

REPORT ON BOILERS.

No. 108898

Received at London Office

17 NOV 1951

12 JAN 1952

Date of writing Report 16.11.51 When handed in at Local Office 16.11.51 Port of NEWCASTLE-ON-TYNE
 No. in Survey held at WALLSEND-ON-TYNE Date, First Survey 19.6.50 Last Survey 13.11.51
 No. in Book 1 on the M.V. "BRITISH MAPLE" (Number of Visits 58)
 Tons Gross 1 Net 1
 Built at SUNDECLAND By whom built SIR JAMES LAING & CO. LTD Yard No. 792 When built 1951
 Engines made at HARTLEPOOL By whom made RICHARDSON, WESTGARTH & CO. LTD Engine No. 3190 When made 1951
 Boilers made at WALLSEND-ON-TYNE By whom made NORTH EASTERN MARINE ENG CO (1938) LTD Boiler No. 3190 When made 1951
 Nominal Horse Power 4004 $\frac{4004}{12} = 334$ Owners BRITISH TANKER CO. LTD Port belonging to LONDON

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel COLVILLES LTD (Letter for Record S)
 Total Heating Surface of Boilers 2002 x 2 = 4004 sq ft Of Superheaters ✓
 Total for Register Book ✓ Is forced draught fitted YES Coal or Oil fired OIL OR EX-GAS
 No. and Description of Boilers 2 SINGLE ENDED Working Pressure 150 LBS/SQ IN
 Tested by hydraulic pressure to 275 LBS/SQ IN Date of test 12.5.51 No. of Certificate 1435 Can each boiler be worked separately YES
 Area of Firegrate in each Boiler ✓ No. and Description of safety valves to each boiler ONE 2 1/2" CS IMPROVED HIGH LIFT DOUBLE SAFETY VALVE
 Area of each set of valves per boiler per Rule 7.58 sq in 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 NO MAIN BOILERS
 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 BOILER FLAT 3'-6" Is the bottom of the boiler insulated ✓
 Largest internal dia. of boilers 12'-10 3/16" Length 11'-6" OVERALL Shell plates: Material STEEL Tensile strength 29/33 TONS/SQ IN
 Fusion welded, state name of welding Firm ✓ Have all the requirements of the Rules for Class I vessels DE OVERLAP
 When complied with ✓ Thickness 29/32" Are the shell plates welded or flanged NO Description of riveting: circ. seams DE OVERLAP
 Long. seams TR DOUBLE BUTT STRAP Diameter of rivet holes in circ. seams 1 3/32" Pitch of rivets 3 1/4"
 Percentage of strength of circ. end seams plate 66.4 Percentage of strength of circ. intermediate seam plate 50.6
 Percentage of strength of longitudinal joint plate 85.3 WORKING PRESSURE OF SHELL BY RULES 157.3 LBS/SQ IN
 Thickness of butt straps outer 3/4" No. and Description of Furnaces in each Boiler TWO CORRUGATED DEIGHTON TYPE
 Material STEEL Tensile strength 26/30 TONS/SQ IN Smallest outside diameter 3'-8 3/16"
 Length of plain part top 1 Thickness of plates 15/32" Description of longitudinal joint WELD
 Dimensions of stiffening rings on furnace or c.c. bottom NONE WORKING PRESSURE OF FURNACE BY RULES 152 LBS/SQ IN
 End plates in steam space: Material STEEL Tensile strength 26/30 TONS/SQ IN Thickness 1 3/8" Pitch of stays 30" x 16"
 How are stays secured NUTTED IN & OUT
 Tube plates: Material STEEL Tensile strength 26/30 TONS/SQ IN Thickness 27/32"
 Mean pitch of stay tubes in nests 9.375" Pitch across wide water spaces 14 1/2"
 Rinders to combustion chamber tops: Material STEEL Tensile strength 29/33 TONS/SQ IN Depth and thickness of girder
 centre 7" x 3/4" Length as per Rule 2'-10" Distance apart 6 1/4" No. and pitch of stays
 each EW TO CC TOP Combustion chamber plates: Material STEEL
 Tensile strength 26/30 TONS/SQ IN Thickness: Sides 3/4" Back 3/4" Top 3/4" Bottom 3/4"
 Pitch of stays to ditto: Sides 1 1/2" x 10" Back 10 3/4" x 10 3/4" Top CC GIRDER EW Are stays fitted with nuts or riveted over SIDE STAYS - NUTS
 Front plate at bottom: Material STEEL Tensile strength 26/30 TONS/SQ IN
 Thickness 27/32" Lower back plate: Material STEEL Tensile strength 26/30 TONS/SQ IN Thickness 13/16"
 Pitch of stays at wide water space 14 1/2" Are stays fitted with nuts or riveted over EW TO PLATE
 Main stays: Material STEEL Tensile strength 28/32 TONS/SQ IN
 Diameter At body of stay 3" No. of threads per inch 6
Over threads 3 1/4"
 Crew stays: Material STEEL Tensile strength 26/30 TONS/SQ IN
 Diameter At turned off part 1 5/8" No. of threads per inch 1 3/4" - 9
Over threads 1 3/4"



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Are the stays drilled at the outer ends... *No* ✓ Margin stays: Diameter { At turned off part... *1 3/4"* or Over threads... *1 3/4"*

No. of threads per inch... *EW*

Tubes: Material *STEEL* External diameter { Plain... *2 1/2"* Stay... *2 1/2"* Thickness { *10.29* *5 1/8"* *5 3/8"* No. of threads per inch *9*

Pitch of tubes... *3 3/4" x 3 3/4"* Manhole compensation: Size of opening

shell plate... *16 x 12* Section of compensating ring... No. of rivets and diameter of rivet holes... ✓

Outer row rivet pitch at ends... ✓ Depth of flange if manhole flanged... *4 1/8"* ✓ Steam Dome: *NONE* ✓

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... ✓ Thickness of crown... ✓ No. and diameter of stays... ✓ Inner radius of crown... ✓

How connected to shell... ✓ Size of doubling plate under dome... ✓ Diameter of rivet holes and of rivets in outer row in dome connection to shell... ✓

~~Is~~ Superheater... *NONE* Manufacturers of { Tubes... ✓ Steel forgings... ✓ 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 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... ✓

Pressure to which the safety valves are adjusted... ✓ Hydraulic test pressure... ✓

tubes... ✓ forgings and castings... ✓ and after assembly in place... ✓ Are drain cocks 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... *YES*

The foregoing is a correct description,
THE NORTH EASTERN MARINE ENGINEERING CO. (1989)
Harry Hunt Manufacturer

Dates of Survey while building { During progress of work in shops - - - [1950] JUNE 19, OCT. 25, NOV. 15, 21, DEC. 13, 20, 21 (1951) Are the approved plans of boiler and superheater forwarded herewith *YES* DIRECT (If not state date of approval.)
During erection on board vessel - - - JAN. 8, 10, 12, 16, 17, 22, 24, 25, 26, FEB. 1, 9, 18, 16, 19, 20, 22, MAR. 9, 14, 21, APR. 12, MAY 9, JUNE 8, JULY 19, AUG. 13, 23, 31, SEPT. 14, 17, 19, 20, 21, 25, 27, 28, OCT. 1, 2, 12, 15, 16, 17, 19, 22, 26, 29, 30, NOV. 6, 13 Total No. of visits... *58*

Is this Boiler a duplicate of a previous case... *YES* If so, state Vessel's name and Report No. *M.V. "BRITISH BIRCH" NEWCASTLE-ON-TYNE*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *The boiler has been constructed in accordance with the Approved Plans. The materials & workmanship are good. The boiler has been satisfactorily installed on board.*

PLEASE FORWARD REPORT TO HARTLEPOOL SURVEYORS IN DUE COURSE

Survey Fee *334 MN £58 : 8 : 0* When applied for... *16 NOV 1951*
Travelling Expenses (if any) £ : : When received... *19*

J. A. Orle

Engineer Surveyor to Lloyd's Register of Shipping

FRI. 8 FEB 1952

Committee's Minute

Assigned *See F.E. mchly rpt.*



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