

REPORT ON WATER TUBE BOILERS.

Boiler D.611. RECEIVED Rpt. 50150 11 JAN 1950

Received at London Office 5 JAN 1950

Report of 4-1-1950 When handed in at Local Office 4-1-1950 Port of West Hartlepool No. in Survey held at West Hartlepool Date, First Survey 16th August, Last Survey 12th December 1949. Reg. Bk. on the S/W "SOUTHERN GAMBLER" (Number of Visits 12) Tons Gross 440 Net 152 Built at South Bank on Tees By whom built Smiths Dock Co Ltd When built 1950 Engines made at do By whom made do When made 1950 Boilers made at West Hartlepool By whom made Richardsons Westgirth & Co Ltd When made 1950 Nominal Horse Power Owners THE SOUTH GEORGIA CO. LTD Port belonging to LEITH

WATER TUBE BOILERS MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel

Date of Approval of plan 1-5-47 Number and Description or Type of Boilers 2 - Foster Wheeler W.T. Boilers Working Pressure 220lb. Tested by Hydraulic Pressure to 418lb. Date of Test 12-12-49 No. of Certificate 4109 Can each boiler be worked separately Yes Total Heating Surface of Boilers 2545 sq. ft. Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 2 - Swinney's No. and description of safety valves on each boiler 1 - Single Spring H.L. (Cochburn) Area of each set of valves per boiler as fitted 9.430 sq. in. Pressure to which they are adjusted 240lb/sq. in. Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler None Smallest distance between boilers or uptakes and bunkers or woodwork 2'8" Height of boiler 15'-3 7/16" Width and Length 9'-10 1/2" x 11'-6 5/8" Steam Drums: Number in each boiler One Inside diameter 3'-6" Thickness of plates 1 3/16" Range of Tensile Strength 28-32 tons Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Broomside Boiler Works Have all the requirements of the rules for Class I vessels been complied with Yes Description of riveting: Cir. seams long. seams Diameter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint: Plate Rivet Diameter of tube holes in drum 2' x 1 1/2" Pitch of tube holes 3' x 1 3/4" Percentage strength of shell in way of tubes 37.4-38.7% Steam Drum Heads or Ends: Range of tensile strength 26-30 tons Thickness of plates 1 3/16" Radius or how stayed 3'-5 3/4" inside Size of manhole or handhole 16" x 12" Water Drums: Number in each boiler One Inside Diameter 2'-5 3/8" Thickness of plates 1 3/16" Range of tensile strength 28-32 tons Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Broomside Boiler Works Have all the requirements of the rules for Class I vessels been complied with Yes Description of riveting: Cir. seams long. seam Diameter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint: Plate Rivet Diameter of tube holes in drum 2' x 1 1/2" Pitch of tube holes 3' x 1 3/4" Percentage strength of drum shell in way of tubes 37.4-38.7% Water Drum Heads or Ends: Range of tensile strength 26-30 tons Thickness of plates 1 3/16" Radius or how stayed 2'-5 3/8" inside Size of manhole or handhole 16" x 12" Headers or Sections: Number Material Thickness Tested by Hydraulic Pressure to Tubes: Diameter Thickness Number Steam Dome or Collector: Description of Joint to Shell Inside diameter Thickness of shell plates Range of tensile strength Description of longitudinal joint If fusion welded, state name of welding firm Have all the requirements of the rules for Class I vessels been complied with Diameter of rivet holes Pitch of rivets Thickness of straps Percentage strength of long. joint Plate Rivet Crown or End Plates: Range of tensile strength Thickness Radius or how stayed SUPERHEATER. Drums or Headers: Number in each boiler Two Inside Diameter 5 1/2" x 4 1/2" Thickness 3/4" Material Mild Steel Range of tensile strength 28-32 tons Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Foster Wheeler Have all the requirements of the rules for Class I vessels been complied with Yes Description of riveting: Cir. seams long. seams Diameter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint: Plate Rivet Diameter of tube holes in drum 1 1/2" x 1 1/8" Pitch of tube holes 1 3/16" Percentage strength of drum shell in way of tubes Drum Heads or Ends: 2 Thickness 1 3/8" Range of tensile strength 28-32 tons Radius or how stayed Size of manhole or handhole 20" x 10" Number, diameter, and thickness of tubes 88-1 1/2" OD x 11 1/4" Tested by Hydraulic Pressure to 425 lb. Date of Test No. and description of Safety Valves One - Double Spring High Lift Area of each set of valves 6.3" sq. in. Pressure to which they are adjusted 225 lb/sq. in. Is easing gear fitted Yes Spare Gear. Has the spare gear required by the rules been supplied

The foregoing is a correct description, RICHARDSONS, WESTGARTH & Co. LIMITED Manufacturer.

Dates of Survey while building During progress of work in shops 1949 Aug. 16-23-25-29 Sept 8 Oct 3-13-21 Nov. 2-15-23 Dec. 12 Is the approved plan of boiler forwarded herewith DIRECTOR Total No. of visits 12

Is this boiler a duplicate of a previous case Yes If so, state vessel's name and report No. Hpl Rpt No 19077.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under Spec. Survey in accordance with approved plans & Rules of British Corporation Register for a working pressure of 220lb. The materials & workmanship are good. On completion they were tested by hydraulic pressure of 418 lb. and found sound & tight.

Survey Fee ... £ 67: - When applied for, 4-1-1950 Travelling Expenses (if any) £ 71-4-0 When received, 19

Sh Wood Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Assigned See F.E. mch. rpt.

The Boilers have been despatched to Middletrough for installation on board the vessel,

Port Steam Drum	7845	7-3-49	PM
Port Water Drum	7844	7-3-49	PM
Starb Steam Drum	7846	7-3-49	PM
Starb Water Drum	7843	7-3-49	PM
Port & Starb Superheater leaders D 19021 22-4-49			

These boilers have been severely fitted and examined under working conditions. They were found to be entirely satisfactory and the safety valves set adjusted as stated overleaf.

J. C. Smith