

REPORT ON BOILERS.

No. 57374

Received at London Office

24 SEP 1909

Date of writing Report

19

When handed in at Local Office

24 SEP 1909

Port of Newcastle-on-Tyne

No. in Reg. Book.

Survey held at Newcastle-on-Tyne

Date, First Survey

10th May 1909

Last Survey

16th Sept. 1909

on the *4s Trawler, Dale Castle*

Smiths Dock Co No 410

Tons { Gross 246
Net 95

Master

Built at *North Shields*

By whom built *Smiths Dock Co 410*

When built 1909

Engines made at *North Shields*

By whom made *Shields Engineering & Dry Dock Co Ltd*

when made 1909

Boilers made at *Newcastle*

By whom made *Wallsend Slipway No 236*

when made

Registered Horse Power

80

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *John Spyer Sons.*

(Letter for record) Total Heating Surface of Boilers *1420 sq ft* Is forced draft fitted *No* No. and Description of Boilers *one cylindrical*

No. of Certificate *7873* Can each boiler be worked separately *Yes* Working Pressure *180* Tested by hydraulic pressure to *300* Date of test *20/7/09*

safety valves to each boiler *two direct spring* Area of each valve *4.9 sq in* Pressure to which they are adjusted *185 lbs*

Are they fitted with easing gear *Yes* In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler *Yes*

Smallest distance between boilers or uptakes and bunkers or woodwork *9 in* Mean dia. of boilers *13'-0"* Length *10'-6"*

Material of shell plates *Steel* Thickness *1 1/2"* Range of tensile strength *29-33* Are the shell plates welded or flanged *No*

Descrip. of riveting: cir. seams *lap double* long. seams *butt table* Diameter of rivet holes in long. seams *1 3/32* Pitch of rivets *7 3/4"*

Lap of plates or width of butt straps *16 3/4"* Per centages of strength of longitudinal joint rivets *87.3* Working pressure of shell by plate *86.8*

rules *18 lbs* Size of manhole in shell *16 x 12"* Size of compensating ring *72 Nuts* No. and Description of Furnaces in each boiler *3 plain*

Material *Steel* Outside diameter *3'-5 1/2"* Length of plain part *76 1/4"* Thickness of plates *3 3/4"*

Description of longitudinal joint *welded* No. of strengthening rings *1 part* Working pressure of furnace by the rules *180.4* Combustion chamber plates: Material *Steel* Thickness: Sides *2 1/2"* Back *2 1/2"* Top *2 1/2"* Bottom *1 5/8"* Pitch of stays to ditto: Sides *9 1/2 x 8 1/2"* Back *9 1/2 x 8 1/2"*

Top *9 1/2 x 8 1/2"* If stays are fitted with nuts or riveted heads *Yes* Working pressure by rules *183* Material of stays *Steel* Diameter at smallest part *2.03* Area supported by each stay *81 sq in* Working pressure by rules *226* End plates in steam space: Material *Steel* Thickness *1 1/16"*

Pitch of stays *18 1/2 x 19 1/2"* How are stays secured *2 nuts* Working pressure by rules *183* Material of stays *Steel* Diameter at smallest part *6.1*

Area supported by each stay *250 sq in* Working pressure by rules *180* Material of Front plates at bottom *Steel* Thickness *1"* Material of Lower back plate *Steel* Thickness *1 5/16"* Greatest pitch of stays *14 1/16"* Working pressure of plate by rules *219* Diameter of tubes *3 1/2"*

Pitch of tubes *4 1/16 x 4 1/16"* Material of tube plates *Steel* Thickness: Front *1"* Back *3/4"* Mean pitch of stays *9 3/8"* Pitch across wide water spaces *14 1/4"* Working pressures by rules *230 & 180* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *8 1/2 x 3 1/4 double* Length as per rule *32 1/2"* Distance apart *8 1/2"* Number and pitch of Stays in each *(2) 9 1/2"*

Working pressure by rules *185* Superheater or Steam chest; how connected to boiler *None* 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 holes 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 easing gear

The foregoing is a correct description, FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED, Manufacturer.

W Murray Secretary

Dates of Survey *1909 May 10-12-14-17-18-24-27 Jun 2-10-28 Jul 1-19-20-28* the approved plan of boiler forwarded herewith *Yes* Please return for dealing with duplicate *Yes* Total No. of visits *14+*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey, the materials and workmanship are of good description.*

Survey Fee *Charged on 1st Int. Report* When applied for. 19. Travelling Expenses (if any) £ : : When received. 19. *A. McKeand* Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute Assigned TUES. 28 SEP 1909 Lloyd's Register Foundation