

REPORT ON MACHINERY. No. 9698.

Shull Rpt No. 29993

Received at London Office

Date of writing Report 1917 When handed in at Local Office 10/11/17 Port of Middlesbrough

No. in Survey held at Middlesbrough Date, First Survey 10th Jan 17 Last Survey 28th Mar 1917

Reg. Book. on the steelside trawler Anthony Adlett (Number of Visits 11) Tons 680 Net 1917-6

Master Built at Selby By whom built Cochrane & Son Ltd When built 1917-6

Engines made at Middlesbrough By whom made Richardson Westgarth & Co. (No. 12376) when made 1917-6

Boilers made at Hull By whom made C. D. Holmes & Co. (No. 1185) when made 1917-6

Registered Horse Power Owners British Admiralty Port belonging to

Nom. Horse Power as per Section 28 87 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 13", 23", 37" Length of Stroke 26" Revs. per minute 114 Dia. of Screw shaft as per rule 7.88" Material of screw shaft as fitted 8 1/2" 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 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

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 3'-0"

Dia. of Tunnel shaft as per rule 7.04" Dia. of Crank shaft journals as per rule 7.39" Dia. of Crank pin 7 1/2" Size of Crank web 4 3/4" x 7 1/2" Dia. of thrust shaft under collars 7 1/2" Dia. of screw 9-7 1/2" Pitch of Screw 11-0 No. of Blades 4 State whether moveable No Total surface 33 sq ft

No. of Feed pumps 1 Diameter of ditto 2 5/8" Stroke 14 3/4" Can one be overhauled while the other is at work

No. of Bilge pumps 1 Diameter of ditto 2 5/8" Stroke 14 3/4" Can one be overhauled while the other is at work

No. of Donkey Engines one 3" yd. Sizes of Pumps 6", 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. One two" dia. in each compartment all suction also connected to 3" yd.

No. of Bilge Injections one sizes 3 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 3" yd.

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 Four suction How are they protected strong casing

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 Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S) Manufacturers of Steel

Total Heating Surface of Boilers 1440 sq ft Forced Draft fitted no No. and Description of Boilers one single ended

Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate

Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to each boiler

Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length 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

Percentage of strength of longitudinal joint 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 Thickness of plates crown 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 Area 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

Area 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 Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Number of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set of air, fuel & bilge pump valves, one main & one donkey feed check valve, two valves for donkey pump, 6 junk ring studs & nuts, one safety valve spring one set of fire bars, three condenser tubes & quantity of bolts & nuts & iron of various sizes.

The foregoing is a correct description,

for and on behalf of RICHARDSONS, WESTGARTH & Co., Ltd

M. Jackson

Manufacturer.

Dates of Survey while building
During progress of work in shops --
During erection on board vessel ---
Total No. of visits

1917. Jan 10. 13. 24. Feb. 6. 10. 13. 15. 19. 23. 27. Mar 3. 8. 14. 16. 20. 21. 24

17

Is the approved plan of main boiler forwarded herewith

“ “ “ donkey “ “ “

Dates of Examination of principal parts—Cylinders *27. 2. 17* Slides *14. 3. 17* Covers *14. 3. 17* Pistons *3. 3. 17* Rods *3. 3. 17*

Connecting rods *3. 3. 17* Crank shaft *1. 2. 17* Thrust shaft *21. 3. 17* Tunnel shafts *None* Screw shaft *8. 3. 17* Propeller *8. 3. 17*

Stern tube *8. 3. 17* Steam pipes tested *31-5-17* Engine and boiler seatings *9-2-17* Engines holding down bolts *27-4-17*

Completion of pumping arrangements *5-6-17* Boilers fixed *2-6-17* Engines tried under steam *5-6-17*

Completion of fitting sea connections *9-2-17* Stern tube *9-2-17* Screw shaft and propeller *9-2-17*

Main boiler safety valves adjusted *2-6-17* Thickness of adjusting washers *7 1/32 & 2 3/8*

Material of Crank shaft *Steel* Identification Mark on Do. *5581AB* Material of Thrust shaft *Steel* Identification Mark on Do. *5881A1*

Material of Tunnel shafts *None* Identification Marks on Do. Material of Screw shafts *Steel* Identification Marks on Do. *5882A*

Material of Steam Pipes *solid drawn copper* Test pressure *400 lbs*

Is an installation fitted for burning oil fuel *no* 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

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *William Waterburgh*

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

These Engines have been constructed under Special Survey and in accordance with the Rules and Specification.

The material and workmanship are good.

The Engines have now been sent to Selby where they are to be fitted on board the vessel.

The machinery of this vessel has been properly fitted & secured on board the vessel the steam pipes tested as above & on completion it was tested under full working condition for two hours, as required by the Admiralty & found satisfactory the safety valves have been adjusted under steam & tested for accumulation which did not exceed 215 lbs.

In my opinion the vessel is eligible for the record + L.M.C. 6-17.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 6.17.

Wm. J. W. 19/6/17
Wm. Frank A. Stanger
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ...	£ 1 : - : -	When applied for,
Special <i>Boiler (Donkey)</i> ...	£ 8 : 14 : -	<i>10/4/1917</i>
Donkey Boiler Fee ...	£ 8 : 14 : -	When received,
Travelling Expenses (if any) £	:	<i>20/4/1917</i>

Committee's Minute *TUE 19 JUN 1917*
Assigned *+ L.M.C. 6.17*



MACHINERY CERTIFICATE WRITTEN

MIDDLEBRO

Certificate (if required) to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute