

REPORT ON MACHINERY.

No. 7905

Received at London Office

WED. 30 JAN. 1918

Date of writing Report *28th Jan 1918* When handed in at Local Office *10* Port of *Belfast*
 No. in Survey held at *Belfast* Date, First Survey *26th June 1917* Last Survey *23rd Jan 1918*
 Reg. Book. *P.S. War Python* (Number of Visits *30*) Gross *5155*
 on the *P.S. War Python* Tons Net *3124*
 Master *H. L. Byatt* Built at *Belfast* By whom built *Harland & Wolff Ltd* When built *1918*
 Engines made at *Belfast* By whom made *-* when made *-*
 Boilers made at *-* By whom made *-* when made *-*
 Registered Horse Power *✓* Owner *The Shipping Controller* Port belonging to *London*
 Nom. Horse Power as per Section 28 *518* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*

ENGINES, &c.—Description of Engines *Single Screw Triple Expansion* of Cylinders *3* No. of Cranks *3*
 Dia. of Cylinders *27"-44"-73"* Length of Stroke *48"* Revs. per minute *78* Dia. of Screw shaft *as per rule 14.68* Material of *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 *✓* If two
 liners are fitted, is the shaft lapped or protected between the liners *✓* Length of stern bush *60 1/2"*
 Dia. of Tunnel shaft *as per rule 13.3* Dia. of Crank shaft journals *as per rule 13.9* Dia. of Crank pin *14 1/2"* Size of Crank web *28 1/2"* Dia. of thrust shaft under
 collars *4 1/2"* Dia. of screw *17'-6"* Pitch of Screw *16'-6"* No. of Blades *4* State whether moveable *No* Total surface *102 1/2 sq ft*
 No. of Feed pumps *2* Diameter of ditto *4"* Stroke *24"* Can one be overhauled while the other is at work *Yes*
 No. of Bilge pumps *2* Diameter of ditto *4"* Stroke *24"* Can one be overhauled while the other is at work *Yes*
 No. of Donkey Engines *See other sheet* No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room *4-3 1/2"* In Holds, &c. *9-3 1/2" & 1-3 1/2"*

No. of Bilge Injections *1* sizes *8"* Connected to condenser, or to circulating pump *Pump* a separate Donkey Suction fitted in Engine room & size *1-3 1/2"*
 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 *✓*
 Are all connections with the sea direct on the skin of the ship *Yes - Except Main Tank inspection chest* 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 *Below*
 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 *Fore hold suction* How are they protected *Wood 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*
 Dates of examination of completion of fitting of Sea Connections *6-6-17* of Stern Tube *6-6-17* Screw shaft and Propeller *12-12-17*
 Is the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *No - wth trunk from deck* worked from *-*

BOILERS, &c.—(Letter for record *S*) Manufacturers of Steel *R. Colville & Sons Ltd*
 Total Heating Surface of Boilers *7668 sq ft* forced Draught fitted *Yes* No. and Description of Boilers *3 Single End Cylind.*
 Working Pressure *180 lbs* Tested by hydraulic pressure to *360 lbs* Date of test *17-12-17* No. of Certificate *516*
 Can each boiler be worked separately *Yes* Area of fire grate in each boiler *63 1/2 sq ft* No. and Description of Safety Valves to
 each boiler *2 - Direct Spring* Area of each valve *9.62 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 *Hand 8 ft* dia. of boilers *5'-6"* Length *11'-6"* Material of shell plates *Steel*
 Thickness *1 1/2"* Range of tensile strength *28-32 tons* Are the shell plates welded or flanged *No* Descrip. of riveting: cir. seam *L. P.*
 long. seam *Butt Seams* Pitch of rivets *9 1/8"* Lap of plates or width of butt straps *19 1/2"*
 Per centages of strength of longitudinal joint *88.3* Working pressure of shell by rules *182 lbs* Size of manhole in shell *16" x 12"*
 Size of compensating ring *Plate flange* and Description of Furnaces in each boiler *3 - Deyhton* Material *Steel* Outside diameter *50 3/4"*
 Length of plain part *5'* Thickness of plates *3 1/2"* Description of longitudinal joint *Weld* No. of strengthening rings *✓*
 Working pressure of furnace by the rules *180 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *3 1/2"* Back *4"* Top *3 1/2"* Bottom *3 1/2"*
 Pitch of stays to ditto: Sides *10 1/8" x 9 1/4"* Back *9 1/2" x 8 1/2"* Stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *180 lbs*
 Material of stay *Steel* Diameter at smallest part *2 3/8"* Area supported by each stay *984 sq in* Working pressure by rules *186 lbs* and plates in steam space:
 Material *Steel* Thickness *1 1/2"* Pitch of stays *21 1/2" x 21 1/2"* Stays are secured *By Nuts & Washers* Working pressure by rules *180 lbs* Material of stays *Steel*
 Diameter at smallest part *8 29/32"* Area supported by each stay *4593 sq in* Working pressure by rules *187 lbs* Material of Front plates at bottom *Steel*
 Thickness *3 1/2"* Material of Lower back plate *Steel* Thickness *3 1/2"* Greatest pitch of stays *13 5/8"* Working pressure of plate by rules *186 lbs*
 Diameter of tube *2 1/2"* Pitch of tubes *4" x 3 1/8"* Material of tube plate *Steel* Thickness: Front *3 1/2"* Back *4"* Mean pitch of stays *12" x 7 1/4"*
 Pitch across wide water spaces *13 5/8"* Working pressures by rules *181 lbs* Girders to Chamber tops: Material *Steel* Depth and
 thickness of girder at centre *10" x (5" x 2")* 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 *182 lbs* Superheater or Steam chest; how connected to boiler *✓* 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 *✓*

VERTICAL DONKEY BOILER—

Manufacturers of Steel

None

No.	Description	When made	Where fixed
Made at	By whom made		
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate
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
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates
Working pressure of furnace by rules	Thickness of furnace crown plates	Radius of do.	Stayed by
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey

SPARE GEAR. State the articles supplied:— *See other sheet*

The foregoing is a correct description,
for the *Harland & Wolff* Co. Manufacturer.

Dates of Survey
while building
Total No. of visits

26 June 1917 till 23 Jan 1918

Is the approved plan of main boiler forwarded herewith *Yes*

Dates of Examination of principal parts—Cylinders	3—Slides	—17	Covers	Pistons	Rods
Connecting rods	11—13	Trunk shaft	11—13	Thrust shaft	Tunnel shaft
Stern tube	3—11—17	Steam pipes tested	7—9—17	Engine and boiler seatings	2—1—17
Completion of pumping arrangements	22—1—18	Boilers fixed	4—1—17	Engines tried under steam	6—1—18
Main boiler safety valves adjusted	16—1—18	Thickness of adjusting washers	6—16		
Material of Crank shaft	Steel	Identification Mark on Do.	40YDS	Material of Thrust shaft	40
Material of Tunnel shafts	40	Identification Marks on Do.	40	Material of Screw shafts	40
Material of Steam Pipes	40	Test pressure	540 lb.		

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

The machinery of this vessel has been constructed under Special Survey, and in accordance with the Rules; also as per Specification and instructions issued by the Shipping Control. The workmanship and the materials are of good description and on trial under steam in Belfast Lough, the machinery worked satisfactorily. In my opinion, it is eligible for records + L.M.C. 1-18 with notation "Forced Draft" + "Electric Light".

No oil fuel burning installation fitted
Machinery duplicate of S.S. War Shamrock War Claver War Luffa War Col

It is submitted that
this vessel is eligible for
THE RECORD + L.M.C. 1. 18. F.D.

The amount of Entry Fee	£	When applied for.	28-1-18
Special	11-11	When received.	16-3-18
Donkey Boiler Fee	£		18-3-18
Travelling Expenses (if any)	£		

Committee's Minute

Assigned

FRI. 1-FEB. 1918

+ L.M.C. 1. 18

F.D.

Rpt. 9a.

Port of

Belfast

Continuation of Report No. 790 dated

28 JAN 1918 on the

S.S. War Python

List of Pump

- 1 Ballast $10\frac{1}{2} \times 14 \times 24$ ✓
- 1 General $9\frac{1}{2} \times 7 \times 18$ ✓
- 1 Feed $9\frac{1}{2} \times 7 \times 18$ ✓

List of Spare Gear

- 1 Propeller, C. Iron, Solid
- 1 H.P. piston valve
- 2 Top end bolts ✓
- 2 Bottom " ✓
- 2 Main bearing " ✓
- 3 Crank shaft coupling bolts + nuts ✓
- 3 Tunnel " ✓
- 1 Feed pump suction valve ✓
- 1 " " discharge " ✓
- 1 Bilge " suction " ✓
- 1 " " discharge " ✓
- 3 Main feed check valves ✓
- 3 Donkey " " ✓
- 24 Bolts + nuts ✓
- 6 cylinder cover studs + nuts ✓
- 6 Steam chest " " ✓
- 12 Link ring " " ✓
- 5 Bar round iron " " ✓
- 3 " flat " " ✓
- Spare fire bars etc.