

RECEIVED

1 JUN 1944

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

11 JUN 1944

Received at London Office

Date of writing Report 17th March, 44 When handed in at Local Office 17th March, 1944 Port of Vancouver, B. C.

No. in Survey held at Vancouver, B. C. Date, First Survey 14th Jan., 1944 Last Survey 12th March, 1944
Reg. Book (Number of Visits) 20

on the Steel Single Screw Steam Tanker "WILLOWDALE PARK" Tons { Gross 7243.01
Net 4163.11

Built at Vancouver, B. C. By whom built West Coast Shipbuilders, Ltd. Yard No. 136 When built 1944

Engines made at Lachine, P.Q. By whom made Dominion Engineering Wks Ltd. Engine No. 146 When made 1944

Boilers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd Boiler No.s. 639 & 640. When made 1944

Registered Horse Power 229 Owners Minister of Munitions & Supply of Canada belonging to Montreal, P.Q.
(Mgrs. Park Steamship Co. Ltd.)

Nom. Horse Power as per Rule 628 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which Vessel is intended Carrying Homogeneous Cargo of Petroleum in Bulk.

ENGINES, &c.—Description of Engines Triple Expansion. Superheat to 450° F. Revs. per minute 76

Dia. of Cylinders 24 1/2" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 14.21" Crank pin dia. 14 1/2" Crank webs Mid. length breadth -- Thickness parallel to axis 9" & 9 1/2" L.P.
as fitted 14 1/2" Mid. length thickness -- Thickness around eye-hole 7.125"

Intermediate Shafts, diameter as per Rule 13.53" Thrust shaft, diameter at collars as per Rule 14.21"
as fitted 13.5" as fitted 14.25"

Tube Shafts, diameter as per Rule -- Screw Shaft, diameter as per Rule 15.07" Is the shaft fitted with a continuous liner {
as fitted -- as fitted 15.25" screw } Yes

Bronze Liners, thickness in way of bushes as per Rule .75" Thickness between bushes as per Rule .565" Is the after end of the liner made watertight in the
propeller boss as fitted .78125" as fitted .68"

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Continuous
If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Tight fit.

If two liners are fitted, is the shaft lapped or protected between the liners -- Is an approved Oil Gland or other appliance fitted at the after end of the tube
shaft No If so, state type -- Length of Bearing in Stern Bush next to and supporting propeller 61"

Propeller, dia. 18'-6" Pitch 16' Mean No. of Blades 4 Material Bronze whether Moveable Solid Total Developed Surface 117 sq. ft.

Feed Pumps worked from the Main Engines, No. None Diameter -- Stroke -- Can one be overhauled while the other is at work --

Bilge Pumps worked from the Main Engines, No. Two Diameter 4 1/2" Stroke 26" Can one be overhauled while the other is at work Yes

Feed Pumps (No. and size Two- 12" x 8" x 24" Pumps connected to the { No. and size 1-10"x11"x12"-G.S. Duplex, 1-10"x11"x12"
(How driven Steam-Worthington Simplex Main Bilge Line (How driven Steam (2-4 1/2" Dia.) M.E.Pam. Fire & Bilge Duplex.

Ballast Pumps, No. and size 1-10"x11"x12" (Steam Duplex) Lubricating Oil Pumps, including Spare Pump, No. and size None

Are two independent means arranged for circulating water through the Oil Cooler -- Suctions, connected to both Main Bilge Pumps and Auxiliary
Bilge Pumps;—In Engine and Boiler Room 1-3" Dia. P. & S. Cofferdam-Ford. 1-3" Dia. P. & S. Aft, 1-2 1/2" Dia. P. & S. in way of
in Pump Room 1-2 1/2" Dia. P. & S. (Ford.) 1-2 1/2" Dia. Stbd. (Aft) No. 4 D.B. tanks.

See General Remarks. (Auxiliary Bilge Pump only).

Main Water Circulating Pump Direct Bilge Suctions, No. and size One- 10" Dia. Independent Power Pump Direct Suctions to the Engine Room Bilges,
No. and size 2 - 5" Dia. (1 - P. & S.) all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

Are all Sea Connections fitted direct on the skin of the ship No - To cast steel stands. Are they fitted with Valves or Cocks Yes

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Overboard Discharges above or below the deep water line Below

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Welded

What Pipes pass through the bunkers None How are they protected --

What pipes pass through the deep tanks & cargo tanks - Air & Sounding Pipes to D.B. Tanks. Have they been tested as per Rule Yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one
compartment to another Yes Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door No worked from --

MAIN BOILERS, &c.— (Letter for record --) Total Heating Surface of Boilers 9704 sq. ft.

Which Boilers are fitted with Forced Draft Both Which Boilers are fitted with Superheaters Both

No. and Description of Boilers Two - Babcock Wilcox - W.T. Working Pressure 250 lb. (Spt. 230 lb.)

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? --

Are approved plans forwarded herewith for Shifting Approved Plans in U.K. Main Boilers 17-7-43 Auxiliary Boilers -- Donkey Boilers --
(If not state date of approval)

Superheaters 17-7-43 General Pumping Arrangements 22-4-43 Oil fuel Burning Piping Arrangements 4-5-43
As Fitted Plan attached.

SPARE GEAR.

Is the spare gear required by the Rules been supplied Yes

Is the principal additional spare gear supplied --

As per list forwarded with Vancouver Report No. 5942 - S.S. "FORT COLUMBIA"

The foregoing is a correct description

WEST COAST SHIPBUILDERS LTD.

Manufacturer.

W.C.M. Larn

General Manager



© 2021

Lloyd's Register Foundation

004387-004393-0046

Dates of Survey while building
 During progress of work in shops -- See Montreal Report No. 6072.
 During erection on board vessel -- 1944. Jan. 14, 17, 19. Feb. 8, 10, 11, 16, 18, 22, 23, 25, 28, 29.
 Mar. 1, 3, 4, 7, 10, 11, 12.
 Total No. of visits 20

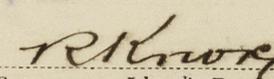
Dates of Examination of principal parts — Cylinders Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft Thrust shaft 28-2-44 Intermediate shafts 22-2-44
 Tube shaft Screw shaft 17-1-44 Propeller 17-1-44
 Stern tube 14-1-44 Engine and boiler seatings 22-2-44 Engines holding down bolts 22-2-44
 Completion of fitting sea connections 19-1-44
 Completion of pumping arrangements 7-3-44 Boilers fixed 22-2-44 Engines tried under steam 29-2-44
 Main boiler safety valves adjusted 29-2-44 Thickness of adjusting washers Lock nuts fitted.
 Crank shaft material O.H. Steel Lloyd's No. 7738-B 409 17-12-43 MD Lloyd's No. 8814
 Identification Mark 12-5-43 IJT Thrust shaft material O.H. Steel Lloyd's No. 8712 13-8-43 JHN 8648 20-8-43 JHN 15-10-43 JM
 Intermediate shafts, material O.H. Steel Identification Marks Lloyd's No. 8716 13-8-43 J.H.N. 8712 13-8-43 JHN 8648 20-8-43 JHN 8652 20-8-43 JHN
 Screw shaft, material O.H. Steel Identification Mark 25-9-43 JHN Steam Pipes, material S.D. Steel Test pressure 750 lbs. Date of Test 18-2-44
 Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes
 Have the requirements of the Rules for the use of oil as fuel been complied with Yes
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Tanker If so, have the requirements of the Rules been complied with --
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with No
 Is this machinery duplicate of a previous case Yes If so, state name of vessel S.S. "MOUNT BRUCE PARK" (Vcr. Report No. 6048)
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under Special Survey of the Montreal P.Q. Surveyors and installed on board under Special Survey in accordance with the approved plans, New York letters and otherwise in conformity with the Society's Rules. The materials and workmanship are good and the tests required by the Rules have been satisfactorily carried out. The whole installation has been examined and tested under full working conditions on sea trials and afterwards part opened out, examined and found satisfactory. Complete oil cargo pumping arrangements are fitted as per Wartime Shipbuilding, Ltd., Plan T.M.23, approved New York, April 13, 1943, with pump room forward and aft. A large duplex steam driven cargo oil pump is fitted in each pump room, also 1-9" x 6" x 10" duplex steam driven bilge pump in each pump room with suctions to:- 1-3 1/2" dia. forepeak, 1-2" dia. fore. cofferdam, 1-2" dia. p. & s. each Nos. 1, 2, 3, 4 & 5 tween dks. way of cargo tanks, 1-2 1/2" dia. each, thrust recess bilge, tunnel well bilge, cofferdam above tunnel recess aft p. & s., and cofferdam abaft Machy. space p.s., also fore. and after pump rooms. A complete carbon dioxide fire extinguish system is fitted in the machinery and boilers spaces operated from the upper deck. The machinery has also been surveyed during construction and installation on behalf of Wartime Shipbuilding, Ltd., to ensure that the terms of the specifications have been fully complied with and this work has been satisfactorily carried out.

The machinery of this vessel is eligible in our opinion to be classed in the Register Book with Notation of M.L.M.C. 3,44 Screw Shaft C.L. - 2 W.T. Boilers 250 lb. (Spt. 230 lb.) F.D. Fitted for oil fuel 3,44, Flash point above 150 degrees Fah.

Mtl. Fees charged in Mtl. Report No. 6072.

The amount of Entry Fee	\$:	When applied for,
Special (Vcr.)	\$	133.00	15 th Mar. 1944
Donkey Boiler Fee	\$:	When received,
Travelling Expenses (if any)	\$	20.00	19


 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 13 JUN 1944

Assigned

+ L.M.C. 3.44 subject



© 2021

Lloyd's Register Foundation

Certificate to be sent to
 The Surveyors are requested not to write on or below the space for Committee's Minute.