

## REPORT ON MACHINERY.

No. 30990  
SAT. 29 MAR. 1919

Received at London Office

Date of writing Report 19 When handed in at Local Office 28/3 1919 Port of Hull  
No. in Survey held at Hull Date, First Survey Jul 18/18 Last Survey Mar 25/19  
Reg. Book. on the steel screw bawler Jeremiah Lewis (Number of Visits 33)  
Master Built at Leby By whom built Buchanan & Sons Ltd Tons Gross 324 Net 146  
Engines made at Hull By whom made Chas. D. Holmes & Co. Ltd when made 1919  
Boilers made at Hull By whom made Chas. D. Holmes & Co. Ltd when made 1919  
Registered Horse Power Owners British Admiralty Port belonging to ✓  
Nom. Horse Power as per Section 28 27 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders Three No. of Cranks 3  
Dia. of Cylinders 13"-23"-37" Length of Stroke 26" Revs. per minute 115 Dia. of Screw shaft as per rule 8.29 Material of 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 ✓ 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 ✓ If two  
liners are fitted, is the shaft lapped or protected between the liners ✓ as liners Pickers glands fitted Length of stern bush 36"  
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 webs 4 1/2" x 11" 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 one Diameter of ditto 2 1/2" Stroke 14 1/4" Can one be overhauled while the other is at work ✓  
No. of Bilge pumps one Diameter of ditto 2 1/2" Stroke 14 1/4" Can one be overhauled while the other is at work ✓  
No. of Donkey Engines one 3/4" HP 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 2" dia in each compartment  
all suction also connected to ejector  
No. of Bilge Injections one sizes 3 1/2" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size 3" ejector  
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 Forward suction & wind steam How are they protected strong 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  
Is the Screw Shaft Tunnel watertight ✓ Is it fitted with a watertight door worked from ✓

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Port-Labret & J. Spencer & Sons  
Total Heating Surface of Boilers 1440 sq ft Is Forced Draft fitted no No. and Description of Boilers one single ended  
Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test 26-11-18 No. of Certificate 3336  
Can each boiler be worked separately ✓ Area of fire grate in each boiler 48 sq ft No. and Description of Safety Valves to  
each boiler two spring loaded Area of each valve 4.9 sq ft Pressure to which they are adjusted 205- Are they fitted with easing gear yes  
Smallest distance between boilers or uptakes and bunkers or woodwork 8" Bl. lagging dia. of boilers 165" Length 10'-8" Material of shell plates steel  
Thickness 1 1/8" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams double  
long. seams J.P.D.B. Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 18"  
Per centages of strength of longitudinal joint rivets 85-9 plate 85-5 Working pressure of shell by rules 202 Size of manhole in shell 16" x 12"  
Size of compensating ring 7" x 1 1/4" No. and Description of Furnaces in each boiler three plain Material steel Outside diameter 40"  
Length of plain part top 7 1/2" bottom 6 1/2" Thickness of plates crown 7/16" bottom 3/16" Description of longitudinal joint welded No. of strengthening rings ✓  
Working pressure of furnace by the rules 206 Combustion chamber plates: Material steel Thickness: Sides 3/4" Back 2 3/8" Top 3/4" Bottom 3/4"  
Pitch of stays to ditto: Sides 10" x 8" Back 9 1/4" x 8 1/4" Top 11" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 208  
Material of stays steel Area at smallest part 2.07 sq in Area supported by each stay 88 sq in Working pressure by rules 211 End plates in steam space:  
Material steel Thickness 1 1/2" Pitch of stays 19" x 17 5/8" How are stays secured J.P.D.B. Working pressure by rules 210 Material of stays steel  
Area at smallest part 7.5 sq in Area supported by each stay 335 sq in Working pressure by rules 233 Material of Front plates at bottom steel  
Thickness 1 1/8" Material of Lower back plate steel Thickness 1 1/8" Greatest pitch of stays 13 1/2" x 9 1/2" Working pressure of plate by rules 216  
Diameter of tubes 3 1/2" Pitch of tubes 4 1/8" Material of tube plates steel Thickness: Front 1 1/8" + 3/16" Back 7/8" Mean pitch of stays 10"  
Pitch across wide water spaces 14" Working pressures by rules 275 Girders to Chamber tops: Material steel Depth and  
thickness of girder at centre 11" x 1 1/2" Length as per rule 36.216 Distance apart 11" Number and pitch of stays in each three 8"  
Working pressure by rules 201 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 ✓  
Diameter of Safety Valve ✓ Pressure to which each is adjusted ✓ Is Easing Gear fitted ✓

W649-D133



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, feed & bilge pump valves, six gun ring studs & nuts, one main & one donkey check valve, two valves for donkey pump, one safety valve spring, 3 condenser tubes, one set of fire bars & a quantity of bolts & nuts & iron of various sizes.

The foregoing is a correct description,

Harold Sheardson

Manufacturer.

Dates of Survey while building

During progress of work in shops - -  
During erection on board vessel - - -  
Total No. of visits

1918: July 15, Aug. 13, 15, 22, 26, 30, Sep. 9, 12, 16, 19, 24, 27, Oct. 1, 2, 4, 9, 14, 18, 24, 29, Nov. 6, 8, 15, 19, 22, 30, Dec. 6, 1919 Jan. 14, 28, Mar. 15, 20, 25

Is the approved plan of main boiler forwarded herewith

sent previously

Dates of Examination of principal parts—Cylinders 2-10-18 Slides 26-10-18 Covers 2-10-18 Pistons 15-11-18 Rods 15-11-18

Connecting rods 24-10-18 Crank shaft 19-11-18 Thrust shaft 8-11-18 Tunnel shafts ✓ Screw shaft 9-9-18 Propeller 9-9-18

Stern tube 9-9-18 Steam pipes tested 25/1/19 Engine and boiler seatings 12-9-18 Engines holding down bolts 20-1-19

Completion of pumping arrangements 25/3/19 Boilers fixed 25/3/19 Engines tried under steam 25/3/19

Completion of fitting sea connections 12-9-18 Stern tube 12-9-18 Screw shaft and propeller 12-9-18

Main boiler safety valves adjusted 15/3/19 Thickness of adjusting washers  $A \frac{7}{8}$  For 0  $\frac{1}{2}$ "

Material of Crank shaft steel Identification Mark on Do. 21P4FL Material of Thrust shaft steel Identification Mark on Do. 21P2 FL8

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts steel Identification Marks on Do. 2156 FL8

Material of Steam Pipes solid drawn copper Test pressure 400

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 Trusey Blues

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under special survey the materials & workmanship are good. On completion the machinery was tried under full working conditions with satisfactory results.

The machinery throughout is now in a good & efficient condition & eligible in our opinion to be classed and to have the notation  $\star LMC 3.19$  marked in red in the Society's 'Register' Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 3.19.

The amount of Entry Fee ... £ 2 : 0 :  
Special ... £ 26 : 2 :  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : :

When applied for,

28/3/19

When received,

5.11.19

Frank A. Sturges

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute' FRI. 4-APR. 1919

Assigned

+ LMC 3.19

MACHINERY CERTIFICATE WRITTEN



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