

REPORT ON MACHINERY.

No. 810

WED. JUL. 23 1920

Received at London Office

Date of writing Report 30 June 1920 When handed in at Local Office 7 July 1920 Port of Vancouver BC
Survey held at Vancouver BC Date, First Survey 18 February Last Survey 19th June 1920
Book. on the Single Screw SS "MARGARET COUGHLAN" (Number of Voids) Gross 5703.93
Tons Net 3531.44
Built at Vancouver BC By whom built J. Coughlan & Sons Ltd When built 1920
Made at Greenock Scotland By whom made J. G. Kincaid & Co when made 1920
Made at Vancouver BC By whom made Vulcan Iron Works (when made 1920 re-sealed at N° 555)
Horse Power 3000 Owners Canada Western S.S. Co Port belonging to Vancouver BC
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
Cylinders 27"-44"-73" Length of Stroke 48" Revs. per minute 83 Dia. of Screw shaft 14 1/2" Material of screw shaft Steel
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
propeller boss yes If the liner is in more than one length are the joints burned yes If the liner does not fit tightly at the part
in the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes If two
are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 5'-2"
Tunnel shaft 13 1/2" Dia. of Crank shaft journals 13 1/2" as per rule 13 1/2" Dia. of Crank pin 14 1/2" Size of Crank webs 91.38 Dia. of thrust shaft under
14 1/2" Dia. of screw 17'-6" Pitch of Screw 18 ft No. of Blades 4 State whether moveable yes Total surface 95.5
Feed pumps 3 2 off Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work yes
Bilge pumps 3 2 off Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work yes
Donkey Engines 1 off Sizes of Pumps 10 1/2" x 14" x 24" No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room 2 off 3 1/2" x 2 off 4" In Holds, &c. N° 1 Hold 2 off 3 1/2" N° 2 Hold 2 off 3 1/2"
Hold 2 off 3 1/2" N° 4 Hold 2 off 3 1/2" Boiler Room 2 off 3 1/2" Tunnel Hull 1 off 3 1/2"
Bilge Injections 1 sizes 9" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size two 4"
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
connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Valves & Cocks
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
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
pipes are carried through the bunkers bilge pipes How are they protected Wood covering

All Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes
Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from Officer D's Grating, Engine Room
ERS, &c.—(Letter for record 5) Manufacturers of Steel Windsor Steel Co

Heating Surface of Boilers 7743 Is Forced Draft fitted yes No. and Description of Boilers 3 Scotch Marine
Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 25-5-20 No. of Certificate 34
each boiler be worked separately yes Area of fire grate in each boiler 66.12 sq No. and Description of Safety Valves to
boiler 2 off Lockhart Stagger Area of each valve 9.64" Pressure to which they are adjusted 180 lb Are they fitted with easing gear yes
least distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 15'-7 1/8" Length 11'-6" Material of shell plates Steel
ness 1 3/8" Range of tensile strength 60,000 lb Are the shell plates webbed or flanged no Descrip. of riveting: cir. seams Double
seams butt straps Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 9 1/16" Lap of plates or width of butt straps 19 1/8"
percentages of strength of longitudinal joint rivets 87.4 Working pressure of shell by rules 188.4 Size of manhole in shell 16 x 12
of compensating ring 37 1/2" x 2-9 x 1 1/8" No. and Description of Furnaces in each boiler 3 Brighton Material Steel Outside diameter 50 1/4"
h of plain part top yes Thickness of plates crown 5/8" Description of longitudinal joint No. of strengthening rings
ing pressure of furnace by the rules 188 Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 15/16"
of stays to ditto: Sides 7 1/2" Back 8" Top 9 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 196
rial of stays Steel Area at smallest part 1 5/8" Area supported by each stay 16.87 Working pressure by rules End plates in steam space:
rial Steel Thickness 1 1/16" Pitch of stays 15 x 18 How are stays secured nuts Working pressure by rules 202 Material of stays Steel
at smallest part 2 1/4" Area supported by each stay nuts Working pressure by rules 202 Material of Front plates at bottom Steel
ness 1 3/16" Material of Lower back plate Steel Thickness 1 1/16" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 199
ter of tubes 3" Pitch of tubes 4 1/4" Material of tube plates Steel Thickness: Front 1 3/16" Back 3/4" Mean pitch of stays 8 1/2"
across wide water spaces 13 1/2" Working pressures by rules 183.3 Girders to Chamber tops: Material Steel Depth and
ess of girder at centre 10" x 3 1/4" Length as per rule yes Distance apart 9 3/4" Number and pitch of stays in each 3 off 7 1/2"
ing pressure by rules 250 Steam dome: description of joint to shell yes % of strength of joint

meter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
h of rivets Working pressure of shell by rules Crown plates Thickness How stayed
PERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to
Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
Is Easing Gear fitted
ometer of Safety Valve Pressure to which each is adjusted

Tested by Hydraulic Pressure to

Is Easing Gear fitted

111331-0234

If so, is a report now forwarded?

The foregoing is a correct description,

Wm Cuyler & Sons L^{td} Eng

Manufacturer.

Is the approved plan of main boiler forwarded herewith

Is an installation fitted for burning oil fuel

Is the flash point of the oil to be used over 150°F?

Have the requirements of Section 49 of the Rules been complied with Yes

Is this machinery duplicate of a previous case yes If so, state name of vessel SS Braholm

General Remarks (State quality of workmanship, opinions as to class, &c. The engines and boilers of the vessel have been built under special survey, installed under special survey and in accordance with approved plans together with auxiliary pumps, piping, mountings, fittings & sea connections &c.

The material and workmanship are of good quality. On completion of the machinery installation the vessel was trialed under full steam at sea and found satisfactory.

Please refer to Glasgow Report N^o 565.

After valves were adjusted under steam

The machinery & Boilers are eligible in my opinion to have record + LMC 19-20 made in Register Book

It is submitted that
this vessel is eligible for

THE RECORD. + LMC. 6.20 FI
Fitted for oil fuel 6.20 FP. above 150°F

RM
6/8/20

| | | | |
|------------------------------|--------|--------------------|------|
| The amount of Entry Fee | ... | £ 15 : | 00 : |
| Special | | £ 153 : | 00 : |
| Donkey Boiler Fee | ... £ | : | : |
| Travelling Expenses (if any) | £ | : | : |

When applied for.

July 20

When received.

15940

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+ L. MC. 6.20 F.D

Titled for oil fuel 6,20 F.P. above $150^{\circ}F$

CERTIFICATE WRITTEN

Lloyd's Register
Foundation