

REPORT ON MACHINERY.

No. 7925

Report made at 16th March 1918 When handed in at Local Office 10 Port of Belfast
 Survey held at Belfast Date, First Survey 26 June 1917 Last Survey 14th March 1918
 (Number of Visits 3)

In the S.S. War Viper Tons { Gross 5160
 Net 3122
 When built 1918
 Built at Belfast By whom built Harland & Wolff L^{td}

made at Belfast By whom made when made
 made at Glenburn By whom made when made 1918

Horse Power 518 Owners The Shipping Controller Port belonging to London
 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ES, &c.—Description of Engines Single Screw Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Cylinders 27"-44"-73" Length of Stroke 48" Revs. per minute 78 Dia. of Screw shaft 14.6" Material of I. Steel
 as fitted 15.5" screw shaft

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
 Propeller boss Yes If the liner is in more than one length are the joints burned Yes If the liner does not fit tightly at the part

the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If two
 fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 60 1/2"

as per rule 13.3" Dia. of Crank shaft journals 13.9" as per rule 14.5" Dia. of Crank pin 14 1/2" Size of Crank web 28 x 9" Dia. of thrust shaft under
 as fitted 13.5" Dia. of screw 7"-6" Pitch of Screw 16"-6" No. of Blades 4 State whether moveable No Total surface 102 1/2 sq ft

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

Donkey Engines Sea Sizes of other sheet No. and size of Suctions connected to both Bilge and Donkey pumps
 In Holds, &c. 9-3 1/2" + 1-3"

Large Injections 1 sizes 8" Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size 1-3 1/2"
 Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes

connections with the sea direct on the skin of the ship Except Main & Tank Suctions Are they Valves or Cocks Both
 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

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
 pipes are carried through the bunkers Fore hold suction How are they protected Wood casings

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door No - W.T. trunk from deck
 ERS, &c.—(Letter for record) Manufacturers of Steel

Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers
 Tested by hydraulic pressure to Date of test No. of Certificate

each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to
 Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Mean dia. of boilers Length Material of shell plates
 Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps
 Working pressure of shell by rules Size of manhole in shell

No. and Description of Furnaces in each boiler Material Outside diameter
 Thickness of plates Description of longitudinal joint No. of strengthening rings

Combustion chamber plates: Material Thickness: Sides Back Top Bottom
 If stays are fitted with nuts or riveted heads Working pressure by rules End plates in steam space:

Area at smallest part Area supported by each stay Working pressure by rules Material of stays
 How are stays secured Working pressure by rules Material of Front plates at bottom

Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules
 Material of tube plates Thickness: Front Back Mean pitch of stays

Girders to Chamber tops: Material Depth and
 Working pressures by rules Length as per rule Distance apart Number and pitch of stays in each

Steam dome: description of joint to shell % of strength of joint
 Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Working pressure of shell by rules Crown plates Thickness How stayed
 Date of Approval of Plan Tested by Hydraulic Pressure to

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
 Pressure to which each is adjusted Is Easing Gear fitted

WHL-0054 (112)

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

See other sheet

The foregoing is a correct description,

for Harland & Wolff Ltd.

Long Blunham

Manufacturer.

Dates of Survey while building
During progress of work in shops --
During erection on board vessel ---
Total No. of visits 36

Is the approved plan of main boiler forwarded herewith?

Dates of Examination of principal parts—Cylinders 23 Slides 8 - 17 Covers 1 Pistons Rods

Connecting rods 2 - 2 - 1 Crank shaft 2 Thrust shaft 17 Tunnel shafts 8 Screw shaft 9 - 1 - 18 Propeller

Stern tube 4 - 1 - 18 Steam pipes tested 7 - 9 - 17 Engine and boiler seatings 21 - 2 - 18 Engines holding down bolts

Completion of pumping arrangements 2 - 3 - 18 Boilers fixed 21 - 2 - 18 Engines tried under steam 2 - 3

Completion of fitting sea connections 18 - 1 - 18 Stern tube 18 - 1 - 18 Screw shaft and propeller 30 - 1

Main boiler safety valves adjusted 2 - 3 - 18 Thickness of adjusting washers 32

Material of Crank shafts *Steel* Identification Mark on Do. *LLOYDS* Material of Thrust shaft *Do* Identification Mark on

Material of Tunnel shafts *Do* Identification Marks on Do. *Do* Material of Screw shafts *Do* Identification Marks on

Material of Steam Pipes *W. Iron* Test pressure 540 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 *Yes*

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *S.S. War Python*

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

The machinery of this vessel has been constructed under supervision

Survey, and in accordance with the Rules, also as per instructions issued by the Shipping Controller.

The workmanship and the materials are of good class and on trial under steam in Belfast Lough, the

worked satisfactorily.

In our opinion it is eligible for record + L.M.C.

with notation Forced Draft + Electric Light

It is submitted that this vessel is eligible for THE RECORD + L.M.C 3-18. F.D.

The amount of Entry Fee ... £ : : When applied for, 18-3-18
Special *Donkey Boiler Fee* ... £ : : When received, 20-4-18
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
Due to Glasgow

Committee's Minute

Assigned

TUE. MAR 26 1918

+ L.M.C. 3-18 J.D.

MACHINERY CERTIFICATE WRITTEN.

Belfast

Continuation of Report No. 7925 dated 16th March 1918 on the

S.S. War Python

Ballast Pump 10 1/2" x 14" x 24"

General 9 1/2" x 7" x 18"

Feed 9 1/2" x 7" x 18"

List of Spare Gear

Propeller C.I. Solid

H.P. piston valve

Top end bolts

Bottom

Main bearing

Crank shaft coupling bolts & nuts

Tunnel

Feed pump suction valve

Discharge

Discharge

Main Feed Check valve

Donkey

Bolts & nuts

Cylinder cover studs & nuts

Steam chest

Pump ring

Raw round iron

flat

Spare fire bar etc.

R. F. Pennington

REMAIN