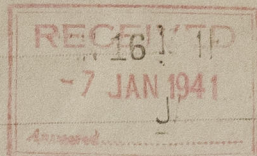


REPORT ON BOILERS.

No. 9.

Received at London Office



Date of writing Report 19 When handed in at Local Office 19 Port of **NOTTINGHAM.**

No. in Survey held at **NEWARK - ON - TRENT.** Date, First Survey Last Survey **9-12-1940**

Reg. Book on the **"POSTBOY"** (Number of Visits) Gross Tons Net

Built at **SELBY.** By whom built **COCHRANE & SONS** Yard No. **1211** When built **1941**

Engines made at **LINCOLN** By whom made **RUSTON & HORNSBY. LTD.** Engine No. ☒ When made **1941.**

Boilers made at ☒ By whom made ☒ Boiler No. ☒ When made ☒

Owners **GRIMSBY MOTOR TRAWLERS LTD.** Port belonging to ☒

VERTICAL DONKEY BOILER.

Made at **Newark** By whom made **Abbott & Co (Newark) Ltd.** Boiler No. **1 (15646)** When made **1940** Where fixed **Engine casing at Base of funnel.**

Manufacturers of Steel **Appleby - Frodingham Steel Co. Ltd., Scunthorpe.**

Total Heating Surface of Boiler **428 tubes exhaust heated = 132 sq. ft. Is forced draught fitted No** Coal or Oil fired **Oil & Exhaust gas.**

No. and Description of Boilers **1 - Clarkson Composite Double Tube Boiler [Type BATOG-190]** Working pressure **75 lb/sq. in.**

Tested by hydraulic pressure to **150 lb/sq. in.** Date of test **9.12.40** No. of Certificate **/**

Area of Firegrate in each Boiler **-** No. and Description of safety valves to each boiler **Double 1 1/2" Marine Type**

Area of each set of valves per boiler { per rule **1.71 sq. ft.** as fitted **3.54 sq. ft.** Pressure to which they are adjusted **75 lbs.** Are they fitted with easing gear **Yes.**

State whether steam from main boilers can enter the donkey boiler ☒ Smallest distance between boiler or uptake and bunkers

or woodwork ☒ Is oil fuel carried in the double bottom under boiler ☒ Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated ☒ Largest internal dia. of boiler **2'-9"** Height **9'-0"**

Shell plates: Material **S.M. Steel** Tensile strength **28-32 tons/sq. in.** Thickness **7/16" & 3/8"**

Are the shell plates welded or flanged **Flanged no** Description of riveting: circ. seams { end **Single Riveted Lap** long. seams **Single Rivet D. butt strap.**

Dia. of rivet holes in { circ. seams **13/16"** Pitch of rivets { **2"** Percentage of strength of circ. seams { plate **59.37%** rivets **56.77%** of Longitudinal joint { plate **59.37%** rivets **100%** combined **-**

Working pressure of shell by rules **180 lb/sq. in.** Thickness of butt straps { outer **3/8"** inner **1/8"**

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat **Flat** Material **S.M. Steel**

Tensile strength **26-30 tons/sq. in.** Thickness **7/16"** Radius **Flanged 2"** Working pressure by rules ☒

Description of Furnace: Plain, spherical, or dished crown **Plain** Material **S.M. Steel** Tensile strength **26-30 tons/sq. in.**

Thickness **7/16"** External diameter { top **2'-0 1/2"** bottom **2'-0 1/2"** Length as per rule **2'-2 3/4"** Working pressure by rules **192 lb/sq. in.**

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 ☒ Working pressure by rule ☒

Thickness of Ogee Ring **3/4"** Diameter as per rule { D ☒ d ☒ Working pressure by rule ☒

Combustion Chamber: Material **S. M. Steel** Tensile strength **26-30 tons/sq. in.** Thickness of top plate **7/16"**

Radius if dished **Flat** Working pressure by rule ☒ Thickness of back plate ☒ Diameter if circular ☒

Length as per rule ☒ Pitch of stays ☒ Are stays fitted with nuts or riveted over ☒

Diameter of stays over thread ☒ Working pressure of back plate by rules ☒

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 ☒ Working pressure by rules { 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 rule ☒

Crown 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 ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒

Tubes: Material M.S. Pressings. External diameter ☒ plain $1\frac{3}{4}$ " $1\frac{3}{8}$ " O.D. ☒ Thickness ☒ 13 W.G. ☒ 12 W.G. ☒

No. of threads per inch ☒ Pitch of tubes 3.87", 3.55", 4.51" Working pressure by rules ☒

Manhole Compensation: Size of opening in shell plate 4 $\frac{1}{2}$ " x 3" Section of compensating ring 2 $\frac{1}{4}$ " x 3 $\frac{3}{8}$ " No. of rivets and diameter of rivet holes 6 x 1 $\frac{1}{16}$ " Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged ☒

Uptake: External diameter 1'-0 $\frac{7}{8}$ " Thickness of uptake plate 7 $\frac{1}{16}$ "

Cross Tubes: No. ☒ External diameters ☒ Thickness of plates ☒

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

The foregoing is a correct description,
FOR ABBOTT & CO. (NEWARK) LIMITED,

Ans. E. Ashbury Manufacturer.
DIRECTOR

Dates of Survey ☒ During progress of work in shops - 15/4/40, 2/9/40, 9/9/40, 9/10/40, 23/10/40, 25/11/40 Is the approved plan of boiler forwarded herewith 5-3-40
☒ while building ☒ During erection on board vessel - 30/11/40, 4/12/40. (If not state date of approval.)
☒ 15/9/41 - 1/10/41 - 24/10/41. Total No. of visits 11

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.)

This boiler has been built under Special Survey in accordance with the Rules, the Secretary's Letters and the approved Plan. The Workmanship and materials are good. The boiler has been despatched to Messrs Beltrane & Sons Selby for installation in the vessel.

This boiler has now been properly fitted on board the vessel, examined under steam, and its safety valves adjusted to 75 lbs. per sq. inch. Oil fuel pipes tested & found in order. Oil fuel installation examined under working conditions with fuel tank, valves and deck control gear, also oil discharge pipes between tank and furnace, and found in good condition. In my opinion the boiler is eligible for the notation of DB 75 lbs.

Survey Fee ... £ 4 : 4 : When applied for, Paid by Clarkson & Co.
Travelling Expenses (if any) £ 2 : 8 : When received, 24/11/19

Committee's Minute
Assigned

TUE. 23 DEC 1941
See Lib. H.C. 51167

W. Buchanan Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
Foundation