

REPORT ON BOILERS.

No. 20318.

Received at London Office

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Date of writing Report 4/1/37 When handed in at Local Office 26th FEBRUARY 1937 Port of GreenockNo. in Survey held at Greenock
Reg. Book.Date, First Survey 5th FEBRUARY 1936 Last Survey 27th FEBRUARY 1937

on the

M/S "San Calisto"(Number of Visits 1) Gross 8010.20
Tons Net 4804.43

Master J. M. [Signature] Built at Pielongow By whom built Lithgow & Co Yard No. 892 When built 1937
Engines made at Greenock By whom made John & Richard Reid & Co Engine No. 96K When made 1937
Boilers made at ditto By whom made ditto Boiler No. 1199 When made 1937
Nominal Horse Power 186 Owners Eagle Oil & Shipping Co Port belonging to London

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY, OR~~ DONKEY.Manufacturers of Steel Colvile Steel Co of Scotland & Stirling Works Ltd (Letter for Record S)Total Heating Surface of Boilers 3380 sq ft Is forced draught fitted Yes Coal or Oil fired OilNo. and Description of Boilers 2 Single Ended Dry Back Working Pressure 180Tested by hydraulic pressure to 320 Date of test 28-10-36 No. of Certificate 2044 Can each boiler be worked separately YesArea of Firegrate in each Boiler Oil Fuel No. and Description of safety valves to each boiler 2 Double SpringArea of each set of valves per boiler { per Rule 10.8 sq ft as fitted 11.8 sq ft Pressure to which they are adjusted 185 Are they fitted with easing gear YesIn 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 NoSmallest distance between shell of boiler and tank top plating — Is the bottom of the boiler insulated YesLargest internal dia. of boilers 12'-1" Length 10'-3" Shell plates: Material S Tensile strength 29.33Thickness 1" Are the shell plates welded or flanged No Description of riveting: circ. seams { end DE inter. —long. seams TR & DBS Diameter of rivet holes in { circ. seams 1 1/16" Pitch of rivets { 3'0.5" as fitted 1 1/32"Percentage of strength of circ. end seams { plate 65.2 rivets 45.6 Percentage of strength of circ. intermediate seam { plate — rivets —Percentage of strength of longitudinal joint { plate 85.25 rivets 88.6 combined 88.2 Working pressure of shell by Rules 186Thickness of butt straps { outer 3/4" inner 7/8" No. and Description of Furnaces in each Boiler 2 MorrisonMaterial S Tensile strength 26-30 Smallest outside diameter 3'-4"Length of plain part { top — bottom — Thickness of plates { crown 1/2" bottom — Description of longitudinal joint weldDimensions of stiffening rings on furnace or c.c. bottom — Working pressure of furnace by Rules 180End plates in steam space: Material S Tensile strength 26-30 Thickness 13/8" Pitch of stays 22"How are stays secured D N T Washers Working pressure by Rules 219Tube plates: Material { front S back S Tensile strength { 26-30 Thickness { 15/16"Mean pitch of stay tubes in nests 9'-3 1/5" Pitch across wide water spaces 14 1/2" Working pressure { front 193 back —Girders to combustion chamber tops: Material — Tensile strength — Depth and thickness of girderat centre — Length as per Rule — Distance apart — No. and pitch of staysin 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 S Tensile strength 26-30Thickness 15/16" Lower back plate: Material S Tensile strength 26-30 Thickness 15/16"Pitch of stays at wide water space 1-2 1/2 Are stays fitted with nuts or riveted over —Working Pressure — Main stays: Material S Tensile strength 28-32Diameter { At body of stay 3 3/8" No. of threads per inch 6 Area supported by each stay 1484 sq inWorking pressure by Rules 186 Screw stays: Material — Tensile strength —Diameter { At turned off part — No. of threads per inch — Area supported by each stay —

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 ☒ 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 ☒

Area of each safety valve ☒ Are the safety valves fitted with casing 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 22 inclusive for boilers been complied with ☒

The foregoing is a correct description,
For JOHN G. KINCAID & CO. LIMITED.
W. G. Kincaid Director. Manufacturer.

Dates of Survey ☒ During progress of work in shops - -
while building ☒ During erection on board vessel - -

SEE MACHINERY REPORT

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.) These Boilers have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. They have been securely fitted on board. This Report accompanies that of the Machinery

Survey Fee ☒ Charged on Machinery ☒
Travel Expenses (if any) ☒

When applied for. 192
When received. 192

W. G. Kincaid
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 2-MAR 1937

Assigned SEE ACCOMPANYING MACHINERY REPORT