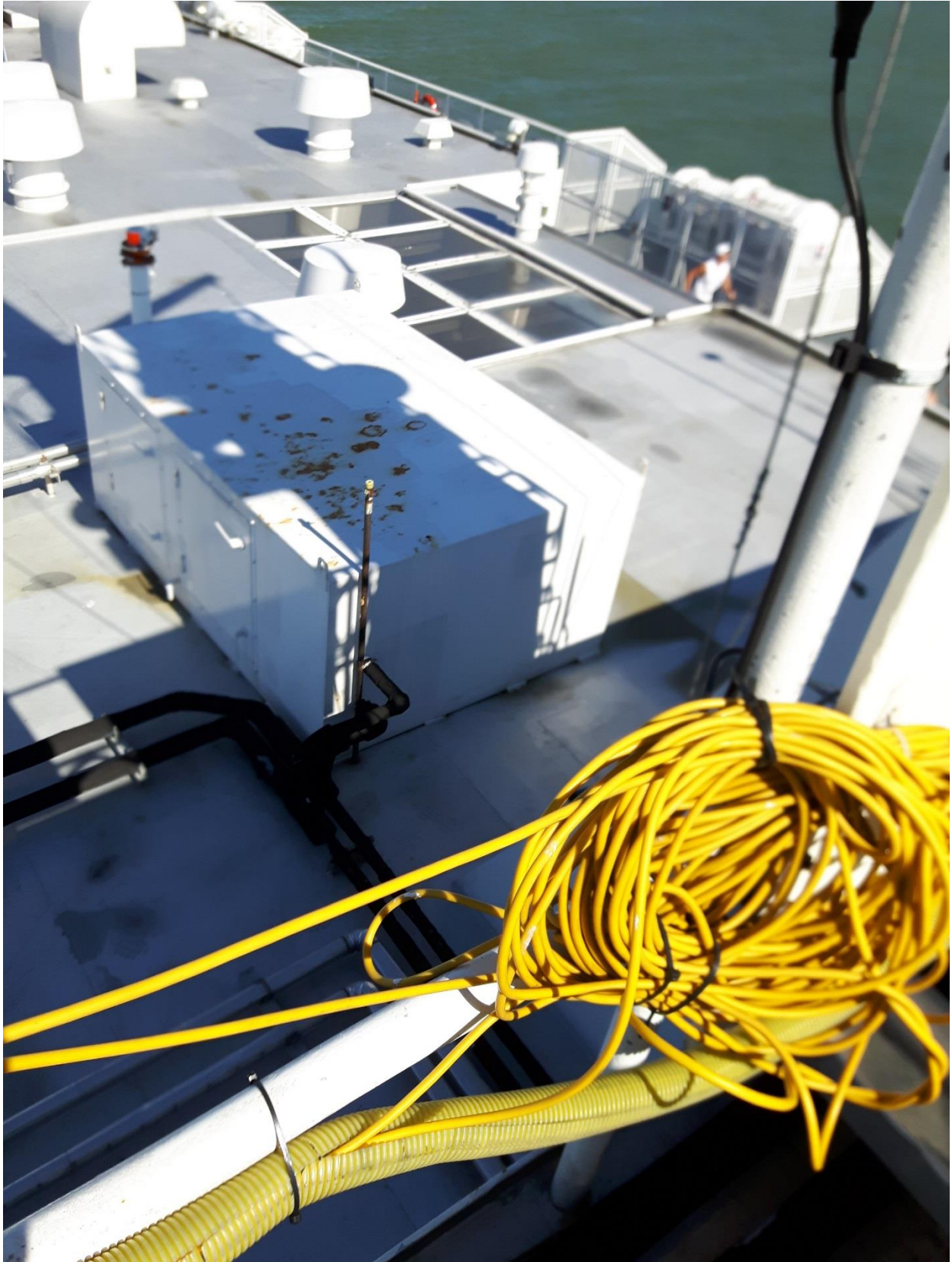
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