

RECEIVED
Rpt. 5e.
FEB-1945
D.O.

REPORT ON BOILERS.

No. 69336

22 FEB 1945

Received at London Office

Date of writing Report 19 When handed in at Local Office 19.2.45 Port of GLASGOW.

No. in Survey held at ANNAN Date, First Survey 14.12.44 Last Survey 14.2.1945.

Reg. Book. SS "FIREBEAM" (Number of Visits 6) Gross 1553.73

on the Aberdeen Hall Russell, G.P. Net 892.58

Built at BURNTISLAND. By whom built BURNTISLAND SHIPBUILDING CO. LD. Yard No. 485 When built 1945

Boilers made at ANNAN By whom made COCHRAN & CO. ANNAN LD Boiler No. 15710 When made 1945

Owners Messrs. G. & J. Light & Co. G.P. Port belonging to London.

VERTICAL DONKEY BOILER— No. One Description Cochran & Co. Manufacturers of steel Colvilles Ltd.

Made at Annan By whom made Cochran & Co. Annan Id. When made 1945 Where fixed Working pressure 105

tested by hydraulic pressure to 208 Date of test 14:2:45 No. of Certificate 21870 Fire grate area 16.75 Description of safety valves Enclosed spring.

No. of safety valves 2 Area of each 3.14 Pressure to which they are adjusted 105 If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler See main boiler report

Diameter of donkey boiler 5'6" Length 12'3" Material of shell plates S Thickness 7/16" 1/2"

Range of tensile strength 28-32 Description of riveting long. seams D.R. Lap. Diameter of rivet holes 25/32" Whether punched or drilled drilled

Pitch of rivets 2.69" 2.55" 2.5" Lap of plating 3 7/8" Per centage of strength of joint Rivets: 66.73 Working pressure of shell by rules Plates: 68.76

Thickness of shell crown plates 23" 13" Radius of do. 2'9" No. of stays to do. Diameter of stays - Diameter of furnace—Top Bottom 4'9" Length of furnace - Thickness of furnace side plates 1/2" Description of joint Seamless Working pressure of furnace by rules 144 Thickness of Ogee ring 23" Working pressure of Ogee ring by rules 114 Thickness of furnace crown plates 1/2" Radius of do. 2'4 1/2" Stayed by Hemisphere Diameter of uptake 13" x 19 1/2" Thickness of uptake plates 9" Thickness of tube plates front 5/16" back 19/32" Mean pitch of stay tubes in nest 10.5" Pitch in outer vertical rows 8"

Diameter of tube holes FRONT stay 2 11/16" plain 2 9/16" BACK stay 2 1/2" plain 2 1/2" Working pressure of tube plates by rules F 109B. 111.5 Tubes: Material Iron

External diameter stay 2 1/2" plain 2 1/8" Thickness stay 1 11/32" plain 1 11/32" No. of threads per inch 9 Pitch of tubes 4" x 3 1/2"

Working pressure by rules 125 Manhole compensation; Size of opening in shell plate 21" x 17" Section of compensating ring 7" x 1" No. of rivets and diameter of rivet holes 40 @ 25/32" Outer row pitch at ends 4"

The foregoing is a correct description,
C. C. Alex. Manufacturer
FOR COCHRAN & CO., ANNAN.

Dates of Survey while building { During progress of work in shops - } 19.04 Dec 14. 19 1945 Jan 20 Feb 2. 9. 14 Drawing No. 25694

{ During erection on board vessel - - } 6

Total No. of visits 6 Is the approved plan of boiler forwarded herewith YES.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The materials and workmanship are good.

The boiler has been constructed under Special Survey.

To the order of Messrs. David Rowan & Co., Ltd., for their Engine No. 1133.

It will be fitted on board at Burntisland. Aberdeen

Survey Fee £ 4 : 4 : - When applied for Mon 4/2 19.....

Travelling Expenses (if any) £ : : } When received 19.....

Committee's Minute GLASGOW 20 FEB 1945

Assigned Referred for completion

L. C. Davis
Engineer Surveyor to Lloyd's Register of Shipping.

F. E. Mackay
FRI. 29 JUN 1945