

18 FEB 1928

NEWCASTLE-ON-TYNE No. 82383.

REPORT ON BOILERS.

No. 46957
24 AUG 1927

Rpt. 5e.

Date of writing Report 19 When handed in at Local Office 20-8-1927 Port of Glasgow
 Received at London Office
 No. in Survey held at Annan Date, First Survey 24-6-27 Last Survey 19 August 1927
 Reg. Book. 40009 on the BOILER No. 10519 M.V. Belmorra (Number of Visits 8) (Gross Tons) (Net Tons)
 Master Built at Walker By whom built Armstrong Whitworth & Co. When built 1925
 Boilers made at Annan By whom made Cochran & Co. Annan L^{td} When made 1927
 Owners A/S. Robert Belmorra Port belonging to Oslo

VERTICAL DONKEY BOILER— No. One Description Vertical Manufacturers of steel D. G. G. & Co. Ltd.
 Made at Annan By whom made Cochran & Co. Annan L^{td} When made 1927 Where fixed Engine Room Working pressure 50 lbs.
 tested by hydraulic pressure to 75 lbs Date of test 19/8/27 No. of Certificate 17537 Fire grate area 18.7 sq ft Description of safety valves Direct spring
 No. of safety valves 2 Area of each 3.14 sq ft Pressure to which they are adjusted 150 lb If fitted with easing gear yes If steam from main boilers can enter the donkey boiler
 Diameter of donkey boiler 6'0" Length 15'9" Material of shell plates Steel Thickness 1/2" and 1/4"
 Range of tensile strength 28/32 tons Description of riveting long seams double Diameter of rivet holes 3/32" Whether punched or drilled drilled Pitch of rivets 3.116, 2.9107, 2.854 Lap of plating 4 3/4" Per centage of strength of joint Rivets 70.1 Working pressure of shell by rules 150.5 lbs Thickness of shell crown plates 9/16" x 1" Radius of do. 3'0" No. of stays to do. none Diameter of stays Diameter of furnace—Top Hemisphere Bottom 5'0" Length of furnace Thickness of furnace side plates 5/8" Description of joint Seamless Working pressure of furnace by rules 174 lbs Thickness of Ogee ring 1" Working pressure of Ogee ring by rules 155.8 lbs Thickness of furnace crown plates 5/8" Radius of do. 2'6" Stayed by radius Diameter of uptake 15" x 18" Thickness of uptake plates 9/16" Thickness of tube plates front 1/4" back 15/16" Mean pitch of stay tubes in nest 10 15/16" Pitch in outer vertical rows 7 1/2"
 Diameter of tube holes FRONT stay 2 3/8" BACK stay 2 1/2" Working pressure of tube plates by rules 152.5, 153 Tubes: Material iron
 External diameter stay 2 1/2" Thickness stay 1/2" No. of threads per inch 9 Pitch of tubes 3 9/16" x 3 3/4"
 Working pressure by rules 175 lbs Manhole compensation: Size of opening in shell plate 16" x 12" Section of compensating ring 6" x 15/16" No. of rivets and diameter of rivet holes 36 7 15/16 3/32" Outer row pitch at ends 3 3/4"

The foregoing is a correct description,
 For COCHRAN & CO., ANNAN, LIMITED Manufacturer.
 Walter Beattie Works Manager
 Drawing No. 15773.

Dates of Survey while building
 During progress of work in shops - - - - - 20 July 28 - 12-29 Aug 2-9-19.
 During erection on board vessel - - - - -
 Total No. of visits 8

copy of Is the approved plan of boiler forwarded herewith J.S.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
 This boiler has been built under Special Survey in accordance with the Rules and the approved plan. The materials and workmanship are good.
 It has been forwarded to Newcastle to be fitted on the vessel No. 66 building by Messrs. Armstrong Whitworth.

Survey Fee ... £ 4 : 4 :
 Travelling Expenses (if any) £ : :
 When applied for 19
 When received 19

Committee's Minute GLASGOW 23 AUG 1927
 Assigned TRANSMIT TO LONDON

A. Campbell
 Engineer Surveyor to Lloyd's Register of Shipping.
 FRI 2 MAR 1928
 Lloyd's Register of Shipping
 TUES 6 MAR 1928
 See Newcastle No. 82383

W541-0026