

Ferry Maintenance Report

Vessel: Queen of Alberni

Date: Sept 26, 2013

Arrival: 12:45PM sailing to Tswassasen. We signed in with terminal supervisor at Duke point. We checked in with Chief Steward Sergiy (Chief Engineer).

Reporter: Denis Hedji

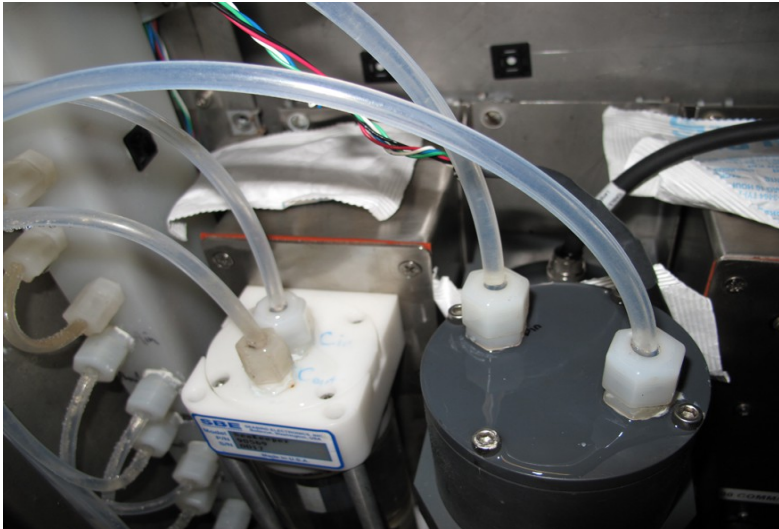
Staff: Denis Hedji and John Dorocicz

Reason for Visit

Possibility of leak detector shut off the Seakeeper system

Observations

1. Found water on bottom of instrument enclosure, which was submerging leak sensor which stopped the Seakeeper system.
2. CTD had puddle formed around intake/outtake fittings

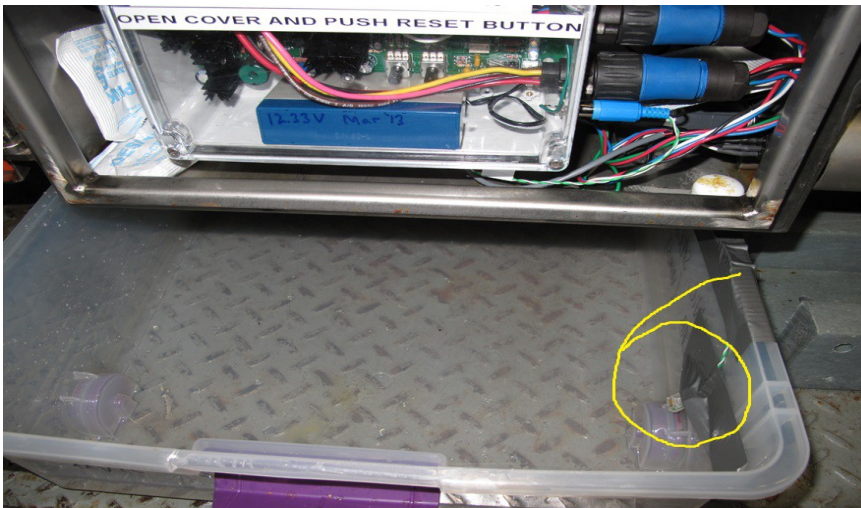


3. Leak apparent on ECO Triplet Intake/Outake fittings see picture above – Grey housing

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Actions Taken

1. Drained water from bottom of instrument enclosure
2. Dry wet areas
3. Power Down Seakeeper system
4. Pull off instruments, and take to Engineering room for servicing / cleaning – found instruments clean
5. Install new end pressure fitting caps to instruments
6. Re-install instruments
7. Measured SLA 12Vdc battery at 14.4 Vdc
8. Replaced leak sensor, and mount into tub below enclosure – see picture

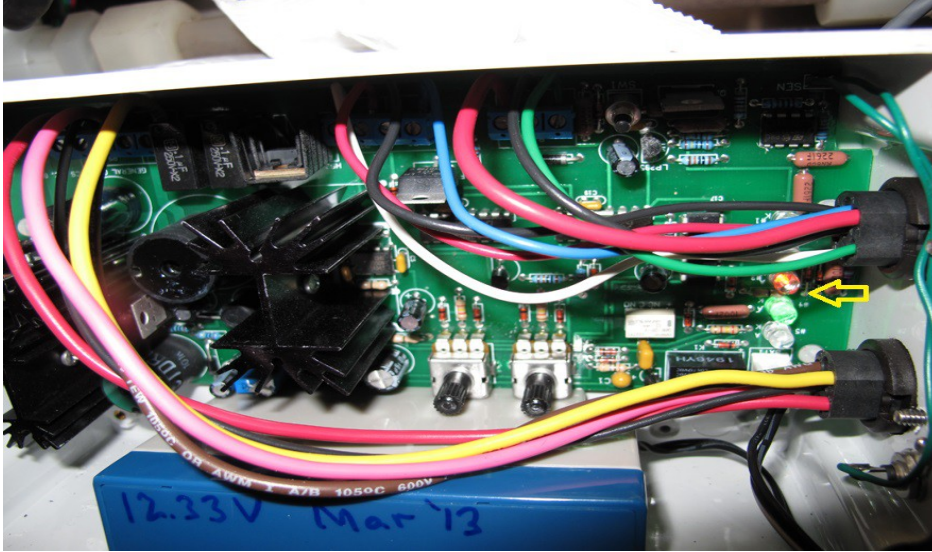


9. Turn ON Seakeeper system
10. Pump turned ON, and continuously ran without delivering seawater
11. Diagnose issue. Went into hull area; check intake valve, and Sea chest.
12. Open Sea strainer cap – unscrew top cap. Felt no pressure nor see water leaking from its sides. Open cap and take off. No flow of sea water passing through strainer – see picture

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13. Check Sea chest for leaks = none apparent. Intake and outlet valves open.
14. Tighten cable connections between enclosures
15. Monitor data logger on PC – looks OK
16. Replaced desiccant packs in enclosure
17. Suspect electronics controlling solenoid valve at Intake or solenoid itself or intake at hull plugged. Leak detection electronics board after pressing reset indicated a Red light ON – see picture



18. Return Key and Sign out at Engineering room with Sergiy

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Future Actions

- I had a conversation with the 1st officer on the ship. He stated that the ship will be going on its annual re-fit October 15th 2013 for one month. They will dock it in Twassasen around the 15th and afterwards take it to shipyards. We have a cruise during this time.
- Recommendations:
 1. Design + Make a new intake on the hull.
 2. Install a flowmeter inline of Intake to monitor water flow
 3. Design + Make a new Water manifold in instrument enclosure - brass fittings.
 4. Install temperature and humidity sensor in instrument enclosure for monitoring
- Swap CTD, ECO Triplet, and 3835 oxygen sensor due to Calibration outstanding
- Immediately commence hull intake design and development
- Search for flow meter suitable for marine environment to monitor flow at Intake