

Rpt. 4.

REPORT ON MACHINERY

No. 34689

Date of writing Report 28. 12. 14 When handed in at Local Office 28. 12. 14 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey Last Survey 26. 12. 19 14

Req. Book. on the S.S. "KINABALU" (Number of Visits)

Master Carver. Built at Anderson By whom built Anderson D.D. & S. Co. (No. 266) built 1914

Engines made at Glasgow By whom made McKie & Baxter (No. 788) when made 1914

Boilers made at do. By whom made Dunsmeui & Jackson (No. B.33) when made 1914

Registered Horse Power Owners Seboh S.S. Co (Malay States) Port belonging to Anderson.

Nom. Horse Power as per Section 28 84.2 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple expansion. Surf. Condg. No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 13" 21" 34" Length of Stroke 24" Revs. per minute 135 Dia. of Screw shaft 4.1" Material of screw shaft steel

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 Yes 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

Dia. of Tunnel shaft as per rule 6.48" Dia. of Crank shaft journals as per rule 6.8" Dia. of Crank pin 6.7" Size of Crank webs 12x4 1/2" Dia. of thrust shaft under collars 6.8" Dia. of screw 8-9" Pitch of Screw 9-3" No. of Blades 4 State whether moceable No. Total surface 26 1/2 sq. ft.

No. of Feed pumps 2 Diameter of ditto 2 7/8" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/4" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps 5 x 3 1/2 x 6" 5 x 3 1/2 x 6" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 3-2" 1-2" special In Holds, &c. 2-2" 7/8"

No. of Bilge Injections 1 sizes 4" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes-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

Dates of examination of completion of fitting of Sea Connections 3. 12. 14 of Stern Tube 3. 12. 14 Screw shaft and Propeller 3. 12. 14.

Is the Screw Shaft Tunnel watertight No tunnel Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record 1.) Manufacturers of Steel Colville & Glasgow I. & S. Co.

Total Heating Surface of Boilers 1699 sq. ft. Is Forced Draft fitted No. No. and Description of Boilers One single ended marine

Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs. Date of test 13. 10. 14. No. of Certificate 12894

Can each boiler be worked separately Yes Area of fire grate in each boiler 54.4 sq. ft. No. and Description of Safety Valves to each boiler Pair spring loaded Area of each valve 5.9 sq. in. Pressure to which they are adjusted 185 lbs. Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 10" Mean dia. of boilers 13'-6" Length 10'-6" Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets plate Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top bottom Thickness of plates crown bottom Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

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