

REPORT ON BOILERS.

No. 48258

Received at London Office OCT -7 1937.

Date of writing Report 4.10 1937 When handed in at Local Office 6 OCT 1937 Port of HULL

No. in Reg. Book 17708 Survey held at Hull Date, First Survey 29th April, 1937 Last Survey 29th Sept. 1937

on the Steam Trawler "BARNETT" (Number of Visits ✓) Tons {Gross 481.59 Net 202.15

Master ✓ Built at Beverly By whom built Lock, Walton & Jemmett Ltd Yard No. 641 When built 1937

Engines made at Hull By whom made Amos & Smith Ltd Engine No. 660 When made 1937

Boilers made at Hull By whom made Amos & Smith Ltd Boiler No. 660 When made 1937

Nominal Horse Power 132 Owners Grampian Steam Fishing Co., Ltd Port belonging to Grimsby

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appley-Frodingham Steel Co., Ltd (Letter for Record "S")

Total Heating Surface of Boilers 2337 square feet Is forced draught fitted No Coal or Oil fired Coal

No. and Description of Boilers One Single Ended Return Tube Working Pressure 210 lbs/sq"

Tested by hydraulic pressure to 365 lbs/sq" Date of test 2.9.37 No. of Certificate 3983 Can each boiler be worked separately ✓

Area of Firegrate in each Boiler 57.5 sq ft No. and Description of safety valves to each boiler Two spring loaded 3" diameter

Area of each set of valves per boiler {per Rule 13.65 sq in as fitted 14.2 sq in Pressure to which they are adjusted 210 lbs/sq" 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 12" 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 15'6" Length 11'0" Shell plates: Material Steel Tensile strength 29.33 Tons/sq"

Thickness 1 7/16" Are the shell plates welded or flanged No Description of riveting: circ. seams {end Double riveted inter. ✓

Long. seams Double riveted D.B.S. Diameter of rivet holes in {circ. seams 1 13/32" long. seams 1 15/32" Pitch of rivets 4 3/8" 10"

Percentage of strength of circ. end seams {plate 66.5 rivets 42.6 Percentage of strength of circ. intermediate seam {plate ✓ rivets ✓

Percentage of strength of longitudinal joint {plate 85.3 rivets 87.5 combined 88.1 Working pressure of shell by Rules 213 lbs/sq"

Thickness of butt straps {outer 1 3/32" inner 1 1/32" No. and Description of Furnaces in each Boiler Three "Daughter" Corrugated

Material Steel Tensile strength 26-30 Tons/sq" Smallest outside diameter 3'-11 7/16"

Length of plain part {top ✓ bottom ✓ Thickness of plates {crown 23/32" bottom 23/32" Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 223 lbs/sq"

End plates in steam space: Material Steel Tensile strength 26-30 Tons/sq" Thickness 1/4" Pitch of stays 18" x 18" 18" x 16"

How are stays secured Double nuts & washers Working pressure by Rules 273 lbs/sq"

Tube plates: Material {front Steel back Steel Tensile strength {26-30 Tons/sq" 26-30 Tons/sq" Thickness {3/32" 7/8"

Lean pitch of stay tubes in nests 10.7" Pitch across wide water spaces 14 1/4" Working pressure {front 221 lbs/sq" back 242 lbs/sq"

Orders to combustion chamber tops: Material Steel Tensile strength 29.33 Tons/sq" Depth and thickness of girder

centre 2 x 7/8" x 10" CENTRE Length as per Rule 2'-10" Distance apart 11" CENTRE 9" Wings No. and pitch of stays

each 3 at 8" Working pressure by Rules 22 lbs/sq" (CENTRE) Combustion chamber plates: Material Steel

Tensile strength 26.30 Tons/sq" Thickness: Sides 3/4" Back 1 1/16" Top 3/4" CENTRE Bottom 13/16"

Pitch of stays to ditto: Sides 9" x 8" Back 9" x 8" Wings Top 9" x 8" Wings Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 215 lbs/sq" Front plate at bottom: Material Steel Tensile strength 26.30 Tons/sq"

Thickness 3/32" Lower back plate: Material Steel Tensile strength 26.30 Tons/sq" Thickness 7/8"

Pitch of stays at wide water space 15" Are stays fitted with nuts or riveted over Nuts

Working Pressure 211 lbs/sq" Main stays: Material Steel Tensile strength 28.32 Tons/sq"

Diameter {At body of stay, 3 3/4" x 3" No. of threads per inch 6 Area supported by each stay 324 square inches

Working pressure by Rules 218 lbs/sq" Screw stays: Material Steel Tensile strength 26.30 Tons/sq"

Diameter {At turned off part, 1 3/4", 1 7/8" x 2" No. of threads per inch 9 Area supported by each stay 77 square inches

