

5c.

REPORT ON WATER TUBE BOILERS.

No. 56055

Received at London Office

20 MAR 1948

of writing Report 15 3 1948 When handed in at Local Office 16 3 1948 Port of **CARDIFF**

in Survey held at **CARDIFF** Date, First Survey 10.1.48 Last Survey 6.2.1948
(Number of Visits 6) Gross 10669

Book. 258 on the **TROCHISCUS** Tons Net

at **PORTLAND OR.** By whom built **KAISER CO. INC** Yard No. When built 1944

ines made at **LYNN MASS.** By whom made **GENERAL ELECTRIC CO.** Engine No. When made 1944

ers made at **ST LOUIS MO.** By whom made **COMBUSTION ENG^R CO INC** Boiler No. When made 1944

inal Horse Power Owners **ANGLO SAXAN PETROL^M CO L^D** Port belonging to **LONDON**

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY—Manufacturers of Steel BETHLEHEM AND NORTH AMERICAN BUREAU. No. and Description or Type

of Approval of plan **AMERICAN BUREAU.** Working Pressure **500 P.S.I.** Tested by Hydraulic Pressure to **750 P.S.I.** Date of Test **28.6.44**

Boilers **2 SINGLE PASS, STRAIGHT TUBE** Total Heating Surface of Boilers **11354 SQ. FT.** *see below*

of Certificate Can each boiler be worked separately **YES** Area of Fire Grate (coal) in each Boiler **OIL FIRED**

forced draught fitted **YES** and type of burners (oil) in each boiler **4 TODD COMBUSTION. BAILEY METER CO. CONTROLS** No. and description of safety valves on boiler **2 2 1/2 DIA SPRING LOADED IMPROVED HIGH LIFT** Area of each set of valves per boiler **9.82 sq. ft.** Pressure to which they adjust **500 P.S.I.** Are they fitted with easing gear **YES** In case of donkey boilers state whether steam from main boilers can enter donkey boiler **NO** Height of boiler **21.0'**

Smallest distance between boilers or uptakes and bunkers or woodwork **6.0'** Inside diameter **41 1/2" average**

Thickness and length **11.0' x 16.0'** Steam Drums:—Number in each boiler **ONE** Range of tensile strength **70,000 MIN.** Are drum shell plates welded **WELDED** If fusion welded, state name of welding firm **YES. A.B.** Have all the requirements of the Rules

Class I vessels been complied with **YES. A.B.** Description of riveting:—Circ. seams long. seams

Pitch of rivets Thickness of straps Percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum **4"** Pitch of tube holes **7"**

Percentage strength of shell in way of tubes **70,000 MIN.** Water Drums:—Number **ONE** Are drum shell plates welded **WELDED** If fusion welded, state name of welding firm **YES. A.B.** Have all the requirements of the Rules

Description of riveting:—Circ. seams long. seams

Pitch of rivets Thickness of straps

Percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum Pitch of tube holes

Percentage strength of drum shell in way of tubes Water Drum Heads or Ends:—Range of tensile strength

Radius or how stayed Size of manhole or handhole

Number of Sections:—Number **14** Material **STEEL** Thickness **3/4"** Tested by hydraulic pressure to **1000 P.S.I.**

Diameter **1 1/2", 2", 2 1/2", 3"** Thickness **1/4", 1/2", 3/4", 1"** Number **145, 148, 282, 56, 36, 14** Steam Dome or Collector:—Description of **1 1/2" DIA** Range of tensile **70,000 MIN.**

Inside diameter Thickness of shell plates Description of longitudinal joint If fusion welded, state name of welding firm

Have all the requirements for the Rules for Class I vessels been complied with Diameter of rivet holes

Thickness of straps Percentage strength of long. joint Plate rivet

Drum or End Plates:—Range of tensile strength Thickness Radius or how stayed

SUPERHEATER DRUMS & HEADERS:—Number in each boiler TWO **INSIDE DIAMETER 7 1/4" SQUARE.** Are drum shell plates welded **WELDED** If fusion welded, state name of welding firm **YES. A.B.** Have all the requirements of the Rules

Description of riveting:—Circ. seams long. seams

Pitch of rivets Thickness of straps Percentage strength of long. joint

Plate Rivet Diameter of tube holes Pitch of tube holes

Drum Heads or Ends:—Thickness Range of tensile strength

Size of manhole or handhole Number, diameter, and thickness of tubes **145 U TUBES 1 1/4" DIA 13 SWG**

Is a safety valve fitted to each section of the superheater which can be shut off from the boiler **NO** No. and description of safety valves **ONE 1 1/2" SINGLE HIGH LIFT.** Area of each set of valves **464 LBS/SQ. IN.** Is easing gear fitted **YES**

Pressure to which they are adjusted **464 LBS/SQ. IN.** Is easing gear fitted **YES**

Spare Gear. Has the spare gear required by the Rules been supplied **YES**

The foregoing is a correct description, Manufacturer.

Is the approved plan of boiler forwarded herewith

Total No. of visits **6**

Dates of Survey while building:—During progress of work in shops During erection on board vessel

Is this boiler a duplicate of a previous case If so, state vessel's name and report No.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **THESE BOILERS HAVE BEEN BUILT UNDER SURVEY AND CLASS OF AMERICAN BUREAU. THE SCANTLINGS HAVE BEEN VERIFIED AS FAR AS PRACTICABLE AND SO FAR AS CAN BE SEEN THE MATERIALS AND WORKMANSHIP ARE GOOD AND BOILERS ELIGIBLE IN OUR OPINION TO BE CLASSED WITH RECORD OF B/S 2/48.**

Survey Fee **£ 1.75** Travelling Expenses (if any) **£ 74.3** When applied for **1948** When received **1948**

Date **2 APR 1948** Committee's Minute **See minute on page 9**

W. E. Davies & J. P. Conalado, Engineer Surveyors to Lloyd's Register of Shipping.

