

# REPORT ON BOILERS

No. 11222

Received at London Office WFD. 1 MAR. 1922

Date of writing Report 27.2.28 19 When handed in at Local Office Port of MIDDLESBRO

No. in Survey held at Stockton-on-Tees Date, First Survey 18.10.21 Last Survey 21.2.22 19

Reg. Book. 9951 on the STEEL Sc. 'OILFIELD' (Number of Visits 9) Tons } Gross (S.S. No. 224) Net

Master Built at Newcastle By whom built Tynes Iron S.B. Co When built

Engines made at Newcastle By whom made Hall and Shipway Eng. Co. Ltd. No. 844 When made

Boilers made at Stockton By whom made Messrs. The Sunderland Id. (No. 4573) When made 1922

Registered Horse Power Owners Northern Petroleum Tank S.I. Co. Ltd. Port belonging to Newcastle

## MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY. — Manufacturers of Steel John Heneer & Sons Ltd

(Letter for record (S) ) Total Heating Surface of Boilers 1237 sq ft Is forced draft fitted No. and Description of Boilers one single ended Working Pressure 120 Tested by hydraulic pressure to 230 Date of test 21.2.22

No. of Certificate 6264 Can each boiler be worked separately Area of fire grate in each boiler 36.6 sq ft No. and Description of safety valves to each boiler Area of each valve Pressure to which they are adjusted

Are they fitted with easing gear 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 External Mean dia. of boilers 12'-0" Length 9'-6"

Material of shell plates steel Thickness 23/32 Range of tensile strength 29-33 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams 2-R. lap long. seams 2 Riv. Diameter of rivet holes in long. seams 15/16 Pitch of rivets 4 3/4

Top of plates or width of butt straps 9 2/8 x 5/8 out 3 Rivets per pitch Per centages of strength of longitudinal joint rivets 90.2 Working pressure of shell by rules 125 Size of manhole in shell 16 x 12 Size of compensating ring 5 1/2 x 3 1/32 plate 80.21

boiler 2 plain Material steel Outside diameter 45 1/4 Length of plain part top 70 3/4 Thickness of plates crown 2 1/32 bottom 7 3/8

Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 125 Combustion chamber plates: Material steel Thickness: Sides 17/32 Back 9/16 Top 17/32 Bottom 7/8 Pitch of stays to ditto: Sides 9 x 8 1/2 Back 9 x 9 1/2

Top 9 x 8 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 125 Material of stays steel Area at smallest part 1.45 Area supported by each stay 85.5 Working pressure by rules 147 End plates in steam space: Material steel Thickness 1/2

Pitch of stays 15 1/2 x 15 1/2 How are stays secured nuts + 7/8 x 7/8 Working pressure by rules 122 Material of stays steel Area at smallest part 3.24

Area supported by each stay 252 Working pressure by rules 157 Material of Front plates at bottom steel Thickness 1/2 Material of Lower back plate steel Thickness 23/32 Greatest pitch of stays 13 1/2 x 9 1/2 Working pressure of plate by rules 149 Diameter of tubes 3

Pitch of tubes 4 1/4 x 4 1/4 Material of tube plates steel Thickness: Front 13/16 Back 5/8 Mean pitch of stays 10 1/2 Pitch across wide water spaces 13 1/2 x 8 1/2 Working pressures by rules 121 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 1/2 x 1 1/4 Length as per rule 28 3/4 Distance apart 9 Number and pitch of Stays in each 20 8 1/2

Working pressure by rules 122 Steam dome: description of joint to shell none % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

UPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

The foregoing is a correct description;  
THOMAS SUTHERLAND & CO. LIMITED.  
A. W. Johnston Manufacturer.

Dates of Survey During progress of work in shops 1921. Oct. 18. 26. Nov. 1. 16. Dec. 7. 15. 22. Jan. 13. 26. 21 Is the approved plan of boiler forwarded herewith yes

while building During erection on board vessel Total No. of visits 9

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

Survey Fee ... £ 8-5-0 When applied for } monthly safe

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

Committee's Minute FRI 29. MAR. 1923 Wm Morrison Engineer Surveyor to Lloyd's Register of Shipping.

Assigned

