

Rpt. 4.  
Received from  
Surveyor.  
1 JAN. 1902

TUES. 14 JAN 1902 No. 19535

# REPORT ON MACHINERY.

Port of Glasgow.

Received at London Office 19

No. in Survey held at  
Reg. Book.

Annan

Date, first Survey 28<sup>th</sup> Feb.

Last Survey 14<sup>th</sup> Dec 19 01.

on the

S. S. "SEACOMBE"

(Number of Visits 29)

Tons { Gross 588.8  
Net 64.89

Master

Built at

Annan

By whom built

Bochran & Co. Annan Ltd. When built 1901

Engines made at

Annan

By whom made

Bochran & Co. Annan, Ltd. when made 1901.

Boilers made at

Annan

By whom made

Bochran & Co. Annan, Ltd. when made 1901.

Registered Horse Power

Owners

Wallasey Urban District Council belonging to Liverpool

Nom. Horse Power as per Section 28 172.

Is Refrigerating Machinery fitted No.

Is Electric Light fitted Yes.

## ENGINES, &c.—Description of Engines

Triple expansion, 4 screws.

No. of Cylinders

3

No. of Cranks 3

Dia. of Cylinders 13.25 22 34 Length of Stroke 22 1/2 Revs. per minute 144 Dia. of Screw shaft as per rule 6.83 as fitted 7.17 Lgth. of stern bush 2.5 1/2

Dia. of Tunnel shaft as per rule 6.30 as fitted 6 1/2 Dia. of Crank shaft journals as per rule 6.70 as fitted 7 3/8 Dia. of Crank pin 7 3/8 Size of Crank webs 5 x 8 1/2 Dia. of thrust shaft under collars 6 3/4 Dia. of screw 7.0 Pitch of screw 9.0 No. of blades 3 State whether moveable no Total surface 16 sq ft

No. of Feed pumps ✓ Diameter of ditto ✓ Stroke ✓ Can one be overhauled while the other is at work ✓

No. of Bilge pumps ✓ Diameter of ditto ✓ Stroke ✓ Can one be overhauled while the other is at work ✓

No. of Donkey Engines Two Sizes of Pumps Aut. feed 6 x 4 1/2 x 6" Duplex. No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two 2" dia. In Holds, &c. Two 2" dia. in each forward

after holds, & one 2" in fore peak.

No. of bilge injections 1 sizes 8 1/2 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 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 on B.H. 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

When were stern tube, propeller, screw shaft, and all connections examined in dry dock before launch Is the screw shaft tunnel watertight none

Is it fitted with a watertight door ✓ worked from ✓

## BOILERS, &c.—

(Letter for record

(S) Total Heating Surface of Boilers

3390.0 sq ft

Is forced draft fitted no.

No. and Description of Boilers 3 Navy type.

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs

Date of test 28/12/01 Can each boiler be worked separately yes Area of fire grate in each boiler 34.4 sq ft No. and Description of safety valves to

each boiler 2 Patent Spring Area of each valve 3.98 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 2.3 Mean dia. of boilers 8.0 Length 16.6 Material of shell plates steel

Thickness 15/16 Range of tensile strength 27.632 Are they welded or flanged no Descrip. of riveting: cir. seams double long. seams double

Diameter of rivet holes in long. seams 17/32 Pitch of rivets 4 7/8 Lap of plates or width of butt straps 12

Per centages of strength of longitudinal joint rivets 76.3 plate 75 Working pressure of shell by rules 213 lbs Size of manhole in shell 15 x 11

Size of compensating ring McNeil's No. and Description of Furnaces in each boiler 2 Deighton Material steel Outside diameter 3.0

Length of plain part top ✓ bottom ✓ Thickness of plates crown 1 1/2 bottom 1 1/2 Description of longitudinal joint welded No. of strengthening rings ✓

Working pressure of furnace by the rules 210 lbs Combustion chamber plates: Material steel Thickness: Sides 9/16 Back ✓ Top 9/16 Bottom 9/16

Pitch of stays to ditto: Sides 7 3/4 x 7 1/2 Back ✓ Top 7 3/4 x 7 1/2 stays are fitted with nuts or riveted heads nuts Working pressure by rules 182 lbs

Material of stays steel Diameter at smallest part 1.5 Area supported by each stay 60 Working pressure by rules 200 lbs End plates in steam space:

Material steel Thickness 1 1/32 Pitch of stays 20 x 14 How are stays secured nuts Working pressure by rules 182 lbs Material of stays steel

Area at smallest part 5.56 Area supported by each stay 280 Working pressure by rules 186 lbs Material of Front plates at bottom steel

Thickness 1 1/32 Material of Lower back plate steel Thickness 1 1/32 Greatest pitch of stays ✓ Working pressure of plate by rules ✓

Diameter of tubes 2 1/2 Pitch of tubes 3 1/2 x 3 1/2 Material of tube plates steel Thickness: Front 1 1/16 Back 1 1/32 Mean pitch of stays abt 10 1/2

Pitch across wide water spaces none Working pressures by rules ✓ Girders to Chamber tops: Material none 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 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 ✓

W1584-0211

Lloyd's Register  
Foundation



DONKEY BOILER— No. *none* Description ✓

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

SPARE GEAR. State the articles supplied:— *Two top end & two bottom end connecting rod bolts, two main bearing bolts, one set coupling bolts, one set feed & bilge pump valves. Etc.*

The foregoing is a correct description,  
For COCHRAN & CO., ANNAN, LIMITED, Manufacturer.

*J. H. Bell* Director. 1901. Feb 28 Apr 11. 19. May 6. 21. 28. Jun 7. 14. 21. 27. July 2. 5. 12. Aug 2. 8. 16. Sep 13. 20. 26. Oct 4. 11. 17. 25. Nov 1. 5. 15. 22. 29. Dec 1. 4.  
Dates of Survey while building { During progress of work in shops - -  
During erection on board vessel - -  
Total No. of visits *29*

Is the approved plan of main boiler forwarded herewith *yes*  
" " " donkey " " " ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)

Material of screw shaft *steel* Is the screw shaft fitted with a continuous liner the whole length of the stern tube *no*.  
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 *no*.  
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 *no*.

The Machinery of this vessel has been constructed under Special Survey, the material & workmanship are of good quality, it has been securely fastened on board tried under steam & found satisfactory.

In my opinion it is eligible to be classed in the Register Book with the record of *+ L.M.C. 12.01*

It is submitted that  
this vessel is eligible for  
THE RECORD. + L.M.C. 12.01  
*Elec. light*

*C.M.*  
*14.1.02*

*14.1.02*

The amount of Entry Fee. £ *2* : : : When applied for, *17/12/1901*  
Special . . . £ *25* . *16* : : :  
Donkey Boiler Fee . . . £ : : : : When received, *11/1/1902*  
Travelling Expenses (if any) £ *6* : *12* : : : *1902*

Committee's Minute *Glasgow.* 13 JAN. 1902

Assigned

*+ L.M.C. 12.01*

*J. W. Dimmock*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



© 2021

Lloyd's Register  
Foundation