

Rpt. 4.

YACHT.
REPORT ON MACHINERY.

No. 30242

Date of writing Report 10/6/11 When handed in at Local Office 10/6/11 Port of Glasgow
No. in Survey held at Clydebank Date, First Survey 12th Dec 1910 Last Survey 12th June 1911
Reg. Book. on the Steel Twin screw steam yacht Seannette (Number of Visits) Gross 921
Master Built at Clydebank By whom built J. Brown & Co. Ltd. Tons Net 290
Engines made at Clydebank By whom made J. Brown & Co. Ltd. When built 1911
Boilers made at do By whom made do when made 1911
Registered Horse Power Owners H. Liversay Port belonging to Glasgow
Nom. Horse Power as per Section 28 281 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Twin screw Triple expansion No. of Cylinders 8 No. of Cranks 4 each ing
Dia. of Cylinders 16-26-30-30 Length of Stroke 26 Revs. per minute 170 Dia. of Screw shaft as per rule 8.39 Material of steel
as fitted 8.2 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 — 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 Length of stern bush 3'-5"
Dia. of Tunnel shaft as per rule 7.8 Dia. of Crank shaft journals as per rule 8.2 Dia. of Crank pin 8.2 Size of Crank webs 16 1/2 x 6 Dia. of thrust shaft under
as fitted 8.5 collars 8.2 Dia. of screw 9'-3" Pitch of Screw 10'-3" No. of Blades 4 State whether moveable yes Total surface 28 ft
No. of Feed pumps 2 Weirs Diameter of ditto 10 1/2-8 Stroke 21 Can one be overhauled while the other is at work yes
No. of Bilge pumps 1 each ing Diameter of ditto 3 1/4 Stroke 13 Can one be overhauled while the other is at work yes
No. of Donkey Engines 3 Sizes of Pumps 1 Duplex 8.5 x 8 1 5.5 x 10 1 4.4 x 5 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 3 of 2 1/2" In Holds, &c. Fore peak 1 of 2 1/2" Crew space 1 of 2 1/2"
Bunker 1 of 2 1/2" Tunnel 1 of 2 1/2"
No. of Bilge Injections 2 sizes 4" Connected to condenser, or to circulating pump and Is a separate Donkey Suction fitted in Engine room & size yes 2 1/2"
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 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 yes
What pipes are carried through the bunkers bilge How are they protected wood casings
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 29.3.11 of Stern Tube 29.3.11 Screw shaft and Propeller 29.3.11
Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from upper deck

BOILERS, &c.—(Letter for record S) Manufacturers of Steel D Colville & Sons
Total Heating Surface of Boilers 3163 ft Is Forced Draft fitted yes No. and Description of Boilers One single ended
Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 16.2.11 No. of Certificate 10803
Can each boiler be worked separately Area of fire grate in each boiler 91.9 ft No. and Description of Safety Valves to
each boiler 3 spring loaded Area of each valve 11.04" 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 9" Mean dia. of boilers 14'-6" Length 11'-6" Material of shell plates steel
Thickness 1 1/32 Range of tensile strength 29/33 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams DB+TR lap
long. seams DBS+TR Diameter of rivet holes in long. seams 1 3/8 Pitch of rivets 9 7/8 Lap of plates or width of butt straps 1'-8 1/4
Per centages of strength of longitudinal joint rivets 85.9 Working pressure of shell by rules 185 Size of manhole in shell 21 x 14
plate 85.6
Size of compensating ring 40 x 33 x 1 1/32 No. and Description of Furnaces in each boiler 4 Morrison Material steel Outside diameter 49 1/8
Length of plain part top Thickness of plates crown 19 Description of longitudinal joint welded No. of strengthening rings
bottom 32
Working pressure of furnace by the rules 192 Combustion chamber plates: Material steel Thickness: Sides 19/32 Back 9/16 Top 19/32 Bottom 3/4
Pitch of stays to ditto: Sides 8 x 8 1/4 Back 7 1/2 x 8 3/8 Top 8 x 8 3/8 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 182
Material of stays steel Diameter at smallest part 1.62" Area supported by each stay 67" Working pressure by rules 217 End plates in steam space:
Material steel Thickness 1 3/32 Pitch of stays 14 x 14 How are stays secured DN Working pressure by rules 182 Material of stays steel
Diameter at smallest part 5.94" Area supported by each stay 289" Working pressure by rules 213 Material of Front plates at bottom steel
Thickness 27/32 Material of Lower back plate steel Thickness 3/4 Greatest pitch of stays 15" doubled Working pressure of plate by rules 260
Diameter of tubes 3 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates steel Thickness: Front 3/4 Back 3/4 Mean pitch of stays 10 5/8
Pitch across wide water spaces 14" doubled Working pressures by rules 183 Girders to Chamber tops: Material steel Depth and
thickness of girder at centre 2 plates 8 1/2 x 3/4 Length as per rule 32 1/2 Distance apart 8 3/8 Number and pitch of stays in each 3 of 8"
Working pressure by rules 190 Superheater or Steam chest; how connected to boiler none 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

W1018-0215

VERTICAL DONKEY BOILER—

No. _____ Description _____ Manufacturers of Steel _____
 Made at _____ By whom made _____
 Working pressure _____ tested by hydraulic pressure to _____ Date of test _____ When made _____ Where fixed _____
 Valves _____ No. of Safety Valves _____ Area of each _____ No. of Certificate _____ Fire grate area _____
 If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Pressure to which they are adjusted _____ Description of Safety _____
 Material of shell plates _____ Thickness _____ Range of tensile strength _____ Dia. of donkey boiler _____ Date of adjustment _____
 Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Descrip. of riveting long. seams _____ Length _____
 Working pressure of shell by rules _____ Thickness of shell crown plates _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____
 Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____ Plates _____
 Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Thickness of furnace plates _____ Description of joint _____ Stayed by _____
 Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Radius of do. _____ Dates of survey _____

SPARE GEAR.

State the articles supplied:— 2 top end, 2 bottom end, 2 main bearing and set of coupling bolts and nuts. Set of bilge pump valves. Set of Weiss feed pump valves. Air pump rod. Set of HP, MP, LP piston rings and springs. 2 propeller blades and 6 studs. 2 pairs bottom end brasses. 1 pair top end brasses. 1 eccentric strap valve spindles. 4 check valves. Assorted iron.

The foregoing is a correct description.
 FOR JOHN BROWN & Co. LIMITED Manufacturers.

Dates of Survey while building: During progress of work in shops— 1910 Dec 1. 1911 Jan 6. 12. 16. Feb 1. 7. 15. 16. 20.
 During erection on board vessel— 24. 28. March 1. 7. 8. 10. 15. 17. 23. 29. 31. Apr 3. 10. 18. 21. 24. 26. May 2. 4. 9. 10.
 Total No. of visits 17. 23. 25. 30. June 1.

Dates of Examination of principal parts— Cylinders 7. 2. 11. 16. 24. 28. Slides 7. 3. 11. Is the approved plan of main boiler forwarded herewith yes ✓
 Connecting rods 24. 2. 11. Crank shaft 16. 2. 11. Thrust shaft 1. 2. 11. Tunnel shafts 1. 2. 11. Covers 8. 3. 11. Pistons 24. 2. 11. Rods 24. 2. 11. yes ✓
 Stern tube 8. 3. 11. Steam pipes tested 24. 2. 11. 5. 4. 5. 11. Engine and boiler seatings 23. 3. 11. Screw shaft 16. 2. 11. Propeller 14. 3. 11.
 Completion of pumping arrangements 4. 5. 11. Boilers fixed 2. 5. 11. Engines holding down bolts 18. 4. 11.
 Main boiler safety valves adjusted 9. 5. 11. Identification Mark on Do. 4451 TD Material of Thrust shaft steel Identification Mark on Do. 408 HC
 Material of Crank shaft steel Identification Marks on Do. 408 HC Material of Screw shafts steel Identification Mark on Do. 408 HC
 Material of Tunnel shafts steel Identification Marks on Do. 408 HC Material of Thrust shaft steel Identification Mark on Do. 408 HC
 Material of Steam Pipes steel ✓ Test pressure 540 lbs. ✓

General Remarks

(State quality of workmanship, opinions as to class, &c.)
 The machinery of this vessel has been constructed under special survey in accordance with the rules and approved plans enclosed and has been run working under steam satisfactorily.
 Materials and workmanship are good.
 The machinery of this vessel is eligible in my opinion to be classed +LMC-6-11

It is submitted that this vessel is eligible for THE RECORD +LMC6.11
 ISB & 1AuxSB. FD. JWD 13/6/11

The amount of Entry Fee .. £
 Special .. £ 34 : 1 :
 Donkey Boiler Fee .. £
 Travelling Expenses (if any) £
 Committee's Minute
 Assigned +LMC6.11

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.
 Harry Clarke
 13 JUN. 1911

We certify
 John Brown & Co.
 Builder's Signature
 Assistant Secretary.