

REPORT ON BOILERS.

No. 41216.

Received at London Office

19 SEP 1930

Date of writing Report

18.9.30

When handed in at Local Office

18 Sept 30

Port of

HULL.

No. in Survey held at
Reg. Book.

HULL

Date, First Survey

9 Jan'y

Last Survey

9 Sept 1930.

(Number of Visits

21)

(Gross

354.85

Tons

Net 139.21.

60710 on the

STEAM TRAWLER "CORDELA."

Master

Built at

Selby

By whom built

Bochrane & Sons

Yard No.

1087

When built

1930

Engines made at

Hull

By whom made

Amos & Smith Ltd.

Engine No.

612

When made

1930

Boilers made at

Hull

By whom made

Amos & Smith Ltd.

Boiler No.

612

When made

1930

Nominal Horse Power

97.

Owners

Active Fishing Co Ltd

Port belonging to

Fleetwood

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY~~, OR DONKEY.

Manufacturers of Steel

Appleby Iron & Steel Co Ltd.

(Letter for Record

S)

Total Heating Surface of Boilers

1725 sq. ft.

Is forced draught fitted

No

Coal or Oil fired

Coal.

No. and Description of Boilers

One single ended return tube

Working Pressure

200 lb sq. in.

Tested by hydraulic pressure to

350 lb sq. in.

Date of test

30.7.30

No. of Certificate

3791

Can each boiler be worked separately

Area of Firegrate in each Boiler

51 sq. ft.

No. and Description of safety valves to each boiler

2 Spring loaded

Area of each set of valves per boiler

{ per Rule
as fitted

9.8 sq. in.

Pressure to which they are adjusted

200 lb sq. in.

Are they fitted with easing gear

Yes.

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

Smallest distance between boilers or uptakes and bunkers or woodwork

4"

Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Largest internal dia. of boilers

14' 6"

Length

10' 8"

Shell plates: Material

Steel

Tensile strength

29/33 tons

Thickness

1 9/32"

Are the shell plates welded or flanged

Description of riveting: circ. seams

end

D.R.

long. seams

T.R. D.B.S.

Diameter of rivet holes in

{ circ. seams
long. seams

1 9/32"

Pitch of rivets

3.81"
3 7/8"

Percentage of strength of circ. end seams

{ plate
rivets68.00
42.00

Percentage of strength of circ. intermediate seam

{ plate
rivets85.10
86.30

Working pressure of shell by Rules

200 lb sq. in.

Percentage of strength of longitudinal joint

{ plate
rivets
combined

86.30

Working pressure of shell by Rules

200 lb sq. in.

Thickness of butt straps

{ outer
inner

1 1/2"

No. and Description of Furnaces in each Boiler

Three plain

Material

Steel

Tensile strength

26/30 tons

Smallest outside diameter

42 1/2"

Length of plain part

{ top
bottom79"
74"

Thickness of plates

{ crown
bottom

13/16"

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

204 lb sq. in.

End plates in steam space: Material

Steel

Tensile strength

26/30 tons

Thickness

1 3/16"

Pitch of stays 20" x 18"

How are stays secured

Double nuts & washers

Working pressure by Rules

218 lb sq. in.

Tube plates: Material

{ front
back

Steel

Tensile strength

26/30 tons

Thickness

7/8"

Mean pitch of stay tubes in nests

10.4"

Pitch across wide water spaces

14"

Working pressure

{ front
back209 lb sq. in.
261 lb sq. in.

Girders to combustion chamber tops: Material

Steel

Tensile strength

29/33 tons

Depth and thickness of girder

at centre

9 1/2" x 1 3/4"

Length as per Rule

36 1/2"

Distance apart

9"

No. and pitch of stays

in each

3 @ 8 3/4"

Working pressure by Rules

226 lb sq. in.

Combustion chamber plates: Material

Steel

Tensile strength

26/30 tons

Thickness: Sides

3/4"

Back

2 3/32"

Top

2 3/32"

Bottom

3/4"

Pitch of stays to ditto: Sides

9" x 8 3/4"

Back

9 1/2" x 9"

Top

9" x 8 3/4"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

212 lb sq. in.

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 9"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

209 lb sq. in.

Main stays: Material

Steel

Tensile strength

28/32 tons

Diameter

{ At body of stay,
or
Over threads

3 1/4"

No. of threads per inch

6

Area supported by each stay

360 sq. in.

Working pressure by Rules

222 lb sq. in.

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

85.5 sq. in.

Working pressure by Rules 222 H. Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, or Over threads 2 @ 1 7/8" No. of threads per inch 9 Area supported by each stay 103.50" Working pressure by Rules 205 H 0" Tubes: Material Iron External diameter { Plain 3 1/2" Thickness { 3/8" x 5/16" No. of threads per inch 9 Pitch of tubes 4 3/4" x 5 1/4" Working pressure by Rules 215 H 0" Manhole compensation: Size of opening in shell plate 16" x 12" Section of compensating ring 34" x 24" x 1 9/32" No. of rivets and diameter of rivet holes 32 @ 1 9/32" Outer row rivet pitch at ends 8 5/8" 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,
[Signature] MANAGER

Dates { During progress of work in shops - - } See attached report Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) while { During erection on board vessel - - } on Machy. Total No. of visits ✓

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey and in accordance with the approved plan. It has been satisfactorily fitted on board, tried under steam and its safety valves adjusted as above.

The invoices relative to the sister vessel "Armana", which will be completed shortly, are forwarded herewith.

Charged on engine report sent herewith Survey Fee ... £ : When applied for, 192 Travelling Expenses (if any) £ : When received, 192

B. Moffatt.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 23 SEP 1930 Assigned See F. E. Rpt.