

## Report of Survey for Repairs, &amp;c., of Engines and Boilers.

(Received at London Office

APR 12 1938

Date of writing Report **Mar. 7th. 38.**When handed in at Local Office **Mar. 8th. 38.**Port of **Hong Kong**No. in Reg. Book. **24415** Survey held at **Hong Kong**Date, First Survey **Feb. 21st.** Last Survey **Mar. 5th. 1938**(No. of Visits **6**)on the Machinery of the ~~Steel~~ **Twin Sc "EMPRESS OF CANADA"**Tonnage { Gross **21517**  
Net **12811**Vessel built at **Glasgow**By whom **Fairfield Co. Ltd.**When **1922** 5mo.Nominal Horse Power { **4592**Engines made at **Glasgow**By whom **Fairfield Co. Ltd.**When **1922** 5mo.No. of Main Boilers **12**Boilers, when made (Main) **1922**

(Donkey) -

No. of Donkey Boilers -

Owners **Canadian Pacific Rly. Co.**

Owners' Address -

Steam Pressure in Main Boilers **210**Managers **Canadian Pacific Steamships Ltd.**Port **London**

Voyage -

in Donkey Boilers -

If Surveyed Afloat or in Dry Dock

(State name of Dock.)

**Dry  
Taikoo**

Particulars of Classification (which must be inserted precisely as in Register Book &amp; Supplements).

Last Report No. **Port**

Particulars of Examination and Repairs (if any)

**Docking, B.S.  
Part MS & TS**

(Periodical Surveys, when held, must be reported in detail and verbatim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case.)

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined -

Was a damage report made by anyone else? If so, by whom? -

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? **Yes**" " Donkey " " " **None**

If this was not done, state for what reasons? -

And what parts of the Boilers could not be thus thoroughly examined? -

Also what special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler?

State latest date of internal examination of each boiler **Forwd. section Brs. 21-2-38  
Aft " No. 8 " 24-2-38  
" " " 28-2-38**

Present condition of funnel(s)

**Good**

Did the Surveyor examine the Safety Valves of the Main Boiler?

**Yes**

To what pressure were they afterwards adjusted under steam?

**210 lbs.  
5-3-38**

Did the Surveyor examine the Safety Valves of Donkey Boiler? -

**Yes**

To what pressure were they afterwards adjusted under steam? -

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers?

**Yes**

, and of the Donkey Boilers? -

Did the Surveyor examine the drain plugs of the Main Boilers?

**Yes**

, and of the Donkey Boilers? -

Did the Surveyor examine all the mountings of the Main Boilers?

**Yes**

, and of the Donkey Boilers? -

Has screw shaft now been drawn and examined? **Yes Both**Is it fitted with continuous liner? **Yes**

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? -

Has shaft now been changed? **No** If so, state reasons -

Has the shaft now fitted been previously used? -

Has it a continuous liner? -

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? -

State date of examination of Screw Shaft **25-2-38**State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft **Rewooded**

Engine parts, when referred to by numbers, should be counted from forward.

Is electric light and/or power fitted?

**Yes**If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? **Yes**Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? **Yes**If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done **Complete.**

**Vessel placed in dry dock, propellers and all sea cocks and valves and their fastenings examined and placed in good condition.**

**Both propeller shafts drawn, shafts and stern tubes examined and placed in good order.**

**Starboard H.P., M.P. & L.P. turbines (rotors lifted) Starboard gearing and bearings, Starboard thrust and tunnel shafting, Starboard circulating pumps, Starboard air pumps, Feed, bilge, ballast and general service pumps, pumping arrangements and condensers examined and placed in good order. Port diesel generator engine opened up and examined throughout together with its air compressor, air coolers and air bottle.**

**All boilers and superheaters examined internally and externally together with their mountings, doors and fastenings and placed in safe working order.** (Continued overleaf)

## General Observations, Opinion, and Recommendation:—

(State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, E.S. 9, 11, E.&M.S. 9, 11, & L.M.C. 9, 11, or L.M.C. 140 lb., E.D., &c.)

**The Machinery as far as seen, Boilers and Propeller Shafts of this vessel, are in good and efficient condition and eligible, in my opinion, to be continued as classed with fresh record of B.S. 3-38, M.S. 3-38, and Tail Shafts seen C.L. 2-38.**

Survey Fee (per Section 20) **\$585.00.**

Fees applied for

Special Damage or Repair Fee (if any) **Electric light - - \$194.00.****5/3/ 1938**Travelling expenses (if chargeable) **\$ 25.00.**

Received by me,

**J. H. Morrison for G. Pickering & Self**  
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned

**FRI. 29 APR 1938****+ Lmb. 1.37****8.1. 3.38**

CERTIFICATE WRITTEN.

Lloyd's Register  
Foundation  
W166



T.S.S. Empress of Canada  
8018

Safety valves adjusted under steam as above.  
Electric generators, motors and wiring examined throughout and megger tested and found satisfactory.

REPAIRS:-Wear & Tear.

One cylinder cover renewed & one bottom end remetalled on Port diesel generator engine. (cylinder cover cracked and white metal in bottom end broken)

Outer bearings of stern tubes rewooded.

All superheater elements in boilers renewed, (supplied from the U.K.) and tested in place with 350 lbs. hydraulic pressure.

About 40 combustion chamber stays renewed in boilers.

No.8 Boiler:- Crack in Port aft furnace electric welded.

Part starboard aft furnace mouth cut out where wasted and a new part plate riveted and welded in place.

Sundry minor repairs effected.

*J.H.H.*