

REPORT ON BOILERS.

No. 12059

Rec. Report No 19097

Received at London Office

4 SEP 1924

Date of writing Report 30.8.24 1924 When handed in at Local Office 30.8.24 1924 Port of MIDDLESBRO 18 APR 1925

No. in Survey held at Stockton-on-Tees Date, First Survey 14th February Last Survey 24th Aug. 1924

Reg. Book. 90558 on the Steel RABY CASTLE (Number of Visits 14) Tons } Gross }
Net 459

Master Dundell Built at Dundell By whom built Calder & Co. Ld. When built 1925

Boilers made at Stockton By whom made James Riley Bros Ltd (No 5504) When made 1924

Owners James Chambers & Co. Port belonging to Riverpool

VERTICAL DONKEY BOILER— No. One Description "Meredith Pat" Manufacturers of steel South Durham S. Co (Malleable)

Made at Stockton By whom made James Riley Bros Ltd When made 1924 Where fixed Working pressure 100

tested by hydraulic pressure to 200 Date of test 27.8.24 No. of Certificate 6386 Fire grate area 10 sq ft Description of safety valves Spring

No. of safety valves 2 Area of each 1.76 sq ft Pressure to which they are adjusted 100 lb If fitted with easing gear yes If steam from main boilers can enter the donkey boiler no Dia. of donkey boiler 4'-9" Length 10'-6" Material of shell plates Steel Thickness 3/8" Range of tensile strength 28-32 Descrip. of riveting long. seams 2 Riv. Lap Dia. of rivet holes 3/4" Whether punched or drilled drilled Pitch of rivets 2 1/2"

Lap of plating 4" Per centage of strength of joint Rivets 75.0 Working pressure of shell by rules 120 Thickness of shell crown plates 19/32" Plates 70.7

Radius of do. 4'-6" No. of Stays to do. one Dia. of stays 1 1/2" Diameter of furnace Top 3'-4 1/2" Bottom 4'-2 1/2" Length of furnace 1'-9"

Thickness of furnace plates 7/16" Description of joint Weld Working pressure of furnace by rules 120 Thickness of furnace crown plates 7/16" Radius of do. 3'-0" Stayed by dished Diameter of tubes 2 3/4" x 11' Thickness of uptake plates F-2 1/32" B-2 1/16"

Thickness of stay tubes 2 3/4" + 5/16" @ 9 threads; C.C. back plate 1/2" C.C. stay 1 1/4" dia @ 9 threads, pitched 9 x 8 + nutted.

RILEY BROS. (ENGINEERS) LIMITED.
The foregoing is a correct description,
J. H. Shields SECRETARY, Manufacturer.

Dates of Survey while building

During progress of work in shops - -	1924, Feb. 14, 26	Mar. 10, 24	Apr. 3, 17	June 17, 24	July 2, 11, 22	Aug. 1, 7, 14, 27
	During erection on board vessel - -					
	Total No. of visits <u>14</u>					

Is the approved plan of boiler forwarded herewith yes

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey; is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results

S.S. This boiler was fitted on the bank top in the engine room of the motor vessel "RABY CASTLE". It was efficiently fastened, fitted with two spring loaded safety valves and easing gear. The valves were 1.76 sq ft area were adjusted to 100 lb pressure under steam. The boiler burns oil fuel F.P. above 150°F.

R. Lee Amear
Newcastle-on-Tyne.

Survey Fee £ 4-4-4 When applied for, MONTHLY A/c. (September) 1924

Travelling Expenses (if any) £ : : When received, 1924

Wm Morrison
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 21 APR 1925
Assigned See Dem J.E. 8528

