

REPORT OF SURVEY, STEAMER "CAMOSUN" BY MR. HENRY  
DARLING, SURVEYOR TO BRITISH CORPORATION REGISTRY.

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Vancouver, B. C.

July 3rd, 1905.

REPORT OF SURVEY.

This is to certify, that at the request of Gordon T. Legg, Esq., Managing Director of the Union S.S. Company of B. C., Limited, I have inspected the Steamship "Camosun" under working conditions on a trip to Union and return, leaving Vancouver on June 30th at noon, returning at noon on 1st July, 1905, now report as to construction, design, etc., and the present working condition of this vessel's machinery.

ENGINES.

Construction, Design and Defects.

The design is in accordance with specifications and should develop the 1200 H. P. guaranteed, but it is very doubtful in my mind if 450 H. P. additional can be obtained with the funnel blast. This can be readily determined by a trial run and indicator cards taken.

The design according to specifications does not cover many points of good practice, such as liners in cylinders, slide valve faces, and independent feed pumps with heater.

The condenser doors cannot be removed without taking up the engine room floor, and should also have been provided with traveller and lifting screws for easy handling.

A reducing valve should have been provided and fitted on steam connection to auxiliary deck machinery.

The specifications state that donkey pumps are arranged to work ~~with~~ full boiler pressure.

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The stop valve on reversing gear should have been placed on lower platform in reach of engineer, with a drain leading into the bilge to rid pipe of water. The piping under shade deck should have more hangers to support same in several places where it is now bent down and looking unsightly. They should be straightened and secured.

A defect due to faulty workmanship is a serious leak in the joint of H. P. cylinder casting at I. P. receiver and may necessitate same being disconnected and joint renewed.

Also the air pump lever and weight shaft appears to work slightly out of line.

#### BOILERS.

The boilers are leaky at seams and rivets. The salinometer cocks are too light in pattern.

The blow-off valves on boilers and cocks on ship's side leak badly.

The safety valves could be fitted on after end of boilers and casing fitted to allow about seven feet more deck space each side.

The water gauge should have valves top and bottom on boiler.

#### PRESENT WORKING CONDITION.

With engine full open under ordinary draft, steam is easily maintained and the condition of same is as good as could be expected after a long run, but advance should have been taken of the lengthy stay in San Francisco to remedy leaky joints, etc.

It appeared to me that the white metal liner was slack in I. P. go-a-stern X head shoe, and this should be hammered up solid.

I am of the opinion, however, that as far as



the engines are concerned they could not have been delivered in better shape.

RECOMMENDATIONS.

Immediate steps be taken to stop leak between cylinders by forcing in putty, clip face of flange groove joint in way of leak, fill with smooth on cement and cover joint with a plate and tap bolts.

If joint does not rust up and continue tight it will then be necessary to rejoin cylinders, which means a big job.

A Weir's heater and independent feed pump to be fitted in vessel. The present direct acting feed pumps to be arranged to deliver into heater and only to be used on special occasions for pumping direct to boilers.

Reducing valves to be placed on steam pipe to winches. A drain cock and pipe to be fitted on bottom bend of steam pipe to reversing engine.

Piping under shade deck on port side and in cargo space on main deck forward to be taken down, straightened and rejointed. Hangers to be fitted to hold same in place. Steering gear aft to have lead tray provided to catch grease, etc.

Bad rivets to be taken out of boiler and renewed if practicable. Seams carefully caulked. Rivets and land: ing inside at bottom, each end to be covered with cement.

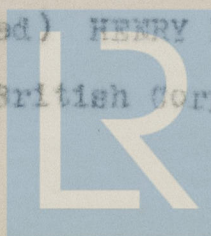
Salinometer cocks renewed or holes plugged.

Water gauges to have valves fitted top and bottom.

Blow-down valves and cocks to be overhauled.

(Signed) HENRY DARLING, 2020

Surveyor to British Corporation Registry.



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Foundation

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