

# REPORT ON MACHINERY.

No. 71020

Received at London Office

of writing Report 10<sup>th</sup> May 1918 When handed in at Local Office 1 JUN 1918 Port of NEWCASTLE-ON-TYNE  
in Survey held at Newcastle Date, First Survey 12 Oct. 1917 Last Survey 2<sup>nd</sup> May 1918  
Book. (Number of Volls 79

on the S.S. "War Buffalo" Tons { Gross 5228  
Net 3227  
When built 1918

ter Built at Newcastle By whom built Northumbrian & B. Co

ines made at Newcastle By whom made N. E. Marine Eng Co when made 1918

ers made at Newcastle By whom made when made 1918

istered Horse Power Owners The Shipping Controller Port belonging to London

Horse Power as per Section 28 517 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

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

of Cylinders 27-44-73 Length of Stroke 48 Revs. per minute 77 Dia. of Screw shaft as per rule 14-6-6 Material of screw shaft as fitted 15-2 Steel

the screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight

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

rs are fitted, is the shaft lapped or protected between the liners Length of stern bush 5'-0 1/2"

z. of Tunnel shaft as per rule 13-3-3 Dia. of Crank shaft journals as per rule 14-1/2 Dia. of Crank pin 14-1/2 Size of Crank webs 24"x9" Dia. of thrust shaft under

lars 14-3/4 Dia. of screw 17-6 Pitch of Screw 16-6 No. of Blades 4 State whether moveable No Total surface 102.5 sq

of Feed pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes

of Bilge pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes

of Donkey Engines 3 Sizes of Pumps 10 1/2"x14"x24", 9 1/2"x18", 9 1/2"x7"x18" No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room Three 3 1/2" In Holds, &c. No. 1 hold 2-3 1/2", No. 2 hold 2-3 1/2", No. 3 hold 2-3 1/2", No. 4 hold well 1-3 1/2", Tunnel well 1-3"

of Bilge Injections 1 sizes 10 1/2" Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2"

re all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible None

re all connections with the sea direct on the skin of the ship Are they Valves or Cocks Both

re they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line Both

re they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes

That pipes are carried through the bunkers Hold suction How are they protected Wood casing

re all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

re the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

ates of examination of completion of fitting of Sea Connections 12-2-18 of Stern Tube 12-2-18 Screw shaft and Propeller 25-4-18

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

ILERS, &c.—(Letter for record 5) Manufacturers of Steel John Spencer & Sons

total Heating Surface of Boilers 7668 sq Is Forced Draft fitted Yes No. and Description of Boilers Three, single-ended

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of tests 1-19-3-18, 1-25-3-18, 1-26-3-18 No. of Certificates 1-9067, 1-9069, 1-9070

Can each boiler be worked separately Yes Area of fire grate in each boiler 63.3 sq No. and Description of Safety Valves to

each boiler Two, Spring Area of each valve 9.6 sq 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 3'-2" Mean dia. of boilers 15'-6" Length 11'-8 1/4" Material of shell plates Steel

Thickness 1 1/4" Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams 8 Lap

ing. seams S.B.S. Y. Riv Diameter of rivet holes in long. seams 1 5/16" Pitch of rivets 9 1/8" Lap of plates or width of butt straps 19 1/2"

Per centages of strength of longitudinal joint rivets 8.8-2, plate 8.5-6 Working pressure of shell by rules 182 lbs Size of manhole in shell 16"x12"

Size of compensating ring Flanged No. and Description of Furnaces in each boiler 3-Beightoni Material Steel Outside diameter 50 3/8"

Length of plain part top 19", bottom 32" Thickness of plates crown 19", bottom 32" Description of longitudinal joint Welded No. of strengthening rings 4

Working pressure of furnace by the rules 188 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/32 Back 1/4 Top 23/32 Bottom 23/32

Pitch of stays to ditto: Sides 10 5/8"x9 1/4" Back 10 1/4"x8 3/4" Top 10 5/8"x9 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 181 lbs

Material of stays Steel Diameter at smallest part 2-3 1/8" Area supported by each stay 98 1/4" Working pressure by rules 232 lbs End plates in steam space:

Material Steel Thickness 1 1/2" Pitch of stays 2 1/4"x2 1/4" How are stays secured Nuts & W Working pressure by rules 180 lbs Material of stays Steel

Diameter at smallest part 8-29" Area supported by each stay 473" Working pressure by rules 182 lbs Material of Front plates at bottom Steel

Thickness 31/32" Material of Lower back plate Steel Thickness 27/32" Greatest pitch of stays 13 5/8" Working pressure of plate by rules 187 lbs

Diameter of tubes 2 3/4" Pitch of tubes 4"x3 3/8" Material of tube plates S Thickness: Front 31/32 Back 3/4 Mean pitch of stays 9 7/8"

Pitch across wide water spaces 13 5/8" Working pressures by rules 182 lbs Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 10"x1 3/4" Length as per rule 35 1/2" Distance apart 10 5/8" Number and pitch of stays in each 3-9 1/4"

Working pressure by rules 188 lbs 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

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