

REPORT ON BOILERS.

Sld. No. 33067
Sls. No. 63121
NOV 28 1940

Received at London Office
Date of writing Report 19 When handed in at Local Office 23:11:10 40 Port of Glasgow
No. in Survey held at Annan Date, First Survey 25:7:40 Last Survey 21-11-1940
Reg. Book. M/V "EMPIRE MIST" (Number of Visits 14) Gross 7241 Tons Net 5069
Built at Sunderland By whom built Wm Doxford & Sons Ltd Yard No. 669 When built 1941
Boilers made at Annan By whom made Buchanan & Co Annan Ltd Boiler No. 14852 When made 1940
Owners Ministry of Shipping Port belonging to Sunderland.

VERTICAL DONKEY BOILER— No. one Description Buchanan composite Manufacturers of steel Buchanan Ltd
Made at Annan By whom made Buchanan & Co Annan Ltd When made 1940 Where fixed reew. Working pressure 120
tested by hydraulic pressure to 230 Date of test 21-11-40 No. of Certificate 20670 Fire grate area— Description of safety valves enclosed opening
No. of safety valves 2 Area of each 7.06 sq ft Pressure to which they are adjusted 120 If fitted with easing gear yes If steam from main boilers can
enter the donkey boiler ✓ Diameter of donkey boiler 8.0 Length 17.9 Material of shell plates S Thickness 13/16 21/32
Range of tensile strength 28-32 Description of riveting long. seams DR Lap Diameter of rivet holes 1 1/32 Whether punched or
drilled drilled Pitch of rivets 3.154 3.135 3.18 Lap of plating 5 Per centage of strength of joint Rivets 66.2 53.9 Working pressure of shell by
rules 122.5 Thickness of shell crown plates 1 1/32 19/32 Radius of do. 4.0 No. of stays to do. — Diameter of stays — Diameter of
furnace—Top — Bottom 7.0 Length of furnace — Thickness of furnace side plates 23/32 Description of joint seamless Working
pressure of furnace by rules 144 Thickness of Ogee ring 1 1/32 Working pressure of Ogee ring by rules 124 Thickness of furnace
crown plates 23/32 Radius of do. 3.6 Stayed by Hemisphere Diameter of uptake 21 1/2 x 15 Thickness of uptake
plates 9/16 Thickness of tube plates front 1 1/4 back 1 1/4 Mean pitch of stay tubes in nest 8.73 9.48 Pitch in outer vertical rows 5 1/4 & 6 3/4
Diameter of tube holes FRONT stay 2 3/8 1 1/8 BACK stay 2 1 1/2 Working pressure of tube plates by rules 122 126 196 161 Tubes: Material S
External diameter stay 2 1 1/2 Thickness stay 1 1/32 No. of threads per inch 9 Pitch of tubes 2 7/8 x 2 1/8 3.18 x 3.13
Working pressure by rules 215 Manhole compensation; Size of opening in shell plate 21" x 17" Section of compensating
ring 7 1/2 x 1 1/32 No. of rivets and diameter of rivet holes 40 @ 1 1/32 Outer row pitch at ends 403"

The foregoing is a correct description,

J. R. COCHRAN & ANNAN, LTD
Glasgow. Manufacturer

Dates of Survey while building { During progress of work in shops— 1940 July 25-30 Aug: 9-22 Sep: 5-11-19 Oct: 1-10-17-24-30 Drawing No. 26072.25112
{ During erection on board vessel — Nov: 14-21
Total No. of visits 14
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.

This boiler has been securely fixed on board the vessel, examined under steam & safety valves adjusted to working pressure in accordance with the rule requirements.

For recommendation please see Memo Rpt.

J. R. COCHRAN

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

MONTHLY ACCOUNT

Committee's Minute

GLASGOW 24 NOV 1940

Assigned

TRANSMIT TO LONDON

Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 22 APR 1941

See Sld. 33067

Lloyd's Register
Foundation