

RECEIVED

1 JUN 1944

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

11 JUN 1944

Received at London Office

Date of writing Report 17th March, 1944 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 (Mgrs. Park Steamship Co. Ltd.) belonging to Montreal, P.Q.
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 24½" 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. 14½" Crank webs Mid. length breadth -- Thickness parallel to axis 9" & 9½" L.P.
as fitted 14½" 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 15.07" Is the screw shaft fitted with a continuous liner { Yes
as fitted -- as fitted 15.25"
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 Yes—Rubber 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 4½" Stroke 26" Can one be overhauled while the other is at work Yes
Feed { 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"
Pumps { How driven Steam—Worthington Simplex Main Bilge Line { How driven Steam (2-4½" 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, 1-2½" Dia. P. & S. in way of
in Pump Room 1-2½" Dia. P. & S. (Ford.) 1-2½" Dia. S. (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.) Are 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 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 Air & Sounding How are they protected --
What pipes pass through the deep tanks & cargo tanks 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.)
A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
A DONKEY BOILER FITTED? No If so, is a report now forwarded? --
If the donkey boiler be used for domestic purposes only --
PLANS. Are approved plans forwarded herewith for Shifting 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 YesIs 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.

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

Intermediate shafts, material

O.H. Steel

Lloyd's No. 8712

13-8-43 JHT

Lloyd's No. 8814

Screw shaft, material

O.H. Steel

Lloyd's No. 8759

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

Oil 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"

(Ver. 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

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.,

ford. 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 ford. 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.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 ... \$

Special (Ver.) ... \$ 133.00

Donkey Boiler Fee ... \$

Travelling Expenses (if any) \$ 20.00

When applied for,

15th Mar. 1944

When received,

19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 13 JUN 1944

Assigned

+ LMC 3.44 subject



© 2021

Lloyd's Register
Foundation