

## REPORT ON BOILERS.

No. 53442

Received at London 29 AUG 1907

Date of writing Report

10

When handed in at Local Office

28 AUG 1907

Port of

Newcastle on Tyne

No. in Survey held at

South Shields

Date, First Survey

Mar 12 '07

Last Survey

Aug 20 '07

Reg. Book.

3H on the

"S.S. Baku Standard"

(Number of Visits 26)

Gross 3708

Net 2378

Master

Built at Newcastle-on-Tyne

By whom built Wm &amp; G. Armstrong &amp; Co. Ltd

When built 1893-2

Engines made at

Newcastle

By whom made

Hallhead Ship Co Ltd

when made

1893

Donkey

Boilers made at

South Shields

By whom made

T. C. Dowson &amp; Co

when made

1907

Registered Horse Power

Owners

European Petroleum Co Ltd

Port belonging to

London

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

J. Spencer &amp; Sons

(Letter for record)

Total Heating Surface of Boilers

500 sq ft

Is forced draft fitted

No

No. and Description of

Boilers

One Cyl Multitubular

Working Pressure

100 lbs

Tested by hydraulic pressure to

200 lbs Date of test 23-7-07

No. of Certificate

4535 Can each boiler be worked separately

Yes

Area of fire grate in each boiler

22.5 sq ft

No. and Description of

safety valves to each boiler

Two direct spring

Area of each valve

4.9 sq in

Pressure to which they are adjusted 40 lbs blow off

Are they fitted with casing gear

Yes

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

No

Smallest distance between boilers or uptakes and bunkers or woodwork

20 in

dia. of boilers

8-6 in

Length

8-6 in

Material of shell plates

Steel

Thickness

19/32 in

Range of tensile strength

24-32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

lap single

long. seams

lap triple

Diameter of rivet holes in long. seams

7/8 in

Pitch of rivets

3 3/8 in

Lap of plates or width of butt straps

6 13/16 in

Per centages of strength of longitudinal joint

76.5 %

Working pressure of shell by

rules

106.5 lbs

Size of manhole in shell

15 in x 12 in

Size of compensating ring

6 1/2 x 7 3/4 in

No. and Description of Furnaces in each

boiler

Two plain

Material

Steel

Outside diameter

2-4 7/8 in

Length of plain part

5-4 1/2 in

Thickness of plates

1/2 in

Description of longitudinal joint

lap single

No. of strengthening rings

—

Working pressure of furnace by the rules

122 lbs

plates: Material

Steel

Thickness: Sides

9/16 in

Back

9/16 in

Top

9/16 in

Bottom

Pitch of stays to ditto: Sides

10 x 9 in

Back

11 x 8 3/4 in

Top 10 x 9 in

If stays are fitted with nuts or riveted heads

No

Working pressure by rules

109 lbs

Material of stays

Steel

smallest part

1 1/4 in

Area supported by each stay

96.26 sq in

Working pressure by rules

100 lbs

End plates in steam space: Material

Steel

Pitch of stays

16 x 15 1/2 in

How are stays secured

J. Nut &amp; Washers

Working pressure by rules

112.5 lbs

Material of stays

Steel

Area supported by each stay

248 sq in

Working pressure by rules

106 lbs

Material of Front plates at bottom

Steel

Thickness

3/4 in

Lower back plate

Steel

Thickness

3/4 in

Greatest pitch of stays

10 x 8 3/4 in

Working pressure of plate by rules

100 lbs

Pitch of tubes

4 1/4 x 4 in

Material of tube plates

Steel

Thickness: Front

3/4 in

Back

1 1/16 in

Mean pitch of stays

8.5 in

water spaces

13 in

Working pressures by rules

114 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

—

girder at centre

6 1/2 x 1 1/4 in

Length as per rule

22

Distance apart

10 in

Number and pitch of Stays in each

one

9 in

Working pressure by rules

104 lbs

Superheater or Steam chest: how connected to boiler

—

Can the superheater be shut off and the boiler worked

separately

—

Diameter

—

Length

—

Thickness of shell plates

—

Material

—

Description of longitudinal joint

—

Diam. of rivet

—

Pitch of rivets

—

Working pressure of shell by rules

—

Diameter of flue

—

Material of flue plates

—

Thickness

—

If stiffened with rings

—

Distance between rings

—

Working pressure by rules

—

End plates: Thickness

—

How stayed

—

Working pressure of end plates

—

Area of safety valves to superheater

—

Are they fitted with casing gear

—

The foregoing is a correct description,

For J. R. DOWSON &amp; Co., Ltd.

J. R. Dowson

Manufacturer.

Dates

During progress of

work in shops

7/11/06 to 2/1/07

May 10 to 23/30

June 20 to 26/07

July 19 to 23/07

Is the approved plan of boiler forwarded herewith

Yes

while

building

During erection on

board vessel

Aug 6 to 10/12/06

Total No. of visits

26

## GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;c.)

This boiler has been built under special survey, the material and workmanship is good and efficient.

The boiler was fitted in place of the old boiler now removed

Survey Fee

...

£ 2 : 2 : 0

When applied for,

29 JUL 1907

Travelling Expenses (if any)

£

:

:

When received,

10 Aug 1907

Leonard Hallcross

J. R. Sells

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

WED. 3 SEP 1907

FRI. 25 OCT 1907

TUES. 4 FEB 1908

Assigned

sa Minnie

on attached report