

REPORT ON BOILERS.

No. 89297

20 OCT 1932

Received at London Office

Date of writing Report _____ 19 _____ When handed in at Local Office 18/10/1932 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Walsend-on-Tyne Date, First Survey 19 Sep. Last Survey 14 Oct 1932
 g. Book. _____ (Number of Visits 10.)

on the S/S. Castleman Tons { Gross _____ Net _____

Master _____ Built at Sunderland By whom built W Doxford & Sons Yard No. _____ When built 1900

Engines made at Sunderland By whom made W Doxford & Sons Ltd Engine No. _____ When made do

Boilers made at do By whom made do Boiler No. _____ When made do

Nominal Horse Power 547 1/2 Owners Moore Line Ltd Port belonging to London.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Port of Spain main Boilers fitted with superheaters. (Letter for Record _____)

Total Heating Surface of Boilers _____ Is forced draught fitted _____ Coal or Oil fired _____

No. and Description of Boilers _____ Working Pressure _____

Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Can each boiler be worked separately _____

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 _____ as fitted _____ 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 _____ 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 _____ long. seams _____ Pitch of rivets { _____

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

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

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

Material _____ Tensile strength _____ Smallest outside diameter _____

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

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 _____ back _____ Tensile strength { _____ Thickness { _____

Mean 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 _____

in 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 _____ 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 _____

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

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

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

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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 _____ Stay _____ Thickness { _____ No. of threads per inch _____

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 North Eastern Locomotive Manufacturers of Stewart & Lloyds Ltd Tubes Stewart & Lloyds Ltd Steel Widening the Firth of Forth Steel Coy Ltd.

Number of elements 144 Material of tubes Solid drawn steel Internal diameter and thickness of tubes _____

Material of headers Wart steel Tensile strength 26 to 30 tons Thickness 1 1/2" Can the superheater be shut off and the boiler be worked separately no

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler yes

Area of each safety valve 3.1416" Are the safety valves fitted with easing gear yes Working pressure as per Rules 180 lbs Pressure to which the safety valves are adjusted 185 lbs Hydraulic test pressure: tubes 150 lbs + castings 540 lbs 1" and after assembly in place 450 lbs Are drain cocks or valves fitted to free the superheater from water where necessary yes.

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

The foregoing is a correct description, Manufacturer. _____

Dates of Survey { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) _____

{ During erection on board vessel - - - } Total No. of visits _____

Is this Boiler a duplicate of a previous case _____ If so, state Vessel's name and Report No. _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

Superheaters fitted to the two wing boilers. Materials & workmanship good. Hydraulic tests satisfactory. Safety valves adjusted under steam as above.

Survey Fee £ 10 : - : - | When applied for, 19 OCT 1932

Travelling Expenses (if any) £ : ✓ : | When received, 29/10/1932

William Butler
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 28 OCT 1932

Assigned _____

