

REPORT ON BOILERS.

Received at London Office 3 MAR 1932

Date of writing Report 1932 When handed in at Local Office 25/2/32 Port of Newcastle-on-Tyne

No. in Reg. Book. Survey held at Wallsend Farms Date, First Survey 15 Feb. Last Survey 25 Feb 1932

on the Steel S.S. "Cadillac" (Number of Visits 17) Gross 120 1/2 Tons Net 74 1/2

Master Built at Newcastle By whom built Palmes Coy Ltd Yard No. ✓ When built 1914-17

Engines made at Newcastle By whom made Palmes Coy Ltd. Engine No. ✓ When made do

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

Nominal Horse Power 493. Owners Anglo American Oil Coy Ltd Port belonging to Newcastle.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Fitting of Superheaters to Main Boilers. (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

Percentage of strength of circ. end seams {plate rivets Diameter of rivet holes in {circ. seams long. seams Pitch of 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

If not, state whether, and when, one or more of the following conditions apply: Is a Report also sent on the Hull of the Ship?

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Working pressure by Rules *352* Are the stays drilled at the outer ends *Yes* Margin stays: Diameter *1 1/2"* ^{At turned off part.} or ^{Over threads}
 No. of threads per inch *12* Area supported by each stay *100 sq in* Working pressure by Rules *352*
 Tubes: Material *Wrought steel* External diameter *10 1/2"* ^{Plain} Thickness *1/2"* ^{Stay} No. of threads per inch *12*
 Pitch of tubes *18"* Working pressure by Rules *352* Manhole compensation *None* Size of opening in shell plate *18"*
 Section of compensating ring *None* No. of rivets and diameter of rivet holes *12 rivets 1/2"*
 Outer row rivet pitch at ends *18"* Depth of flange if manhole flanged *None* Steam Dome: Material *None*
 Tensile strength *36000* Thickness of shell *1/2"* Description of longitudinal joint *None*
 Diameter of rivet holes *1/2"* Pitch of rivets *18"* Percentage of strength of joint *100%* ^{Plate} ^{Rivets}
 Internal diameter *10 1/2"* Working pressure by Rules *352* Thickness of crown *None* No. and diameter of stays *None*
 Inner radius of crown *None* Working pressure by Rules *352*
 How connected to shell *None* Size of doubling plate under dome *None* Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell *None*

Type of Superheater *North Eastern Smokestack* Manufacturers of *Weldless Steel Tube Coy* ^{Tubes} *Wrought Steel* ^{Steel castings} *The Bradford Iron Works*
 Number of elements *352* Material of tubes *Solid Drawn Steel* Internal diameter and thickness of tubes *10 1/2" x 1/2"*
 Material of headers *Wrought steel* Tensile strength *36000 lbs* Thickness *1/2"* Can the superheater be shut off and the boiler be worked separately *Yes*
 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 *3.14 sq in* Are the safety valves fitted with easing gear *Yes* Working pressure as per Rules *220 lbs*
 Pressure to which the safety valves are adjusted *225 lbs per sq in* Hydraulic test pressure: tubes *1500 lbs* *660 lbs* and after assembly in place *550 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 *Yes*
 The foregoing is a correct description,
 Manufacturer.

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

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

Survey Fee ... £ *See note* : *192* When applied for, *192*
 Travelling Expenses (if any) £ *See note* : *192* When received, *192*

William D. H. Foster
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE. 15 MAR 1932* *FRI. 22 JUL 1932* *FRI. 9 DEC 1932*
 Assigned

