

REPORT ON BOILERS.

Date of writing Report **25.8.30** When handed in at Local Office **19-12-1930** Port of **Greenock**
 Received at London Office
 No. in Survey held at **Greenock** Date, First Survey **15th May 1930** Last Survey **4th Dec 1930**
 on the **T.S.S. "ABEILLE" No 16** (Number of Visits **20**) Gross **282.33** Tons Net **314**
 Master **P. Elongow** Built at **P. Elongow** By whom built **Ferguson Bros Ltd** Yard No. **300** When built **1930**
 Engines made at **P. Elongow** By whom made **Ferguson Bros Ltd** Engine No. **300** When made **1930**
 Boilers made at **Greenock** By whom made **John & McCandless** Boiler No. **199** When made **1930**
 Nominal Horse Power Owners **Lieut. Remery & de Saumetage "Les Abeilles"** Port belonging to **Harve**

MULTITUBULAR BOILERS - MAIN

Manufacturers of Steel **Vereinigte Stahlwerke** **Steel Co of Scotland, Milkowitzer Bergbau** (Letter for Record **S** ✓)
 Total Heating Surface of Boilers **2720** # Is forced draught fitted **yes** Coal **Oil fired** **Coal**
 No. and Description of Boilers **one single ended** **1 SB** Working Pressure **180**
 Tested by hydraulic pressure to **320** Date of test **22/8/30** No. of Certificate **1962** Can each boiler be worked separately ✓
 Area of Firegrate in each Boiler **69** # No. and Description of safety valves to each boiler **2 Lockburns Improved High Lift** ✓
 Area of each set of valves per boiler **8.7** per Rule **9.81** # Pressure to which they are adjusted **185 lb** 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 **No**
 Smallest distance between shell of boiler and tank top **4 1/2** # ^{OFF FLOORS} Is the bottom of the boiler insulated **yes**
 Largest internal dia. of boilers **15-9 7/16** Length **11-6** # Shell plates: Material **S** Tensile strength **29.33**
 Thickness **1 9/32** # Are the shell plates welded or flanged ✓ Description of riveting: circ. seams **end** **DR** **inter** ✓
 long. seams **TRIPBS** Diameter of rivet holes in **circ. seams** **1 1/32** # **long. seams** **1 5/16** # Pitch of rivets **3/94** ✓ **9/8** ✓
 Percentage of strength of circ. end seams **plate** **66.3** # **rivets** **44** # Percentage of strength of circ. intermediate seam **plate** **85.6** # **rivets** ✓
 Percentage of strength of longitudinal joint **plate** **86.25** # **rivets** **88.45** # Working pressure of shell by Rules **186**
 Thickness of butt straps **outer** **3/32** # **inner** **3/32** # No. and Description of Furnaces in each Boiler **3 Deighton** **30**
 Material **S** Tensile strength **26.30** # Smallest outside diameter **4-1 1/4** #
 Length of plain part **top** ✓ **bottom** ✓ Thickness of plates **crow** **5/8** # **bottom** # Description of longitudinal joint **weld** ✓
 Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules **185** ✓
 End plates in steam space: Material **S** Tensile strength **26.30** # Thickness **1 1/8** # Pitch of stays **19.5 x 16** #
 How are stays secured **DN** # Working pressure by Rules **185** #
 Tube plates: Material **front** **?** **back** **?** **steel** Tensile strength **?** **26.30** # Thickness **3/32** # **23/32** #
 Mean pitch of stay tubes in nests **9.28** # Pitch across wide water spaces **13 1/2** # Working pressure **front** **193** # **back** **211** #
 Girders to combustion chamber tops: Material **S** Tensile strength **29.33** # Depth and thickness of girder
 at centre **10-3 1/4 (2)** # Length as per Rule **3-1 5/26** # Distance apart **9 3/4** # No. and pitch of stays
 in each **3 at 8 3/4** # Working pressure by Rules **185** # **Combustion chamber plates: Material** **S** #
 Tensile strength **26.30** # Thickness: Sides **1 1/16** # Back **2 1/32** # Top **1 1/16** # Bottom **3/4** #
 Pitch of stays to ditto: Sides **8 3/4 x 9 1/4** # Back **8 x 9 1/2** # Top **8 3/4 x 9 3/4** # Are stays fitted with nuts or riveted over **Nuts** #
 Working pressure by Rules **194** # **Front plate at bottom: Material** **S** # Tensile strength **26.30** #
 Thickness **3/32** # **Lower back plate: Material** **S** # Tensile strength **26.30** # Thickness **13/16** #
 Pitch of stays at wide water space **13 3/4** # Are stays fitted with nuts or riveted over **Nuts** #
 Working Pressure **192** # **Main stays: Material** **S** # Tensile strength **28.32** #
 Diameter **At body of stay,** **2 7/8** # **or** # **No. of threads per inch** **6** # **Area supported by each stay** **3 1/2** #
 Working pressure by Rules **195** # **Screw stays: Material** **S** # Tensile strength **26.30** #
 Diameter **At turned off part,** **1 5/8** # **or** # **No. of threads per inch** **9** # **Area supported by each stay** **60** #

Working pressure by Rules **200** Are the stays drilled at the outer ends **No** Margin stays: Diameter **17/8"**
 No. of threads per inch **9** Area supported by each stay **102"** Working pressure by Rules **200**
 Tubes: Material **Iron** External diameter **2 1/2"** Thickness **9 WG 11/32 9/32** No. of threads per inch **9**
 Pitch of tubes **33 1/4 x 3 1/16"** Working pressure by Rules **194** Manhole compensation: Size of opening in shell plate **16 1/2" x 20 1/2"** Section of compensating ring **3' 0" x 2' 8" x 1 1/32"** No. of rivets and diameter of rivet holes **38 at 13/8"**
 Outer row rivet pitch at ends **9 1/4"** Depth of flange if manhole flanged **3 1/4"** Steam Dome: Material
 Tensile strength Thickness of shell Description of longitudinal joint
 Diameter of rivet holes Pitch of rivets Percentage of strength of joint
 Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays
 How connected to shell Inner radius of crown Working pressure by Rules
 Size of doubling plate under dome Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell
 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
 Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
 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 JOHN G. KINCAID & CO. LIMITED,
 Director/Manufacturer.

Dates of Survey while building: During progress of work in shops (1930) May 15, 21, 22, 24, June 24, 26, 30, July 21, 25. Are the approved plans of boiler forwarded herewith (If not state date of approval.) **Yes**
 During erection on board vessel 30 Aug 1, 4, 8, 11, 15, 18, 21, 22, Dec 11, 14. Total No. of visits **20**

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

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 & all workmanship & material are of good quality & it is now securely fitted on board.**

This report accompanies that of the machinery.

Survey Fee ... £ **22 : 12 : -** When applied for, 26th AUGUST 1930
 Travelling Expenses (if any) £ **00 : - : -** When received, 30th AUGUST 1930

Wm Gordon-Maclean
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 20 DEC 1930**
 Assigned **SEE ACCOMPANYING MACHINERY REPORT.**

