

REPORT ON BOILERS.

No. 44223
20 NOV 1933

Received at London Office

Date of writing Report 18 NOV 1933 When handed in at Local Office HULL Port of HULL

No. in Reg. Book 58 Survey held at Hull Date, First Survey 10.8.33 Last Survey 17.11.1933

on the Steam Trawler "BASQUE" (Number of Visits 1) Tons { Gross 424.30 Net 162.32

Master W. H. ... Built at Burley By whom built Cox, Nelson & Co. Ltd Yard No. 581 When built 1933

Engines made at Hull By whom made Charles & Holmes & Co. Ltd Engine No. 4444 When made 1933

Boilers made at Hull By whom made do Boiler No. 4444 When made 1933

Nominal Horse Power 111 Owners Sullivan Bros. Ltd Port belonging to Hull

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appley Iron Co. Ltd (Letter for Record S. ✓)

Total Heating Surface of Boilers 1940 Sq. ft Is forced draught fitted do Coal or Oil fired Coal

No. and Description of Boilers One single ended Working Pressure 210 Lbs.

Tested by hydraulic pressure to 365 Lbs. Date of test 18.10.33 No. of Certificate 3871 Can each boiler be worked separately ✓

Area of Firegrate in each Boiler 587 sq ft No. and Description of safety valves to each boiler Two spring loaded.

Area of each set of valves per boiler { per Rule 10.8 sq ft as fitted 11.86 sq ft Pressure to which they are adjusted 210 Lbs. 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 9 1/4" 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 17 1/4" Length 10'-8" Shell plates: Material Steel Tensile strength 29/33 Tons.

Thickness 1 1/32" Are the shell plates welded or flanged ✓ Description of riveting: circ. seams { end SR. inter. ✓

long. seams SR. SR. Diameter of rivet holes in { circ. seams 1 3/8" long. seams 1 3/8" Pitch of rivets { 9 1/4"

Percentage of strength of circ. end seams { plate 63.2 rivets 46.4 Percentage of strength of circ. intermediate seam { plate ✓ rivets ✓

Percentage of strength of longitudinal joint { plate 85.13 rivets 86.8 combined 84.6 Working pressure of shell by Rules 212 Lbs.

Thickness of butt straps { outer 1 1/32" inner 1 5/32" No. and Description of Furnaces in each Boiler Three plain.

Material Steel Tensile strength 26/30 Tons. Smallest outside diameter 42.5"

Length of plain part { top 4 5/8" bottom 4 5/8" Thickness of plates { crown 5 3/16" bottom 5 1/16" Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 212 Lbs.

End plates in steam space: Material Steel Tensile strength 26/30 Tons. Thickness 1 1/16" Pitch of stays 17 1/4" x 18 1/4"

How are stays secured Double nuts & washers. Working pressure by Rules 212 Lbs.

Tube plates: Material { front Steel back do Tensile strength { 26/30 Tons. Thickness { 1 5/16" 7/8"

Mean pitch of stay tubes in nests 10 1/4" Pitch across wide water spaces 14" Working pressure { front 230 Lbs. back 222 "

Girders to combustion chamber tops: Material Steel Tensile strength 29/33 Tons. Depth and thickness of girder

at centre 10" x 1 3/4" Length as per Rule 36 7/32" Distance apart 9" No. and pitch of stays

in each 3 @ 8" Working pressure by Rules 224 Lbs. Combustion chamber plates: Material Steel.

Tensile strength 26/30 Tons. Thickness: Sides 3/4" Back 2 3/32" Top 2 3/32" Bottom 3/4"

Pitch of stays to ditto: Sides 10" x 8 1/2" Back 9 3/8" x 8 1/4" Top 9" x 8" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 215 Lbs. Front plate at bottom: Material Steel Tensile strength 26/30 Tons

Thickness 1 5/16" Lower back plate: Material Steel Tensile strength 26/30 Tons Thickness 7/8"

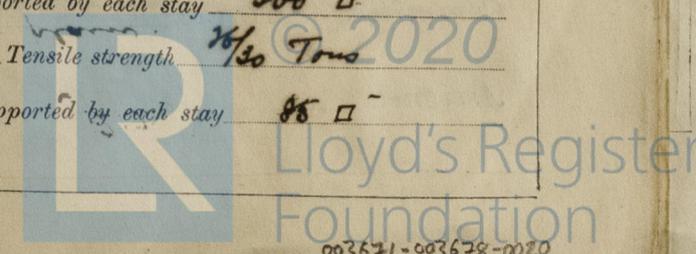
Pitch of stays at wide water space 14 1/2" x 8 1/4" Are stays fitted with nuts or riveted over nuts

Working Pressure 211 Lbs. Main stays: Material Steel Tensile strength 26/32 Tons

Diameter { At body of stay, 3 1/4" or 3 1/4" No. of threads per inch 8 Area supported by each stay 360 sq in

Working pressure by Rules 220 Lbs. Screw stays: Material Steel Tensile strength 26/30 Tons

Diameter { At turned off part, 1 3/4" or 1 3/4" No. of threads per inch 10 Area supported by each stay 86 sq in



Working pressure by Rules 212 lb Are the stays drilled at the outer ends no Margin stays: Diameter 1 7/8" + 2" ^{at turned off part,} _{or} ^{Over threads} 17/8" + 2"

No. of threads per inch 10 Area supported by each stay 98 sq" Working pressure by Rules 217 lb

Tubes: Material Iron External diameter 3 1/2" Thickness 5/16" - 1/8" No. of threads per inch 9"

Pitch of tubes 4 3/4" Working pressure by Rules 215 lb Manhole compensation: Size of opening in shell plate 16" x 12" Section of compensating ring 5 1/2 dia x 1 1/2" No. of rivets and diameter of rivet holes 16 @ 1 1/2"

Outer row rivet pitch at ends 10 1/4" Depth of flange if manhole flanged 3/4" Steam Dome: Material Steel

Tensile strength 36/30 Tons Thickness of shell 3/4" Description of longitudinal joint S.R. Lap.

Diameter of rivet holes 1 1/2" Pitch of rivets 2 1/4" Percentage of strength of joint Plate 54.0
Rivets 43.8

Internal diameter 33" Working pressure by Rules 215 lb Thickness of crown 7/8" No. and diameter of stays 2 @ 2 1/4" Inner radius of crown 10 1/2" Working pressure by Rules 215 lb

How connected to shell Riveted Size of doubling plate under dome 5 1/2 dia x 1 1/2" Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 1 1/2" @ 10 1/4"

Type of Superheater _____ Manufacturers of _____ Tubes _____ Steel castings _____

Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____

Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off and the boiler be worked separately _____

Area of each safety valve _____ Are the safety valves fitted with easing gear _____ Working pressure as per Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure: tubes _____ castings _____ and after assembly in place _____ Are drain cocks or valves fitted to free the superheater from water where necessary _____

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

The foregoing is a correct description,
FOR CHARLES D. HOLMES & CO., LTD.
J. D. Gosper Manufacturer

Dates of Survey During progress of work in shops - - Are the approved plans of boiler and superheater forwarded herewith ✓
while building During erection on board vessel - - - See machinery sp. (If not state date of approval.)
Total No. of visits 1

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. Pioneer N. 44200.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey & in accordance with the approved plan. The materials and workmanship are sound & good. It has been satisfactorily fitted on board, tried under working conditions, & its safety valves adjusted as above.

The steel windows sent with report on the sister vessel "Pioneer"

Charged on engine report

Survey Fee <u>£ 10</u>	When applied for, <u>19</u>
Travelling Expenses (if any) <u>£ 10</u>	When received, <u>19</u>

John H. Mackintosh
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 21 NOV 1933

Assigned See other report

