

## REPORT ON MACHINERY.

No. 10380.

Received at London Office

Date of writing Report

19

When handed in at Local Office

21/5/19 Port of Middlesbrough

No. in Survey held at  
Reg. Book.

Stockton on-Tees

Date, First Survey 8<sup>th</sup> Aug/18 Last Survey 14<sup>th</sup> May 1919

on the S.S. PEEBLES ex War Petunia

(S.S. No 675)

Tons { Gross 5260.31  
Net 3217.64

Master J.G. Potts. Built at Stockton

By whom built Richardson Duck &amp; Co

When built 1919

Engines made at Stockton

By whom made Messrs Blair &amp; Co Ltd (No 1899) when made 1919

Boilers made at Newcastle

By whom made Wallend Slipway &amp; Dry Dock (312-B) when made 1918

Registered Horse Power

Owners Sutherland Steamship Co Port belonging to Newcastle

Nom. Horse Power as per Section 28 455

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted yes

ENGINES, &amp;c.—Description of Engines

Tri-compound

No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 27-44-73 Length of Stroke 48 Revs. per minute 77

Dia. of Screw shaft as per rule 14.7 as fitted 15.5 Material of screw shaft Ing 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 in one 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 tight fit If two

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush 5'-1 1/2"

Dia. of Tunnel shaft as per rule 13.33 as fitted 13 1/2

Dia. of Crank shaft journals as per rule 14.0 as fitted 14 1/2

Dia. of Crank pin 14 1/2 Size of Crank webs 28x9 Dia. of thrust shaft under

collars 14 3/4 Dia. of screw 17'-6" Pitch of Screw 16'-6"

No. of Blades 4 State whether moveable no Total surface 98.2

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 3 Sizes of Pumps 10 1/2 x 14 x 24

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4 @ 3 1/2"

In Holds, &amp;c. 2 @ 3 1/2" each hold except aftermost

where one @ 3 1/2" : Tunnel will one @ 3"

No. of Bilge Injections 1 sizes 13 Connected to condenser, &amp;c. to circulating pump yes

Is a separate Donkey Suction fitted in Engine room &amp; size yes - 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 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 others 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

suctions to forward holds How are they protected wood ceiling

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 see Newcastle Report No 71371

Is it fitted with a watertight door yes worked from top platform

BOILERS, &amp;c.—(Letter for record (S))

Manufacturers of Steel J. Spencer &amp; Sons &amp; Schultzy &amp; Co

Total Heating Surface of Boilers 6204

Is Forced Draft fitted yes No. and Description of Boilers 2 Single ended

Working Pressure 180

Tested by hydraulic pressure to 360 Date of test 25.10.18 No. of Certificate 9173

Can each boiler be worked separately yes

Area of fire grate in each boiler 76 1/2 sq ft No. and Description of Safety Valves to

each boiler 2 direct spring

Area of each valve 11 sq in Pressure to which they are adjusted 185 Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 2'-10"

Mean dia. of boilers 16'-6" Length 11'-6" Material of shell plates steel

Thickness 1 1/2 Range of tensile strength 29 1/2 - 33 1/2

Are the shell plates welded or flanged no Descrip. of riveting: cir. seams 8-lap

long. seams DBS-J. Riv Diameter of rivet holes in long. seams 1 1/2

Pitch of rivets 10 1/4 Lap of plates or width of butt straps 22 1/2

Per centages of strength of longitudinal joint

rivets 87.3 Working pressure of shell by rules 214 lb Size of manhole in shell 16" x 12"

Size of compensating ring 3/4 in

No. and Description of Furnaces in each boiler 4-Horison Material steel Outside diameter 45 1/2

Length of plain part top

Thickness of plates crown 1 1/2 Description of longitudinal joint welded No. of strengthening rings

bottom

bottom 3/2 Back 2 1/2 Top 1 1/2 Bottom 1 3/2

Working pressure of furnace by the rules 209

Combustion chamber plates: Material steel Thickness: Sides 1/2 Back 3/2 Top 1 1/2

Pitch of stays to ditto: Sides 9 1/2 x 7 1/2

Back 8 1/2 x 8 1/2 Top 9 1/2 x 8 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 212 lb

Material of stays steel

Area at smallest part 2.03 Area supported by each stay 77 sq in Working pressure by rules 237 lb End plates in steam space:

Material steel Thickness 1 1/2

Pitch of stays 20 1/2 x 18 1/2 How are stays secured X. 9. Working pressure by rules 214 Material of stays steel

Area at smallest part 7.07 sq in

Area supported by each stay 346 sq in Working pressure by rules 211 lb Material of Front plates at bottom steel

Thickness 1 1/2

Material of Lower back plate steel Thickness 3/2 Greatest pitch of stays 14 1/2 Working pressure of plate by rules 230

Diameter of tubes 2 1/2

Pitch of tubes 3 1/2 x 3 1/2 Material of tube plates steel Thickness: Front 1 Back 2 1/2 Mean pitch of stays 7 1/2

Pitch across wide water spaces 14

Working pressures by rules 209 Girders to Chamber tops: Material steel Depth and

thickness of girder at centre 8 1/2 x 1 1/2

Length as per rule 29 1/2 Distance apart 8 1/2 Number and pitch of stays in each 20 9 1/2

Working pressure by rules 207

Steam dome: description of joint to shell none % 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



IS A DONKEY BOILER FITTED? *yes*

If so, is a report now forwarded? *yes*

SPARE GEAR. State the articles supplied:— *Two each of con. and top-end, bottom-end and main bearing bolts and nuts: 3 crank shaft & 3 tunnel shaft coupling bolts and nuts: one set each of feed and bilge pump valves: 3 each of main and donkey chuck valves: one set each of HP & M. ram bottom piston rings: assorted bolts and nuts: iron of various sizes, one cast iron propeller and minor gear all as per specification*

The foregoing is a correct description,  
For BLAIR & Co., LIMITED

*Geo Wattishup*

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1918 Aug 8. 9. Sep 11. 16. 19. 24. Oct 1. 5. 9. 11. 14. 16. 18. 23. 25. 28. 30. Nov 1. 4. 6. 8. 11. 14. 16. 19. 20. 22. 27. 31. Dec 2. 3. 4. 5. 6. 9. 11. 1919 Jan 17. 20. Mar 3. 5. 10. 11. 21. 24. 27. Apr 1. 2. 3. 10. 11. 14. 15. 24. 29. May 2. 7. 12. 14.  
During erection on board vessel - - -  
Total No. of visits 59.

Is the approved plan of main boiler forwarded herewith *no*  
*and with report No. 10319 on War Pansy.*

" " " donkey " " " *yes*

Dates of Examination of principal parts—Cylinders 28.10.18 Slides 21.10.18 Covers 25.10.18 Pistons 21.10.18 Rods 25.10.18  
Connecting rods 25.10.18 Crank shaft 6.11.18 Thrust shaft 21.10.18 Tunnel shafts 18.11.18 Screw shaft 5.3.19 Propeller 5.3.19  
Stern tube 24.3.19 Steam pipes tested *hls* 24.10.18 Engine and boiler seatings 27.3.19 Engines holding down bolts 14.4.19  
Completion of pumping arrangements 12.5.19 Boilers fixed 29.4.19 Engines tried under steam 29.4.19  
Completion of fitting sea connections 27.3.19 Stern tube 27.3.19 Screw shaft and propeller 2.4.19  
Main boiler safety valves adjusted 29.4.19 Thickness of adjusting washers P.Bhr  $P = \frac{17}{32}$  S-  $\frac{13}{32}$  S.Bhr  $P = \frac{3}{8}$  S-  $\frac{15}{32}$  B  
Material of Crank shaft *By Steel* Identification Mark on Do. 7158 Material of Thrust shaft *By Steel* Identification Mark on Do. 7158  
Material of Tunnel shafts *By Steel* Identification Marks on Do. 7158 Material of Screw shafts *By Steel* Identification Marks on Do. 7158  
Material of Steam Pipes *Lap welded steel* Test pressure 540 lb

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 *"War Pansy" RPL 10319.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been built under Special Survey in accordance with the Rules and the specification. The materials and workmanship are sound and good. On completion the engines, Boilers and auxiliaries were examined under steam and found satisfactory*

*The machinery is now in a good and safe working condition and renders the vessel eligible in my opinion to have the notation of LMC.5.19 in the Register Book.*

Note:— The vessel is fitted with Electric Light and Wireless

Admiralty fees *2/6*

Due Indt £ 24-0-0 } 28/5/19

" Due £ 9-0-0 } 28/5/19

The amount of Entry Fee ... £ 3-0-0 When applied for,

Special  $\frac{2}{3}$  Due *hls* £ 28-10-0 19/5/19 1919

Donkey Boiler Fee ... £ 14-5-0 When received, *DMK*

Travelling Expenses (if any) £ - : : 21/5/19

Committee's Minute TUE. 27. MAY. 1919

Assigned

It is submitted that  
this vessel is eligible for  
THE RECORD. + LMC 5.19 F. D

RM 23.5.19.

*Wm Morrison*  
Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation