Ferry Maintenance Report

Vessel: Queen of Alberni

Date: July 31st, Aug 1st, 2013

BC Ferries are shut down at 01:00Am hrs. Gates are locked at front entrance restricting access to anyone. You must call the Terminal Supervisor on duty ph 604-312-5077 who starts shift at 10pm nightly. The terminal Supervisor is Pauline. We signed in at terminal. Drove my vehicle on board the ship. We met with Roman (Engineer) onboard ship and signed out keys to Bosun's store.

Reporter: Denis Hedji

Reason for Visit

Hull intake valve plugged with debris restricting water flow to Seakeeper instrument cage. Second visit. Had to develop a special drill bit to drill out the debris, and drill 1" hole through PVC intake located on exterior side of ship.

Observations

1. The intake valve was capped off and Seachest was not installed. No leaks apparent.

Actions Taken

1. Open Floor cover plate.
2. Assure valves are shut
3. Assemble new drill bit onto Industrial Drill, and go into hull
4. Open intake valve – water flow still the same. Very poor flow.
5. Place drill into intake. Drill out 1" hole through PVC intake. Water flow burst out and water flow great ! Huge difference in water flow.
6. Shut off intake valve
7. Re-assemble Seachest – cleaning and lubing orings
8. Check Anticorrosion plates – looks OK, and no corrosion apparent
9. Install Seachest onto Intake. Place new desicant into Housing
10. Monitor and check for leaks – None. Leave ~4:00am
11. Catch 10:15am ferry to Duke point (very busy terminal due to long weekend)
12. Checks for leaks – None

13. Open outtake valve
14. Power ON electronics
15. Bleed air out of lines
16. Turn ON pump and monitor flow
17. Notice Debris build up in CTD – suggest to clean instruments soon – looks like black Coal dust apparent inside CTD
18. Monitor logging software and view Green bullets on alls devices. Contact Jaklyn and Paul.
19. Close Seakeeper cages, clean up, and drive off Ferry from Duke Point Nanaimo to Victoria

Future Actions

1. I recommend a Sea Strainer on the intake. One with a mesh big enough to capture large items and still allow seawater and science items to pass into Seakeepers instruments. The strainer will protect our system from this kind of problem in the future. This is a typical piece of hardware on ships today
2. Install a flow meter. To monitor velocity of water in intake. This may help determine a clog, or potential clog forming
3. Clean out all instruments, and flush manifold
4. Purchase Oring set for Seachest housing end plates
5. Replace Compression fitting in Seachest that have wires coming out of the centre of cap