Rpt. 5a.

REPORT ON BOILERS. No. 39816.

Received at London Office WED. APR. 14 1920

Date of writing Report 191 When handed in at Local Office 12 H 1920 Port of Glasgow

No. in Reg. Book. Survey held at Renfrew Date, First Survey 22. 1. 18. Last Survey 31. 7 1918. (Number of Visits 14)

on the Boilers No 624 for Racia Type Tug "JAUNTY" Tons Gross 600 Net 57

Master Built at Whiteinch By whom built Ritchie Graham & Milne (343) When built 1919

Engines made at Paisley By whom made Campbell & Calderwood (953) When made 1919

Boilers made at Renfrew By whom made Wm Simons & Co Ltd (624) When made 1918

Registered Horse Power Owners H.M. Government Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Steel Co of Scotland

(Letter for record S) **Total Heating Surface of Boilers** 3600 ☐ft Is forced draft fitted Yes **No. and Description of Boilers** Two. Single ended **Working Pressure** 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 31. 7. 18

No. of Certificate 14387. Can each boiler be worked separately — **Area of fire grate in each boiler** 66 ☐ft No. and Description of safety valves to each boiler — Area of each valve — Pressure to which they are adjusted —

Are they fitted with easing gear — In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler —

Smallest distance between boilers or uptakes and bunkers or woodwork — Mean dia. of boilers 14'-1 21/32 Length 10'-6"

Material of shell plates steel Thickness 1 5/32 Range of tensile strength 28/32 tons Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams DR lap long. seams DBS. TR Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 8 5/16

~~Lap of plates or~~ width of butt straps 17½" Per centages of strength of longitudinal joint rivets 86.2 plate 85.6 Working pressure of shell by rules 182 Size of manhole in shell 20 x 16 Size of compensating ring 34 x 33 x 1 5/32 Flanged **No. and Description of Furnaces in each boiler** 3 Morison Material steel Outside diameter 48 1/4 Length of plain part top — bottom — Thickness of plates crown bottom 19/32"

Description of longitudinal joint weld No. of strengthening rings — Working pressure of furnace by the rules 196 Combustion chamber plates: Material steel Thickness: Sides 19/32" Back 19/32" Top 19/32" Bottom ¾" Pitch of stays to ditto: Sides 8 x 7 Back 8½ x 7½ Top 9 x 7 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 190 Material of stays steel ~~Diameter~~ area at smallest part 1.45 sq" Area supported by each stay 63 sq" Working pressure by rules 183 End plates in steam space: Material steel Thickness 1 3/16 Pitch of stays 19¼ x 18¾ How are stays secured DNW Working pressure by rules 185 Material of stays steel ~~Diameter~~ area at smallest part 6.33 sq" Area supported by each stay 365 sq" Working pressure by rules 180 Material of Front plates at bottom steel Thickness ⅞ Material of Lower back plate steel Thickness 25/32 Greatest pitch of stays 14 Working pressure of plate by rules 180 Diameter of tubes 3¼ Pitch of tubes 4 7/16 x 4 7/16 Material of tube plates steel Thickness: Front ⅞ Back 11/16 Mean pitch of stays 8 7/8 Pitch across wide water spaces 14 ¼ doubled Working pressures by rules 184 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 2 plates 7 ⅜ x 1 1/16 Length as per rule 2'-6½ Distance apart 9" Number and pitch of Stays in each 3 of 7" Working pressure by rules 198 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 —

Survey request form No 2163 attached

FOR WM. SIMONS & CO. LTD. SECRETARY

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building — During progress of work in shops: 1918 Jan 22. Feb 2. 18. 21. Mar 5. 19. 29. Apr 4. 9. 25 May 6. 30. June 10. July 31.

During erection on board vessel: —

Is the approved plan of boiler forwarded herewith yes

Total No. of visits 14.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under special survey in accordance with the rules and approved plan. Materials workmanship are good. The boilers have been securely fitted on board the vessel and tried under steam with satisfactory results.

Survey Fee ... ... £ Charged on machinery When applied for, ✓ 191

Travelling Expenses (if any) £ When received, 191

Harry Clarke
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 13 APR 1920

Assigned See attached machinery report