

REPORT ON BOILERS.

Received at London Office 30 JAN 1929

Date of writing Report 1929 When handed in at Local Office 18.1.29 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 28.5.28 Last Survey 17.1.29

on the new steel S/S "VACUOLINE" (Number of Visits 77) Tons Gross 8670 Net 5223

Master Built at Port Glasgow By whom built Lithyons Ltd Yard No. 820 When built 1929

Engines made at Glasgow By whom made David Rowan & Co Ltd Engine No. 889 When made 1929

Boilers made at Glasgow By whom made David Rowan & Co Ltd Boiler No. 889 When made 1929

Nominal Horse Power 630 Owners Vacuum Oil Co Ltd Port belonging to London

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel James Dunlop & Co Ltd Calderbank. Wm Beaudmore & Co Ltd Parkhead. Wiltkowitz Benzbau und Eisenhütten Gewerkschaft in Wiltkowitz. (Letter for Record)

Total Heating Surface of Boilers 9276 sq ft Is forced draught fitted yes Coal or Oil fired oil

No. and Description of Boilers Three single ended 3 SB Working Pressure 230

Tested by hydraulic pressure to 395 Date of test 21.9.28 No. of Certificate 18045 Can each boiler be worked separately yes

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler two improved high lift

Area of each set of valves per boiler per Rule 9.46 sq ft as fitted 9.80 sq ft Pressure to which they are adjusted 230 Are they fitted with easing gear yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork 2'-11" Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating 3'-0" Is the bottom of the boiler insulated yes

Longest internal dia. of boilers 15'-10 1/2" Length 12'-1 1/8" Shell plates: Material steel Tensile strength 30-34 tons

Thickness 1 11/32" Are the shell plates welded or flanged no Description of riveting: circ. seams end DR inter. DR

long. seams DBS, TR Diameter of rivet holes in circ. seams F 1 1/16" B 1 1/16" Pitch of rivets F 3.5" B 4.368"

Percentage of strength of circ. end seams plate F 58.9 B 64.2 rivets F 46.4 B 44.2 Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate 84.9 rivets 89.5 combined 87.8 Working pressure of shell by Rules 230

Thickness of butt straps outer 5/32" inner 1 9/32" No. and Description of Furnaces in each Boiler Three Deighton J.C.F.

Material steel Tensile strength 26-30 tons Smallest outside diameter 43.75"

Length of plain part top bottom Thickness of plates crown 1 1/16" bottom 1 1/16" Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 231

End plates in steam space: Material steel Tensile strength 26-30 tons Thickness 1 13/32" Pitch of stays 16 1/2" x 23"

How are stays secured WN Working pressure by Rules 230

Tube plates: Material front steel back " Tensile strength 26-30 tons Thickness 29/32" 3/4"

Mean pitch of stay tubes in nests 9.2" Pitch across wide water spaces 13 1/2" Working pressure front 240 back 236

Girders to combustion chamber tops: Material steel Tensile strength 28-32 tons Depth and thickness of girder at centre 2 @ 10 3/8" x 7/8" Length as per Rule 37.47" Distance apart 8 3/4" No. and pitch of stays in each 4 @ 7 1/4" Working pressure by Rules 250

Tensile strength 26-30 tons Thickness: Sides 21/32" Back 21/32" Top 21/32" Bottom 7/8"

Pitch of stays to ditto: Sides 7 1/2" x 8" Back 7 3/8" x 8 1/2" Top 7 1/4" x 8 3/4" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 232 Front plate at bottom: Material steel Tensile strength 26-30 tons Thickness 29/32" Lower back plate: Material steel Tensile strength 26-30 tons Thickness 53/64"

Pitch of stays at wide water space 13 1/2" Are stays fitted with nuts or riveted over nuts

Working Pressure 243 Main stays: Material steel Tensile strength 28-32 tons

Diameter At body of stay, 3 1/4" & 3" No. of threads per inch 6 Area supported by each stay 388 & 337 sq in

Working pressure by Rules 239 & 233 Screw stays: Material steel Tensile strength 26-30 tons

Diameter At turned off part, 1 5/8" No. of threads per inch 9 Area supported by each stay 63.5 sq in



