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# REPORT ON BOILERS.

No. 68619

Date of writing Report 10 When handed in at Local Office 27 6 1944 Port of GLASGOW.  
 No. in Survey held at ANNAN Date, First Survey 11. 2. 44 Last Survey 23: 6: 1944.  
 Reg. Book. "Vic 82" A/MS 974 (Number of Visits 12) Tons {Gross  
 on the Knottlingly John Harker Ltd. Crabtree (1931) Ltd. Yard No. 183 When built 1945  
 Built at St. Yarmouth By whom built Cochran & Co. (Annan) Ltd. Boiler No. 16038 When made 1944  
 Boilers made at Annan By whom made Cochran & Co. (Annan) Ltd. Port belonging to  
 Owners

**VERTICAL MAIN BOILER**— No. One Description Cochran Manufacturers of steel Colvilles Ltd.  
 Made at Annan By whom made Cochran & Co (Annan) Ltd. When made Where fixed Working pressure 125 lbs.  
 tested by hydraulic pressure to 238 Date of test 23: 6: 44 No. of Certificate 21754 Fire grate area 27.75 Description of safety valves Ordinary  
 sq. ft.  
 No. of safety valves 2 Area of each 4.9" Pressure to which they are adjusted - If fitted with easing gear Yes If steam from main boilers can  
 enter the donkey boiler Diameter of donkey boiler 7'0" Length 14'0" Material of shell plates S Thickness 19/32" 23/32"  
 Range of tensile strength 28-32 Description of riveting long. seams DR Lap. Diameter of rivet holes 31/32" Whether punched or  
 drilled drilled Pitch of rivets 2.962" 3.03" 2.87" Lap of plating 4 3/4" Per centage of strength of joint Rivets 68.9 Working pressure of shell by  
 rules 129.7 Thickness of shell crown plates 1" x 17/32" Radius of do. 3'6" No. of stays to do. - Diameter of stays - Diameter of  
 furnace—Top - Bottom 6'0" Length of furnace - Thickness of furnace side plates 21/32" Description of joint Seamless Working  
 pressure of furnace by rules 152 Thickness of Ogee ring 1" Working pressure of Ogee ring by rules 133 Thickness of furnace  
 crown plates 21/32" Radius of do. 3'0" Stayed by hemisphere Diameter of uptake 16" x 20" Thickness of uptake  
 plates 1/2" Thickness of tube plates front 1 1/16" back 1" Mean pitch of stay tubes in nest 10.77" Pitch in outer vertical rows 8"  
 Diameter of tube holes FRONT stay 2 11/16" BACK stay 2 1/8" Working pressure of tube plates by rules R. 126 B. 146 Tubes: Material S.  
 External diameter stay 2 1/8" plain 2 9/16" Thickness stay 1 1/32" plain 1 1/8" No. of threads per inch 9 Pitch of tubes 4" x 3 3/4"  
 Working pressure by rules 175 Manhole compensation; Size of opening in shell plate 21" x 17" Section of compensating  
 ring 7 1/2" x 1" No. of rivets and diameter of rivet holes 40 @ 31/32" Outer row pitch at ends 4 1/8"

The foregoing is a correct description,

H.S. = 500 lb. by specification

FOR COCHRAN & CO., ANNAN, LTD.

Dates of Survey while building  
 During progress of work in shops - 1944 Feb 11, 17 Mar 8, 30 Apr 14, 21, 28 May 5, 18, 31 Jun 10, 23  
 During erection on board vessel -  
 Total No. of visits 12  
 Drawing No. 29465  
 Is the approved plan of boiler forwarded herewith No.  
 Retained for duplicate cases.

**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.  
 The boiler has been constructed to the order of the Admiralty and will be sent to Messrs. Crabtree (1931) Ltd., Great Yarmouth to be fitted in an 80 ft. Steam Lighter.

The above boiler installed in Vic 82 at Knottlingly under Special Survey, examined under steam, safety valves adjusted to 125 lb (ring size F & A 3/8") accumulation test held and boiler found satisfactory on completion of all tests.  
 W. J. Shields,  
 Hull.

Survey Fee ... £ 4 : 4 : } When applied for ... 19...  
 Specification ... £ 1 : 1 : } When received ... 19...  
 Travelling Expenses (if any)

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

Committee's Minute  
 Assigned Transmit to Wokingham

FRI. 1 JUN 1945  
 See H. B. Macky Rpt.  
 Lloyd's Register Foundation

The Surveyors are requested not to write on or below the space for Committee's Minute.

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