

REPORT ON BOILERS.

No. 61742

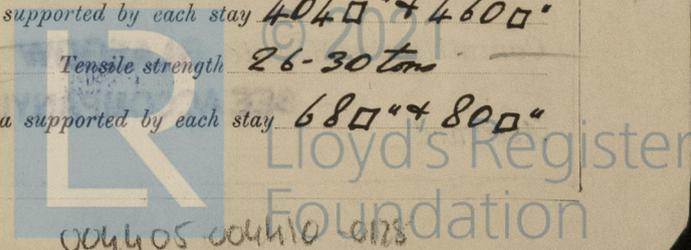
Received at London Office

15 NOV 1939

Reporting Report 19 When handed in at Local Office 13. 11. 1939 Port of **GLASGOW**
 Survey held at **GLASGOW** Date, First Survey 16. 6. 39 Last Survey 8th Nov. 1939
 (Number of Visits 40) Tons { Gross 5717 Net 3034 }
 On the S.S. "**DAN-Y-BRYN**"
 Built at **BURNTISLAND** By whom built **BURNTISLAND S.B. Co.** Yard No. 239 When built
 Made at **GLASGOW** By whom made **D. ROWAN & Co. LD.** Engine No. 1049 When made 1939
 Made at **GLASGOW** By whom made **D. ROWAN & Co. LD.** Boiler No. 1049 When made 1939
 Horse Power 458 Owners **Brynmor Steamship Co Ltd** Port belonging to **London**

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel **COLVILLES LD.** (Letter for Record **S** ✓)
 Heating Surface of Boilers **5322 sq (5646 sq OIL BURNERS)** forced draught fitted **YES** Coal or Oil fired **EITHER**
 Description of Boilers **TWO SINGLE-ENDED** Working Pressure **220 lb.** ✓
 Hydraulic pressure to **380 lb.** Date of test **6-10-39** No. of Certificate **20460** Can each boiler be worked separately **YES**
 Firegrate in each Boiler **63.25 sq** No. and Description of safety valves to each boiler **2 SPRING LOADED** ✓
 Each set of valves per boiler { per Rule **15.0160"** as fitted **16.580"** } Pressure to which they are adjusted **-220 lbs.** Are they fitted with easing gear **- yes.**
 Distance between boilers or uptakes and bunkers or woodwork **-10" at sides. 9'-6" to bulkhead.** Is oil fuel carried in the double bottom under boilers **-**
 Distance between shell of boiler and tank top plating **-2'-5"** Is the bottom of the boiler insulated **- yes.**
 External dia. of boilers **16'-0"** Length **11'-6"** Shell plates: Material **STEEL** - Tensile strength **29-33 tons**
 Are the shell plates welded or flanged **NO** Description of riveting: circ. seams { end **D.R.** }
 Diameter of rivet holes in { circ. seams **F 1 7/16" B 1 9/16"** } Pitch of rivets { **F 3 7/8" B 4 1/4"** }
 { long. seams **1 9/16"** }
 Percentage of strength of circ. end seams { plate **F 61.9 B 60** }
 { rivets **F 45.2 B 45.8** } Percentage of strength of circ. intermediate seam { plate **-** }
 { rivets **-** }
 Working pressure of shell by Rules **221 lb.**
 No. and Description of Furnaces in each Boiler **THREE DEIGHTON**
 Material **STEEL** Tensile strength **26-30 tons** Smallest outside diameter **3'-11 1/2"**
 Thickness of plates { crown **4 7/16"** } Description of longitudinal joint **WELDED**
 { bottom **-** }
 Working pressure of furnace by Rules **227 lb.**
 Material **STEEL** Tensile strength **26-30 tons** Thickness **1 7/16"** Pitch of stays **21 7/8" - 20 7/8"**
 Working pressure by Rules **220 lb.**
 Material { front **STEEL** } Tensile strength { **26/30 tons** } Thickness { **1 5/16" front 2 5/16" back** }
 { back **STEEL** }
 Working pressure { front **229 lb.** }
 { back **232 lb.** }
 Material **STEEL** Tensile strength **28-32 tons** Depth and thickness of girder
 Length as per Rule **34 1/2"** Distance apart **8 1/4"** No. and pitch of stays
 Working pressure by Rules **224 lb.** Combustion chamber plates: Material **STEEL**
 Thickness: Sides **2 1/32"** Back **2 3/32"** Top **2 1/32"** Bottom **2 7/32"**
 Material **STEEL** Tensile strength **26-30 tons** Thickness **5 3/64"**
 Working pressure by Rules **220 lb.** Front plate at bottom: Material **STEEL** Tensile strength **26-30 tons**
 Lower back plate: Material **STEEL** Tensile strength **26-30 tons** Thickness **5 3/64"**
 Working pressure by Rules **227 lb.** Main stays: Material **STEEL** Tensile strength **28-32 tons**
 At body of stay, **3 1/4" + 3 1/2"** No. of threads per inch **6** Area supported by each stay **4040" + 4600"**
 Over threads
 Working pressure by Rules **228 + 236 lb.** Screw stays: Material **STEEL** Tensile strength **26-30 tons**
 At turned off part, **1 5/8" + 1 3/4"** No. of threads per inch **9** Area supported by each stay **680" + 800"**
 Over threads



Working pressure by Rules **223.2** Are the stays drilled at the outer ends **NO** Margin stays: Diameter ^{At turned off part,} **1 7/8"**
 No. of threads per inch **9** Area supported by each stay **94 0"** ^{or} Over threads **1 7/8"**
 Tubes: Material **IRON** External diameter ^{Plain} **3"** Thickness ^{8 W.G.} **1/4", 5/16", 3/8", 7/16"** Working pressure by Rules **228 lb.**
 Pitch of tubes **4 3/16" x 4 1/8"** Working pressure by Rules **250 lb.** Manhole compensation: Size of ^{of} **19 1/2" x 15 1/2"**
 shell plate **19 1/2" x 15 1/2"** Section of compensating ring **11" x 1 3/16"** No. of rivets and diameter of rivet holes **34 @ 1 9/16"**
 Outer row rivet pitch at ends **10 1/2"** Depth of flange if manhole flanged **3"** Steam Dome: Material **NONE**
 Tensile strength - Thickness of shell - Description of longitudinal joint -
 Diameter of rivet holes - Pitch of rivets - Percentage of strength of joint ^{Plate} -
 Internal diameter - Working pressure by Rules - Thickness of crown - No. and diam made a
 stays - Inner radius of crown - Working pressure by Rules -
 How connected to shell - Size of doubling plate under dome - Diameter of rivet holes a
 of rivets in outer row in dome connection to shell -

Type of Superheater **NORTH EASTERN SMOKE TUBE** Manufacturers of ^{Tubes} **See M.W.C. CERT. No 9824 - City**
 Number of elements - Material of tubes - ^{Steel forgings} **See M.W.C. CERT. No 9824 - City**
 Material of headers - Tensile strength - Thickness - Can the superheater be shu
 the boiler be worked separately **NO** Is a safety valve fitted to every part of the superheater which can be shut off from the boiler **YES**
 Area of each safety valve **1.76 0"** Are the safety valves fitted with easing gear **YES** Working pressu
 Rules - Pressure to which the safety valves are adjusted - Hydraulic test
 tubes - forgings and castings - and after assembly in place **440 lbs.** Are drain
 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 David Rowan & Co. Ltd
 Archd. N. Grierson

Dates of Survey ^{During progress of} work in shops - -
 while building ^{During erection on} board vessel - -
 Are the approved plans of boiler and superheater forwarded herewith
 (If not state date of approval.)
SEE ACCOMPANYING MACHINERY REPORT 41
 Total No. of visits

Is this Boiler a duplicate of a previous case **YES** If so, state Vessel's name and Report No. **"CEFH-Y-BRYN" 915. R 03**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
 The materials and workmanship are good.
 The boilers have been constructed under special survey in accordance with
 Rules and approved plan, and have been sent to Burntisland to be insta
 in the vessel.

These boilers have been efficiently fitted on board and the safety valves
 adjusted to 220 lbs/0".
 J. Campbell

Survey Fee ... £
 Travelling Expenses (if any) £
 When applied for, 19
 When received, 19

Committee's Minute **GLASGOW 14 NOV 1939**
 Assigned **SEE ACCOMPANYING MACHINERY REPORT.**

Engineer Surveyor to Lloyd's Register of
 TUE. 23 JAN 1940
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 Foundation