

REPORT ON MACHINERY.

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REC'D NEW YORK July 12-1918.
 Date of writing Report 20 June 1918 When handed in at Local Office 28 June 1918 Port of Toronto
 No. in Survey held at Toronto Date, First Survey 10th Sept 17 Last Survey 20 June 1918
 Reg. Book. on the S.S. TROJA Tons { Gross 2715.06
 Net 1663

Master Built at Toronto By whom built The Iron Works When built 1918
 Engines made at Toronto By whom made John Inglis Co. Ltd when made 1918
 Boilers made at Toronto By whom made John Inglis Co. Ltd when made 1918
 Registered Horse Power 1400 Owners Great Lakes Transportation Co. Port belonging to Montreal
 Nom. Horse Power as per Section 28 253 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Inverted Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 20 x 33 1/2 x 55 Length of Stroke 40 Revs. per minute 80 Dia. of Screw shaft 11 1/2 Material of screw shaft Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube No liners Is the after end of the liner made water tight
 in the propeller boss ✓ If the liner is in more than one length are the joints burned ✓ 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 ✓ If two
 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 4'-1"
 Dia. of Tunnel shaft 10 1/2 Dia. of Crank shaft journals 10 9/16 Dia. of Crank pin 11 Size of Crank webs 20 1/2 x 7 1/2 Dia. of thrust shaft under
 collars 11 Dia. of screw 13'-0" Pitch of Screw 13'-6" No. of Blades 4 State whether moveable Solid Total surface 61 sq
 No. of Feed pumps 2 Diameter of ditto 10 x 5 Stroke 12 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 1 Diameter of ditto 5 Stroke 12 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 4 Sizes of Pumps 7/2 x 7/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2, 3" Suc. 1, 3" Direct, Stokehold 2, 3" Suc In Holds, &c. 2, 3" Suc forward hold, 2, 3" Suc aft. hold
1, 3" Suction tunnel well
 No. of Bilge Injections 1 sizes 6" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible None
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line Above
 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 Yes
 What pipes are carried through the bunkers None How are they protected ✓
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Main Deck

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Carnegie Steel Co
 Total Heating Surface of Boilers 4534 sq Is Forced Draft fitted No No. and Description of Boilers 2, S.E. multitubular
 Working Pressure 185 lb Tested by hydraulic pressure to 280 Date of test 24 + 30 Jan 18 No. of Certificate 18, 19
 Can each boiler be worked separately Yes Area of fire grate in each boiler 63 sq No. and Description of Safety Valves to
 each boiler Two Spring loaded Area of each valve 4.06 sq Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 1'-6" Mean dia. of boilers 14'-0" Length 12'-0" Material of shell plates Steel
 Thickness 1 1/4 Range of tensile strength 25-32 Tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double
 long. seams T. neck Diameter of rivet holes in long. seams 1 7/16 Pitch of rivets 9 Lap of plates on width of butt straps 19 1/4
 Per centages of strength of longitudinal joint rivets 89.2 Working pressure of shell by rules 200 Size of manhole in shell 11 x 15
 plate 85.4
 Size of compensating ring 34 x 30 No. and Description of Furnaces in each boiler 3 corrugated Material Steel Outside diameter 46"
 Length of plain part Thickness of plates Description of longitudinal joint Welded No. of strengthening rings ✓
 Working pressure of furnace by the rules 205 Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 1"
 Pitch of stays to ditto: Sides 6 1/4 Back 6 Top 4 If stays are fitted with nuts or riveted heads others riveted Working pressure by rules 207
 Material of stays Steel Area at smallest part 994 Area supported by each stay 36 sq Working pressure by rules 220 End plates in steam space:
 Material Steel Thickness 1" Pitch of stays 15 1/2 How are stays secured Nuts Working pressure by rules 193 Material of stays Steel
 Area at smallest part 4.9 Area supported by each stay 23.25 Working pressure by rules 219 Material of Front plates at bottom Steel
 Thickness 13/16 Material of Lower back plate Steel Thickness 3/4 Greatest pitch of stays 13 1/2 x 6 Working pressure of plate by rules 35.7
 Diameter of tubes 3 1/2 Pitch of tubes 4 1/2 Material of tube plates Steel Thickness: Front 13/16 Back 3/4 Mean pitch of stays 10.12
 Pitch across wide water spaces 14 1/2 Working pressures by rules 216 Girders to Chamber tops: Material plates Depth and
 thickness of girder at centre 8 3/4 x 1 1/4 Length as per rule 2.5 Distance apart 7 3/4 Number and pitch of stays in each 3 @ 7"
 Working pressure by rules 206 Steam dome: description of joint to shell None % of strength of joint
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to
 Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
 Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

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