

REPORT ON BOILERS.

12 MAY 1950

Received at London Office

Date of writing Report

19

When handed in at Local Office

6 MAY 1950

Port of HULL.

No. in Reg. Book

Survey held at

Hessle

Date, First Survey

29. 4. 49.

Last Survey

9. 3. 19 50

35267 on the

S.Sc. Motor Trawler "BONNYBRIDGE".

(Number of Visits

16)

Tons

Gross

289

Net

98

Built at

Hessle

By whom built

Henry Scarr, Ltd.

Yard No. S.629

When built 1950

Engines made at

Hazelgrove, Stockport

By whom made

Mirrlees, Bickerton & Day, Ltd.

Engine No. 33401

When made 1949

PROBABLY

Boilers made at

Johannesburg

By whom made

Wright Boag & Co., Ltd.

Boiler No. -

When made -

Owners

Great Western Fishing Co., Ltd.

Port belonging to

Fleetwood

VERTICAL DONKEY BOILER.

Probably at S. Africa by Boag & Co., Ltd., Johannesburg

not known

Made at

By whom made

Boiler No.

When made

Where fixed

E.R.

Manufacturers of Steel

not known

Total Heating Surface of Boiler

54 sq.ft.

Is forced draught fitted

No

Coal or Oil fired

Oil

No. and Description of Boilers

1 vertical cross tube

Working pressure

80 lb.

Tested by hydraulic pressure to

160 lb/sq.in.

Date of test

20.5.49

No. of Certificate

no cert.

Area of Firegrate in each Boiler

7 sq.ft.

No. and Description of safety valves to each boiler

1 - 2" enclosed direct spring

Area of each set of valves per boiler

per rule approx. as fitted 3.1416

Pressure to which they are adjusted

80

Are they fitted with casing gear

Yes

State whether steam from main boilers can enter the donkey boiler

no main boiler

Smallest distance between boiler and bunkers

12" open floors

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

42"

Height 6'6"

Shell plates: Material

Probably steel to BSS for vertical X tube boiler

Tensile strength

Thickness

3/8"

Are the shell plates welded or flanged

No

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.L.

Dia. of rivet holes in

circ. seams 25/32" long. seams 25/32"

Pitch of rivets

2" 3 1/2"

Percentage of strength of circ. seams

plate approx. rivets approx.

of Longitudinal joint

plate rivets combined

Thickness of butt straps

outer inner

Shell Crown: Whether complete hemisphere, dished partial

spherical, or flat

dished

Material

Probably to BSS for Vertical X tube boiler

Tensile strength Thickness

Radius

Description of Furnace: Plain, spherical, or dished crown

dished

Material

Tensile strength

Thickness

External diameter

2 - 7 1/2" 3 - 3 3/8"

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 2' - 6"

Thickness of Ogee Ring

Diameter as per rule

Combustion Chamber: Material

Tensile strength

Thickness of top plate

Radius if dished

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

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



Crown stays: Material none 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 - External diameter { plain..... stay..... } Thickness { }

No. of threads per inch - Pitch of tubes -

Manhole Compensation: Size of opening in shell plate 15" x 11" Section of compensating ring 3 7/8" x 3.7/16" No. of rivets and diameter of rivet holes 32 @ 25/32" Outer row rivet pitch at ends approx. 3 1/2" Depth of flange if manhole flanged -

Uptake: External diameter 10" Thickness of uptake plate 3/8"

Cross Tubes: No. 2 External diameters { 8 1/2" } Thickness of plates 3/8"

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

The foregoing is a correct description,

Manufacturer.

Dates of Survey { During progress of work in shops - - } Is the approved plan of boiler forwarded herewith (If not state date of approval.)

while building { During erection on board vessel - - } See mech Rpt + h. Total No. of visits 16.

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 not been built under Special Survey. No definite information is available regarding the Makers of the boiler but it is most probable that it was manufactured by Messrs. Wright Broag & Co., Johannesburg, S. Africa. (See our letter of 2.5.49 and London "E" letter of 5.5.49).

It has been examined internally and externally and found in good, unused condition. A hydraulic test of 160 lb/sq.in. was witnessed with satisfactory results and the boiler was stamped

near the manhole TESTED 160 lb/sq.in.
N.C. 20.5.49 L.R.

The principal scantlings have been checked and found to agree with the approved plan. The boiler has been satisfactorily installed, examined under steam, its safety valves adjusted to 80 lb/sq.in. and an accumulation test held with satisfactory results.

The installation of this boiler for domestic purposes only does not affect the class of this trawler (See "E" letter of 5.5.49)

Survey Fee ... £ : } When applied for, 19
 Travelling Expenses (if any) £ see machinery report : } When received, 19

N. Chambers
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 2 JUN 1950
 Assigned See F.B. mech. rpt.

