

REPORT ON BOILERS.

No. 94.

Bel. 14361

0 MAR 1947

Received at London Office 18 MAR 1947

Date of writing Report

24 Feb. 47

19 47

When handed in at Local Office

15th March 1947

Port of

Birmingham.

by Rules.

Actual.

No. in
Reg. Book

Survey held at

Bradley Heath.

Date, First Survey

12 December '46

Last Survey

17 February 1947

87577

on the

Donkey Boiler for motorship "JUANITA BEAZLEY."

(Number of Visits

8.

Gross

1100.

Tons

Net

Built at

Warrenpoint, N. Ireland.

By whom built

Warrenpoint Shipyard Ltd.

Yard No.

T102.

When built

1946.

Engines made at

Co. Lister.

By whom made

Davy Paxman & Co (Lister) Ltd.

Engine No.

When made

1946.

Boilers made at

Bradley Heath.

By whom made

Bradley Boilers Co Ltd.

Boiler No.

33292

When made

1947.

Owners

Anglo-Ecuadorian Oilfields Ltd.

Port belonging to

VERTICAL DONKEY BOILER.

Made at

Bradley Heath

By whom made

Bradley Boilers Co Ltd.

Boiler No.

33292.

When made

1947.

Where fixed

Manufacturers of Steel

Patent Shaft and Axletree Co Ltd.

Widnesbury.

Staffs.

Total Heating Surface of Boiler

112 square feet.

Is forced draught fitted

✓

Coal or Oil fired

Coal or Oil.

No. and Description of Boilers

One - mild steel vertical cross tube boiler.

Working pressure

100 lbs/sq.

Tested by hydraulic pressure to

200 lbs/sq.

Date of test

11 February 1947.

No. of Certificate

93.

Area of Firegrate in each Boiler

12.5 sq ft.

No. and Description of safety valves to each boiler

One - 2" Double Spring Loaded.

Area of each set of valves per boiler

per rule

Approved.

as fitted

6.28 sq ins

Pressure to which they are adjusted

✓

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

4'-6"

Height

12'-6" from base.

Shell plates: Material

mild steel.

Tensile strength

28/32 tons/sq.

Thickness

3/8"

Are the shell plates welded or flanged

No.

Description of riveting: circ. seams

end S.R. lap.

inter. do.

long. seams

D.R. lap.

Dia. of rivet holes in

circ. seams

13/16"

Pitch of rivets

2"

Percentage of strength of circ. seams

plate 59.3.

rivets 48.3.

of Longitudinal joint

plate 67.5.

rivets 77.5.

combined.

Working pressure of shell by rules

Approved 100 lbs/sq.

Thickness of butt straps

outer

inner

Shell Crown:

Whether complete hemisphere, dished partial spherical, or flat

Dished, partial, spherical.

Material

mild steel.

Tensile strength

26/30 tons/sq.

Thickness

9/16"

Radius

4'-6" external.

Working pressure by rules

Approved 100 lbs/sq.

Description of Furnace:

Plain, spherical, or dished crown

Dished.

Material

mild steel.

Tensile strength

26/30 tons/sq.

Thickness

9/16" top.

External diameter

top 3'-6 1/4"

bottom 4'-1"

Length as per rule

3'-9"

Working pressure by rules

Approved 100 lbs/sq.

Pitch of support stays circumferentially

7" (max)

and vertically

22" from furnace

Are stays fitted with nuts or riveted over

Riveted over.

Diameter of stays over thread

1 1/8"

Radius of spherical or dished furnace crown

3'-6" int.

Working pressure by rule

Approved 100 lbs/sq.

Thickness of

flanged bottom

1/2"

Diameter as per rule

D 4'-6"

Working pressure by rule

Approved 100 lbs/sq.

a 4'-1"

Combustion Chamber: Material

Tensile strength

Thickness of top plate

Radius if dished

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

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

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Lloyd's Register
Foundation

01295-011303-0454

Crown stays: Material ✓ Tensile strength ✓ Diameter { at body of stay... ✓
No. of threads per inch ✓ Area supported by each stay ✓ Working pressure by rules ✓

Screw stays: Material ✓ Tensile strength ✓ Diameter { at turned off part... ✓
Area supported by each stay ✓ Working pressure by rules ✓ Are the stays drilled at the outer ends ✓

Tubes: Material ✓ External diameter { plain... ✓ Thickness { ✓
No. of threads per inch ✓ Pitch of tubes ✓ Working pressure by rules ✓

Manhole Compensation: Size of opening in shell plate 16" x 12" ✓ Section of compensating ring 2" - 5 1/2" x 1/2" ✓ No. of rivets and diameter
of rivet holes 32 - 13/16 DIA. ✓ Outer row rivet pitch at ends Equal Pitch ✓ Depth of flange if manhole flanged not flanged ✓

Uptake: External diameter 1' - 2" ✓ Thickness of uptake plate 9/16" ✓

Cross Tubes: No. 5 ✓ External diameters { 9" ✓ Thickness of plates 3/8" Thick tubes ✓

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes, as far as applicable. ✓

The foregoing is a correct description,
ON BEHALF OF
CRADLEY BOILER CO. LTD.
H. Hudson Manufacturer.

Dates of Survey { During progress of work in shops - 12/11/46; 3/1/47; 27/1/47; 11/2/47.
while building { During erection on board vessel - 19/11/46; 17/1/47; 3/2/47; 17/2/47.
Is the approved plan of boiler forwarded herewith 29/12/46.
(If not state date of approval.)
Total No. of visits 8

Is this Boiler a duplicate of a previous case Yes except for one position of steam & injector pads. If so, state Vessel's name and Report No. Motor Ship 'PETRONAVE I' 15th Mar 47
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This boiler has been built under special survey in accordance with the Society's Rules and approved plans.
The materials and workmanship are good.
The boiler has been despatched to Warrenpoint Shipyard, Northern Ireland, for installation in the "M.V. Juanita Beagley."

This Boiler has been efficiently installed on board the vessel and safety valves adjusted under steam. Port ring 5 1/32 INS. STAR'D ring. 9/32 INS.
R.I. Murchison Belfast. 3-5-47.

Survey Fee ... £ 6 : 0 : } When applied for, 17th March 1947.
Travelling Expenses (if any) £ 1 : 4 : } When received, 19

H. McDonald.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 27 JUN 1947
Assigned See F.E. mehy. sph