

REPORT ON BOILERS.

No. 40373.

Received at London Office 22 NOV 1929

Date of writing Report 20: 11: 1929 When handed in at Local Office 20 Nov 1929 Port of **HULL**

No. in Survey held at **Hull.** Date, First Survey 18 April Last Survey 12 Nov 1929

1618 on the **Steam Trawler 'LORD TRENT'** (Number of Visits 19) Gross 245.88 Tons Net 134.66

Master Built at **Lelby** By whom built **Cochrane & Sons Ltd** Yard No. 1062 When built 1929

Engines made at **Hull** By whom made **Amos & Smith Ltd** Engine No. 587 When made 1929

Boilers made at **Hull** By whom made **do** Boiler No. 587 When made 1929

Nominal Horse Power 96 Owners **Fiskering & Holdams Steam Trawling Co Ltd.** Port belonging to **Hull**

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel **Appledy Iron Co. Ltd.** (Letter for Record (S))

Total Heating Surface of Boilers **1698 Sq. feet** Is forced draught fitted **Yes** Coal or Oil fired **Coal**

No. and Description of Boilers **One single ended, return tube** Working Pressure **200 lbs**

Tested by hydraulic pressure to **350 lbs** Date of test **24.7.29** No. of Certificate **3726** Can each boiler be worked separately **Yes**

Area of Firegrate in each Boiler **49.2 sq. ft.** No. and Description of safety valves to each boiler **2 Spring loaded**

Area of each set of valves per boiler { per Rule 9.8 sq. ft. as fitted 9.8 Pressure to which they are adjusted **200 lbs** Are they fitted with easing gear **Yes**

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **Yes**

Smallest distance between boilers or uptakes and bunkers or woodwork **4'** Is oil fuel carried in the double bottom under boilers **Yes**

Smallest distance between shell of boiler and tank top plating **Yes** Is the bottom of the boiler insulated **Yes**

Largest internal dia. of boilers **14'-0"** Length **10'-8"** Shell plates: Material **Steel** Tensile strength **29/33 Tons**

Thickness **1 1/2"** Are the shell plates welded or flanged **Yes** Description of riveting: circ. seams { end 5/8" inter. 3/4" } Pitch of rivets **8 3/4"**

g. seams **T.R. 5/8"** Diameter of rivet holes in { circ. seams 1 1/2" long. seams 1 1/2" } Percentage of strength of circ. end seams { plate 65.8 rivets 51.2 } Percentage of strength of circ. intermediate seam { plate 85.03 rivets 70.8 combined 88.8 } Working pressure of shell by Rules **201 lbs**

Thickness of butt straps { outer 1 1/2" inner 1 1/2" } No. and Description of Furnaces in each Boiler **Three plain**

Material **Steel** Tensile strength **26/30 Tons** Smallest outside diameter **41"**

Length of plain part { top 76" bottom 69" } Thickness of plates { crown 13/16" bottom 1 1/16" } Description of longitudinal joint **Butt**

Dimensions of stiffening rings on furnace or c.c. bottom **Yes** Working pressure of furnace by Rules **219 lbs**

End plates in steam space: Material **Steel** Tensile strength **26/30 Tons** Thickness **13/16"** Pitch of stays **18"**

How are stays secured **Double nuts & washers** Working pressure by Rules **220 lbs**

End plates: Material { front **Steel** back **do** } Tensile strength { **26/30 Tons** } Thickness { **15/16"** } Working pressure { front **211 lbs** back **230** }

Can pitch of stay tubes in nests **10.97"** Pitch across wide water spaces **13 3/4"** Working pressure { front **211 lbs** back **230** }

Orders to combustion chamber tops: Material **Steel** Tensile strength **26/32 Tons** Depth and thickness of girder

centre **10 1/2" x 13 1/4"** Length as per Rule **36 3/16"** Distance apart **9"** No. and pitch of stays

each **3 @ 8 3/4"** Working pressure by Rules **210 lbs** Combustion chamber plates: Material **Steel**

Tensile strength **26/30 Tons** Thickness: Sides **3/4"** Back **23/32"** Top **3/4" + 23/32"** Bottom **3/4"**

Pitch of stays to ditto: Sides **9" x 8 3/4"** Back **9" x 8 1/2"** Top **9" x 8 3/4"** Are stays fitted with nuts or riveted over **Nuts**

Working pressure by Rules **230 lbs** Front plate at bottom: Material **Steel** Tensile strength **26/30 Tons**

Thickness **15/16"** Lower back plate: Material **Steel** Tensile strength **26/30 Tons** Thickness **29/32"**

Pitch of stays at wide water space **14" x 8 3/4"** Are stays fitted with nuts or riveted over **Nuts**

Working Pressure **228 lbs** Main stays: Material **Steel** Tensile strength **26/32 Tons**

Diameter { At body of stay, or Over threads **3/4"** } No. of threads per inch **6** Area supported by each stay **324 sq. in.**

Working pressure by Rules **240 lbs** Screw stays: Material **Steel** Tensile strength **26/30 Tons**

Diameter { At turned off part, or Over threads **1 7/8" + 1 3/4"** } No. of threads per inch **9** Area supported by each stay **78.9 sq. in.**

Working pressure by Rules 230 Lb Are the stays drilled at the outer ends Lo Margin stays: Diameter { At turned off part, 1 7/8"
or Over threads 2 1/8 Lb.
No. of threads per inch 9 Area supported by each stay 97.75 sq" Working pressure by Rules 215 Lb.
Tubes: Material Lin External diameter { Plain 3 1/2" Thickness { 8/16" No. of threads per inch 9
Stay 3 1/2" Pitch of tubes 4 7/8" Working pressure by Rules 215 Lb. Manhole compensation: Size of opening in
shell plate 16" x 12" Section of compensating ring 34" x 27" x 1 3/8" No. of rivets and diameter of rivet holes 32 @ 1 1/4"
Outer row rivet pitch at ends 8 3/16" 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 ✓ 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 ✓ 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

For AMOS & SMITH LTD.

The foregoing is a correct description,

Manufacturers

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

See attached report on Machinery.

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.)

This boiler has been built under special survey & in accordance with the approved plan & the materials & workmanship are sound & good. It has been satisfactorily fitted on board, tried under steam & its safety valves adjusted under steam as above.

Charge on engine report

Survey Fee £ 100
Travelling Expenses (if any) £ 10

When applied for, 192

When received, 192

John Whuckirdy

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI, 29 NOV 1929

Assigned

See Script attached



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Lloyd's Register
Foundation