

REPORT ON BOILERS.

No. 40621.

Received at London Office 25 FEB 1930

Date of writing Report 14 Feb 1930 When handed in at Local Office 14 Feb 1930 Port of HULL.

No. in Survey held at Goole Date, First Survey 21 Aug 1928 Last Survey 14 Feb 1930.
 (Number of Visits 12) Tons { Gross 671.30
 Net 326.40

1808 on the Steel S.S. "PORTAVON"

Master Built at Goole By whom built Goole S.B. & R. Co Ltd Yard No. 265 When built 1930

Engines made at Loughampton By whom made Say, Summers & Co Ltd Engine No. 366. When made

Boilers made at Newcastle By whom made Palmer S.B. & Co Boiler No. 1050. When made

Nominal Horse Power 97 Owners Portfield Steamship Co Ltd Port belonging to Cardiff.
Managers W.E. Skinde & Co

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel _____ (Letter for Record _____)

Total Heating Surface of Boilers 1780 Sq. feet. Is forced draught fitted _____ Coal or Oil fired _____

Working Pressure 180 lbs. sq.

No. and Description of Boilers _____ Can each boiler be worked separately _____

Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____

Area of Firegrate in each Boiler _____ No. and Description of safety valves to each boiler _____

Area of each set of valves per boiler { per Rule 11.4 sq. ft. Pressure to which they are adjusted 180 lbs. Are they fitted with easing gear Yes.
 { as fitted 11.86 sq. ft.

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 10" Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating _____ Is the bottom of the boiler insulated

Largest internal dia. of boilers _____ Length _____ Shell plates: Material _____ Tensile strength _____

Thickness _____ Are the shell plates welded or flanged _____ Description of riveting: circ. seams { end _____
 { inter. _____

Long. seams _____ Diameter of rivet holes in { circ. seams _____ Pitch of rivets { _____
 { long. seams _____

Percentage of strength of circ. end seams { plate _____ Percentage of strength of circ. intermediate seam { plate _____
 { rivets _____ { rivets _____

Percentage of strength of longitudinal joint { plate _____ Working pressure of shell by Rules _____
 { rivets _____ { combined _____

Thickness of butt straps { outer _____ No. and Description of Furnaces in each Boiler _____
 { inner _____

Material _____ Tensile strength _____ Smallest outside diameter _____

Length of plain part { top _____ Thickness of plates { crown _____ Description of longitudinal joint _____
 { bottom _____ { bottom _____

Dimensions of stiffening rings on furnace or c.c. bottom _____ Working pressure of furnace by Rules _____

End plates in steam space: Material _____ Tensile strength _____ Thickness _____ Pitch of stays _____

How are stays secured _____ Working pressure by Rules _____

Tube plates: Material { front _____ Tensile strength { _____ Thickness { _____
 { back _____ { _____ { _____

Lean pitch of stay tubes in nests _____ Pitch across wide water spaces _____ Working pressure { front _____
 { back _____

Girders to combustion chamber tops: Material _____ Tensile strength _____ Depth and thickness of girder _____

At centre _____ Length as per Rule _____ Distance apart _____ No. and pitch of stays _____

On each _____ Working pressure by Rules _____ Combustion chamber plates: Material _____

Tensile strength _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____

Pitch of stays to ditto: Sides _____ Back _____ Top _____ Are stays fitted with nuts or riveted over _____

Working pressure by Rules _____ Front plate at bottom: Material _____ Tensile strength _____ Thickness _____

Thickness _____ Lower back plate: Material _____ Tensile strength _____ Thickness _____

Pitch of stays at wide water space _____ Are stays fitted with nuts or riveted over _____

Working Pressure _____ Main stays: Material _____ Tensile strength _____

Shipping. _____

Diameter { At body of stay, _____ No. of threads per inch _____ Area supported by each stay _____
 { Over threads _____

Working pressure by Rules _____ Screw stays: Material _____ Tensile strength _____

Diameter { At turned off part, _____ No. of threads per inch _____ Area supported by each stay _____
 { Over threads _____



Report No. 800921
 Newcastle
 attached

Working pressure by Rules _____ Are the stays drilled at the outer ends _____ Margin stays: Diameter { At turned off part, _____
 or _____
 Over threads _____
 No. of threads per inch _____ Area supported by each stay _____ Working pressure by Rules _____
Tubes: Material _____ External diameter { Plain _____ Thickness { _____ No. of threads per inch _____
 Stay _____
 Pitch of tubes _____ Working pressure by Rules _____ **Manhole compensation:** Size of opening in _____
 shell plate _____ Section of compensating ring _____ No. of rivets and diameter of rivet holes _____
 Outer row rivet pitch at ends _____ Depth of flange if manhole flanged _____ **Steam Dome:** Material _____
 Tensile strength _____ Thickness of shell _____ Description of longitudinal joint _____
 Diameter of rivet holes _____ Pitch of rivets _____ Percentage of strength of joint { Plate _____
 Rivets _____
 Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ No. and diameter of _____
 stays _____ Inner radius of crown _____ Working pressure by Rules _____
 How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and pitch _____
 of rivets in outer row in dome connection to shell _____

Type of Superheater _____ Manufacturers of { Tubes _____
 Steel castings _____
 Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____
 Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off and _____
 the boiler be worked separately _____ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler _____
 Area of each safety valve _____ Are the safety valves fitted with easing gear _____ Working pressure as per _____
 Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure: _____
 tubes _____ castings _____ and after assembly in place _____ Are drain cocks or valves fitted _____
 to free the superheater from water where necessary _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with _____

The foregoing is a correct description, _____
 Manufacturer: _____

Dates of Survey { During progress of work in shops - - } See attached reports _____ Are the approved plans of boiler and superheater forwarded herewith _____
 while building { During erection on board vessel - - } on Machy _____ (If not state date of approval.)
 Total No. of visits _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been _____
 satisfactorily fitted on board, examined under steam, and _____
 its safety valves adjusted under steam as above. _____

Please see Newcastle Report No. 80092. _____

Please see engine report _____
 Survey Fee £ : : When applied for, ✓ 192
 Travelling Expenses (if any) £ : : When received, ✓ 192

John Mackintosh
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute _____ FRI. 28 FEB. 1930

TUE. 4 MAR 1930

Assigned _____ See other S.E. Rpt

