

# REPORT ON BOILERS.

No. 13199.7

Received at London Office

5 SEP 1955 6 JAN 1956

Date of writing Report -2 SEP 1955

When handed in at Local Office -2 SEP 1955

Port of LONDON

No. in Survey held at LONDON

Date, First Survey 15.4.55 Last Survey 9.8.55

on the *trunking lighter "Onward Pioneer"*

(Number of Visits 6)

Built at THORNE

By whom built RICHARD DUNSTON

Yard No. T910 When built 1955

Engines made at *Rebbish*

By whom made *Crossley Bros Ltd*

Engine No. 143468 When made 1955

Boilers made at MILLWALL, LONDON

By whom made JOHN FRASER & SON LTD

Boiler No. 3929 When made 1955

Owners *British Transport Holdings Ltd*

Port belonging to *Lancashire*

## VERTICAL BOILER.

Made at MILLWALL LONDON

By whom made JOHN FRASER & SON LTD

Boiler No. 3929 When made 1955

Manufacturers of Steel APPLEBY FRODINGHAM

Total Heating Surface of Boiler 50 SQ FT (APPROX)

Is forced draught fitted No Coal or Oil fired OIL

No. and Description of Boilers ONE - TRINITY TYPE VERTICAL BOILER

Working Pressure 105 PS.I.

Tested by hydraulic pressure to 210 PSI

Date of test 9.8.55

No. of Certificate 1507

Area of fire grate in each Boiler

No. and description of safety valves to each boiler

ONE - SINGLE SPRING PATTERN ENCLOSED DISCHARGE SAFETY VALVE 2" O.D.M.

Area of each set of valves per boiler

*per Rule* 2.43 SQ. INS.

Pressure to which they are adjusted NOT ADJUSTED

Are they fitted with easing gear YES

State whether steam from main boilers can enter the donkey boiler

or woodwork

Is oil fuel carried in the double bottom under boiler

Smallest distance between boiler or uptake and bunkers

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

Largest internal dia. of boiler

Height

Shell plates: Material

STEEL

Tensile strength

26-30 TONS

Thickness

5" / 16"

Are the shell plates welded or flanged

RIVETED

If fusion welded, state name of welding firm

Have all the requirements of the Rules for Class I vessels been complied with

Description of riveting: circ. seams

long. seams D.R. LAP

Dia. of rivet holes in

circ. seams 13" / 16" long. seams 13" / 16"

Pitch of rivets

2" / 2 7/8"

Percentage of strength of circ. seams

plate 40.6% rivets 73.6%

of longitudinal joint

plate 66.7% rivets 121.6% combined

Thickness of butt straps

outer inner

Shell Crown: Whether complete hemisphere, dished partial

spherical, or flat

DISHED

Material

STEEL

Tensile strength

26-30 TONS

Thickness

5" / 16"

Radius

2'-6"

Description of Furnace: Plain, spherical, or dished crown

Material

Tensile strength

Thickness

External diameter

Length as per Rule

Pitch of support stays circumferentially

and vertically

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Radius of spherical or dished furnace crown

Thickness of Ogee Ring

Diameter as per Rule

FIRE BOX

Combustion Chamber: Material

M.S.

Tensile strength

26-30 TONS

Thickness of top plate

3" / 8"

Radius if dished

1'-8"

Thickness of plate

3" / 8"

Diameter if circular 1'-9" I.D. TOP - 2'-1 1/2" I.D. BOTTOM

Length as per Rule

Pitch of stays

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Tube Plates: Material

front back

Tensile strength

Thickness

Mean pitch of stay tubes in nests

If comprising shell, dia. as per Rule

front back

Pitch in outer vertical rows

Dia. of tube holes FRONT

stay plain

BACK

stay plain

Is each alternate tube in outer vertical rows a stay tube

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

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Crown Stays: Material ☒ Tensile strength ☒ Diameter { at body of stay, or over threads. ☒

No. of threads per inch ☒ Screw Stays: Material ☒ Tensile strength ☒

Diameter { at turned off part, or over threads. ☒ No. of threads per inch ☒ Are the stays drilled at the outer ends. ☒

Tubes: Material HOT FINISHED BS512. External diameter { plain 1 1/2" 00 Thickness { 8 swg.

No. of threads per inch ☒ Pitch of tubes 2 1/2"

Manhole Compensation: Size of opening in shell plate 10" x 7 1/2" Section of compensating ring 2 1/2" x 3/8" No. of rivets and diameter of rivet holes 8

Outer row rivet pitch at ends 9 3/4" 8 1/2" Depth of flange if manhole flanged ☒

Uptake: External diameter 9 3/4" 8 1/2" Thickness of uptake plate 5/16"

Cross Tubes: No. 1 External diameters { Thickness of plates {

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

JOHN FRASER & CO. LTD. LIMITED.

The foregoing is a correct description,

J. Edwards DIRECTOR

Manufacture

Dates of Survey while building { During progress of work in shops - - 1955. APRIL 15, JULY 5. 20. 21. 27. Is the approved plan of boiler forwarded herewith (If not state date of approval.) 5<sup>th</sup> APRIL.

{ During erection on board vessel - - as per Rpt No 61827 Total No. of visits 1

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Boiler has been constructed under special survey in accordance with the approved plan

The materials and workmanship are good  
The Boiler has been dispatched to Thorne for Doncaster  
to be installed at Messrs Richard Dunston Yard N° T 910

For identification the Boiler was stamped

N° 1507

LLOYDS TEST

210 lbs

WP 105 lbs

AEF 9.8.55 LON.

This Boiler has now been installed in the above vessel, seen under steam, evaporator test carried out as per Rules, and safety valve adjusted to 105 lbs/sq"

W. J. Thomas  
Mar 20/55

Survey Fee ... £ 10 : 0 : 0 When applied for 19

Travelling Expenses (if any) £ 1 : 0 : 0 When received 19

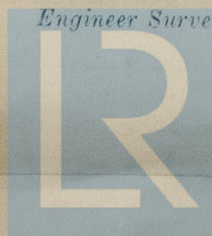
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Date TUESDAY 20 MAR 1956

Committee's Minute See Rpt. 46.

W. J. Thomas

Engine Surveyor to Lloyd's Register of Shipping.



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