Expt. 5b.

REPORT ON BOILERS.

No. 2760

Received at London Office -9 NOV 1926

Date of writing Report 30th Oct. 1926 When handed in at Local Office ... 19 ... Port of Dunkirk

No. in Reg. Book. Survey held at Dunkirk Date, First Survey 27th April 1925 Last Survey 14th September 1926

on the M/V. "THEOPHILE GAUTIER" (Number of Visits 7) Tons Gross 8705.7 Net 4688.43

Built at Dunkirk By whom built "Chantiers de France" Cie. de Constructions Mecaniques Yard No. 132 When built 1926

Engines made at St. Denis (Seine) By whom made Procedés Sulzer Engine No. 5417-5422 Port 5423-5428 Stbd. When made 1925

Boilers made at Anman By whom made Cochran & Co Anman Ltd. Boiler No. 9441 When made 1924

Owners Services Contractuels des Messageries Maritimes Port belonging to Marseilles

VERTICAL DONKEY BOILER.

Made at Anman By whom made Cochran & Co Anman Ltd Boiler No. 9441 When made 1924 Where fixed Top of Engine Room

Manufacturers of Steel —

Total Heating Surface of Boiler 220 □' Is forced draught fitted No Coal or Oil fired Oil fired

No. and Description of Boilers One Cochran Type **Working pressure** 100 lbs.

Tested by hydraulic pressure to — Date of test — No. of Certificate 16634

Area of Firegrate in each Boiler 12.5 □' No. and Description of safety valves to each boiler Two 2" Spring loaded

Area of each set of valves per boiler { per rule 2.87 □" / as fitted 6.28 □" } Pressure to which they are adjusted 100 lbs per □" Are they fitted with easing gear yes

State whether steam from main boilers can enter the donkey boiler No Main boiler Smallest distance between boiler or uptake and bunkers

& woodwork No bunkers or Woodwork Is oil fuel carried in the double bottom under boiler yes Smallest distance between base of boiler and tank top plating

— Is the base of the boiler insulated yes Largest internal dia. of boiler 5'-0" Height 13'-0"

Shell plates: Material — Tensile strength — Thickness —

Are the shell plates welded or flanged — Description of riveting: circ. seams { end — / inter. — } long. seams —

Dia. of rivet holes in { circ. seams — / long. seams — } Pitch of rivets { — / — } Percentage of strength of circ. seams { plate — / rivets — } of Longitudinal joint { plate — / rivets — / combined — }

Working pressure of shell by rules — Thickness of butt straps { outer — / inner — }

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat — Material —

Tensile strength — Thickness — Radius — Working pressure by rules —

Description of Furnace: Plain, spherical, or dished crown — Material — Tensile strength —

Thickness — External diameter { top — / bottom — } Length as per rule — Working pressure by rules —

Pitch of support stays circumferentially — and vertically — Are stays fitted with nuts or riveted over —

Diameter of stays over thread — Radius of spherical or dished furnace crown — Working pressure by rule —

Thickness of Ogee Ring — Diameter as per rule { D — / d — } Working pressure by rule —

Combustion Chamber: Material — Tensile strength — Thickness of top plate —

Radius if dished — Working pressure by rule — Thickness of back plate — Diameter if circular —

Length as per rule — Pitch of stays — Are stays fitted with nuts or riveted over —

Diameter of stays over thread — Working pressure of back plate by rules —

Tube Plates: Material { front — / back — } Tensile strength { — / — } Thickness { — / — } Mean pitch of stay tubes in nests —

Comprising shell, Dia. as per rule { front — / back — } Pitch in outer vertical rows { — / — } Dia. of tube holes FRONT { stay — / plain — } BACK { stay — / plain — }

Each alternate tube in outer vertical rows a stay tube — Working pressure by rules { front — / back — }

Girders to combustion chamber tops: Material — Tensile strength —

Depth and thickness of girder at centre — Length as per rule —

Distance apart — No. and pitch of stays in each — Working pressure by rule —

Crown stays: *Material* ..... *Tensile strength* ..... *Diameter* { *at body of stay,* ..... *or over threads* ..... }

No. of threads per inch ..... *Area supported by each stay* ..... *Working pressure by rules* .....

Screw stays: *Material* ..... *Tensile strength* ..... *Diameter* { *at turned off part,* ..... *or over threads* ..... } *No. of threads per inch* .....

Area supported by each stay ..... *Working pressure by rules* ..... *Are the stays drilled at the outer ends* .....

Tubes: *Material* ..... *External diameter* { *plain* ..... *stay* ..... } *Thickness* { .... }

No. of threads per inch ..... *Pitch of tubes* ..... *Working pressure by rules* .....

Manhole Compensation: *Size of opening in shell plate* ..... *Section of compensating ring* ..... *No. of rivets and dia*

of rivet holes ..... *Outer row rivet pitch at ends* ..... *Depth of flange if manhole flanged* .....

Uptake: *External diameter* ..... *Thickness of uptake plate* .....

Cross Tubes: *No.* ..... *External diameters* { .... } *Thickness of plates* .....

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with .....

The foregoing is a correct description,

..... *Manufac*

Is the approved plan of boiler forwarded herewith ..... (If not state date of approval.)

Dates of Survey while building — *During progress of work in shops* - - / *During erection on board vessel* - - : 1925 April 27. (1926 Jan. 19, April 17, June 23, July 22, 30 Sept 14. *Total No. of visits* 7

GENERAL REMARKS (*State quality of workmanship, opinions as to class, &c.*) Please see Glasgow Rpt: 44095 attached

The boiler of this vessel has been satisfactorily fitted on board, Examined u
a hydraulic pressure of 150 tns per □" and found in good order. The feed pu
and Injector Examined under working conditions. Good. The Safety Valv
adjusted, undly Steame to 100 tbs. per Square inch. Satisfactory.
The washers are P = 7.8 m/m, S = 6.4 m/m.
The boiler is in Good and Safe working Condition and Eligible in
Opinion to have the notation of D.B. 100.tbs. 9, 26

The aforesaid boiler tracing is forwarded herewith.

Survey Fee See Machinery Rpt. } When applied for, ... 19.....
Travelling Expenses (if any) £ : : } When received, ... 19.....

John Crighton
Engineer Surveyor to Lloyd's Register of Shippin

Committee's Minute TUES. 4 JAN 1927
Assigned See F. Rpt attached