

REPORT ON BOILERS.

No. 43937

Received at London Office

-3 AUG 1933

of writing Report

19

When handed in at Local Office

-2 AUG 1933

Port of

HULL

Survey held at

Hull

Date, First Survey

7.4.33

Last Survey

24.7.1933

Book.

on the Steam Trawler "CAPE BATHURST"

(Number of Visits)

Gross

420.5

Tons

Net 167.6

ter.

Built at

Hely

By whom built

Cochrane & Sons Ltd

Yard No.

1112

When built

1933

ines made at

Hull

By whom made

Charles B. Holmes & Co Ltd

Engine No.

1434

When made

1933

lers made at

Hull

By whom made

do

Boiler No.

1434

When made

1933

ninal Horse Power

Owners

Hudson & Fishing Co Ltd

Port belonging to

Hull.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Apperby & Son & Co Ltd.

(Letter for Record S)

al Heating Surface of Boilers

1866 sq. ft. ✓

Is forced draught fitted

No ✓

Coal or Oil fired

Coal ✓

and Description of Boilers

One single ended

Working Pressure

200 lbs.

ted by hydraulic pressure to

350 lbs.

Date of test

9.6.33

No. of Certificate

3860

Can each boiler be worked separately

✓

ea of Firegrate in each Boiler

50.44 sq. ft.

No. and Description of safety valves to each boiler

Two spring loaded.

ea of each set of valves per boiler

{ per Rule 10.85

{ as fitted 11.88

Pressure to which they are adjusted

200 lbs.

Are they fitted with easing gear

Yes ✓

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

✓

allest distance between boilers or uptakes and bunkers or woodwork

8" ✓

Is oil fuel carried in the double bottom under boilers

✓

allest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

✓

rgest internal dia. of boilers

14" ✓

Length

128" ✓

Shell plates: Material

Steel

Tensile strength

29/32 Tons.

ickness

1 1/4" ✓

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

{ end 3/4" inter. 3/4" ✓

g. seams

T.R. 5/8" ✓

Diameter of rivet holes in

{ circ. seams 1 5/16" ✓

{ long. seams 1 5/16" ✓

Pitch of rivets

9 1/4" ✓

Percentage of strength of circ. end seams

{ plate 85.75

{ rivets 45.6

Percentage of strength of circ. intermediate seam

{ plate 85.75

{ rivets 45.6

Percentage of strength of longitudinal joint

{ plate 85.75

{ rivets 86.80

{ combined 88.80

Working pressure of shell by Rules

201 lbs.

Thickness of butt straps

{ outer 3 1/32" ✓

{ inner 1 3/32" ✓

No. and Description of Furnaces in each Boiler

Three plain ✓

aterial

Steel ✓

Tensile strength

26/30 Tons.

Smallest outside diameter

42" ✓

Length of plain part

{ top 80.5" ✓

{ bottom 41" ✓

Thickness of plates

{ crown 13/16" ✓

{ bottom 13/16" ✓

Description of longitudinal joint

Welded ✓

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules

201 lbs.

nd plates in steam space: Material

Steel ✓

Tensile strength

26/30 Tons.

Thickness

1 3/4" ✓

Pitch of stays

19" x 1 1/2" ✓

ow are stays secured

Double nuts & washers ✓

Working pressure by Rules

203 lbs.

ube plates: Material

{ front Steel ✓

{ back Steel ✓

Tensile strength

26/30 Tons.

Thickness

{ 1 5/16" ✓

{ 7/8" ✓

ean pitch of stay tubes in nests

10 1/4" ✓

Pitch across wide water spaces

14" ✓

Working pressure

{ front 209 lbs. ✓

{ back 205 lbs. ✓

rders to combustion chamber tops: Material

Steel ✓

Tensile strength

29/32 Tons.

Depth and thickness of girder

centre

10" x 1 3/4" ✓

Length as per Rule

36 1/4" ✓

Distance apart

9 1/2" ✓

No. and pitch of stays

each

3 @ 8 3/4" ✓

Working pressure by Rules

209 lbs.

Combustion chamber plates: Material

Steel

Tensile strength

26/30 Tons.

Thickness: Sides

3/4" ✓

Back

23/32" ✓

Top

23/32" ✓

Bottom

3/4" ✓

Pitch of stays to ditto: Sides

9 1/2" x 9" ✓

Back

9 1/4" x 8 3/8" ✓

Top

9 1/2" x 8 3/8" ✓

Are stays fitted with nuts or riveted over

Nuts ✓

Working pressure by Rules

214 lbs.

Front plate at bottom: Material

Steel

Tensile strength

26/30 Tons.

Thickness

1 5/16" ✓

Lower back plate: Material

Steel

Tensile strength

26/30 Tons.

Thickness

27/32" ✓

Pitch of stays at wide water space

14" x 8 3/8" ✓

Are stays fitted with nuts or riveted over

Nuts ✓

Working Pressure

208 lbs.

Main stays: Material

Steel

Tensile strength

28/32 Tons.

iameter

{ At body of stay, 3/4" ✓

{ Over threads 3/4" ✓

No. of threads per inch

8

Area supported by each stay

332 sq. in.

Working pressure by Rules

241 lbs.

Screw stays: Material

Steel

Tensile strength

26/30 Tons.

iameter

{ At turned off part, 1 1/4" ✓

{ Over threads 1 1/4" ✓

No. of threads per inch

10

Area supported by each stay

85.5 sq. in.

Working pressure by Rules 213 Lb Are the stays drilled at the outer ends ho Margin stays: Diameter 1 7/8" ^{At turned off part,}
No. of threads per inch 16 Area supported by each stay 97.5 Working pressure by Rules 218 Lb ^{or}
Tubes: Material Iron External diameter 3 1/2" Thickness 5/16" No. of threads per inch 9
Pitch of tubes 4 3/4" x 4 3/4" Working pressure by Rules 215 Lb Manhole compensation: Size of opening
shell plate 16" x 12" Section of compensating ring 4 9/16" dia x 1 1/4" No. of rivets and diameter of rivet holes 16" @ 1 5/16"
Outer row rivet pitch at ends 10.4" Depth of flange if manhole flanged ✓ Steam Dome: Material Steel
Tensile strength 26,300 Tons Thickness of shell 3/4" Description of longitudinal joint SK Lch
Diameter of rivet holes 1 3/32" Pitch of rivets 2 1/4" Percentage of strength of joint 54.0
Internal diameter 2'-9" Working pressure by Rules 215 Lb Thickness of crown 7/8" No. and diameter
stays 2 @ 2 1/4" Inner radius of crown ✓ Working pressure by Rules 215 Lb
How connected to shell Riveted Size of doubling plate under dome 4'-9 1/4" dia x 1 1/4" Diameter of rivet holes and
of rivets in outer row in dome connection to shell 1 5/16" and 10.4"

Type of Superheater
Number of elements 1 Material of tubes Steel Manufacturers of Steel castings
Material of headers Steel Tensile strength 54,000 Thickness 3/16" 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 1.5 sq in Are the safety valves fitted with easing gear Working pressure as
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 CHARLES D. HOLMES & CO., LTD. Manufactured by J. G. Brown

Dates of Survey During progress of work in shops - - Are the approved plans of boiler and superheater forwarded herewith Yes
while building During erection on board vessel - - (If not state date of approval.)
See machinery report Total No. of visits 1

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. NEGRO 42542

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, and the materials & workmanship are sound and good. It has been satisfactorily fitted on board, tried under working conditions & its safety valves adjusted as above.

Charged on engine report
Survey Fee £ 10 When applied for, 19
Travelling Expenses (if any) £ 10 When received, 19

John Shackirdy
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute WED. 9 AUG 1934
Assigned See F.C. Rpt.