

REPORT ON MACHINERY.

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Date of writing Report June 17 1920 When handed in at Local Office June 21 1920 Port of Vancouver B.C.
 No. in Survey held at Vancouver B.C. Date, First Survey Sept 2 1919 Last Survey June 11 1920
 Reg. Book. Single Screw S.S. Canadian Prospector (Number of Visits)
 Master H.S. Helton Built at Vancouver B.C. By whom built J. Coughlan Sons Ltd Tons } Gross 5492.19
 Engines made at Glasgow By whom made D. Rowan & Co. Ltd 746 when made 1919 Net } 3380
 Boilers made at Vancouver B.C. By whom made Vulcan Iron Works Ltd when made 1920 When built 1920
 Registered Horse Power 3000. Owners Canadian Government Port belonging to Montreal
Department of Marine
 Nom. Horse Power as per Section 28 520 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 24" 44" 73" Length of Stroke 48" Revs. per minute 83 Dia. of Screw shaft as per rule 14.1" 14.7" Material of Steel
 as fitted 15.2" screw shaft)
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
 in the propeller boss Yes If the liner is in more than one length are the joints burned one length 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 Yes If two
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5'-2"
 Dia. of Tunnel shaft as per rule 13.19" 13.3" Dia. of Crank shaft journals as per rule 13.99" 13.93" Dia. of Crank pin 14.2" Size of Crank webs 9x28" Dia. of thrust shaft under
 collars 14.2" Dia. of screw 17.6" Pitch of Screw 18-0" No. of Blades 4 State whether moveable Yes Total surface 95 sq
 No. of Feed pumps 3 of 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 3 of 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines one Sizes of Pumps 10 1/2" x 14" x 18" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2 of 3 1/2" 2 of 4" 2 of 3 1/2" Boiler Room 2 of 3 1/2" in 7' 1-2 + 3 Holds;
1 of 4" in Hold & well. 1 of 3" in Tunnel & well. 14 in all.
 No. of Bilge Injections 1 sizes 9" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes
 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 Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves & Cocks
 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 Bilge Pipes How are they protected Wood Covering
 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 Engine Room

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Illinois Steel Co.
 Total Heating Surface of Boilers 7143 sq Is Forced Draft fitted Yes No. and Description of Boilers 3 of Scotch Marine
 Working Pressure 180 lb Tested by hydraulic pressure to 300 lb Date of test March 12 20 No. of Certificate 32
 Can each boiler be worked separately Yes Area of fire grate in each boiler 66.12 sq No. and Description of Safety Valves to
 each boiler 2 of 2 1/2" in 7' 1-2 + 3 Holds; Area of each valve 9.62 sq Pressure to which they are adjusted 180 lb Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 15.7 1/2" Length 11.6" Material of shell plates Steel
 Thickness 1 3/8" Range of tensile strength 60,000 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double
3 hole Double lap Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 9 3/16" Lap of plates or width of butt straps 19 7/8"
 Per centages of strength of longitudinal joint rivets 87.4 Working pressure of shell by rules 188.4 Size of manhole in shell 16" x 12"
 Size of compensating ring 37 1/2 x 33 x 1 1/2" No. and Description of Furnaces in each boiler 3 of Doughton Material Steel Outside diameter 50 1/4"
 Length of plain part top 19.2" Thickness of plates crown 1 3/8" Description of longitudinal joint Double No. of strengthening rings 1
 bottom 19.2" Working pressure of furnace by the rules 188, Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" 1/2" Top 5/8" Bottom 1 1/16"
 Pitch of stays to ditto: Sides 7 1/2" Back 8" Top 9" If stays are fitted with nuts or riveted heads Yes Working pressure by rules 196
 Material of stays Steel Area at smallest part 2.073 Area supported by each stay 30" Working pressure by rules 240" End plates in steam space:
 Material Steel Thickness 1 1/16" Pitch of stays 15 x 18" How are stays secured Double Working pressure by rules 240" Material of stays Steel
 Area at smallest part 5.936 Area supported by each stay 135" Working pressure by rules 202 Material of Front plates at bottom Steel
 Thickness 1 3/16" Material of Lower back plate Steel Thickness 1 3/16" Greatest pitch of stays 24 x 10 1/2" Working pressure of plate by rules 199
 Diameter of tubes 3" Pitch of tubes 4 1/4" Material of tube plates Steel Thickness: Front 1 3/16" Back 1/4" Mean pitch of stays 8"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 183.3 Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 10" 3/4" Length as per rule 2-9" Distance apart 9" Number and pitch of stays in each 3 of 9 1/2"
 Working pressure by rules 250" Steam dome: description of joint to shell Yes % of strength of joint Yes
 Diameter Yes Thickness of shell plates Yes Material Yes Description of longitudinal joint Yes Diam. of rivet holes Yes
 Pitch of rivets Yes Working pressure of shell by rules Yes Crown plates Yes Thickness Yes How stayed Yes

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

If not, state whether, and when, one will be sent



