

REPORT ON WATER TUBE BOILERS

No. 127893

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Date of writing Report 19... When handed in at Local Office 19... Port of **LIVERPOOL**

No. in Survey held at **BIRKENHEAD** Date, First Survey... Last Survey **30/10/1948**

Reg. Book. on the **ESSO LONDON** (Number of Visits...) Gross **10712** Net **6301**

Boilers made at **CHESTER, PENNSYLVANIA U.S.A.** By whom built **SUN SHIPBUILDING & DRYDOCK** Yard No. When built **1944**

Engines made at **SCHENACTADY U.S.A.** By whom made **GENERAL ELECTRIC** Engine No. **61819** When made **1944**

Boilers made at **NEW YORK U.S.A.** By whom made **BABCOCK + WILCOX Co.** Boiler No. **3-9674** When made **1944**

Nominal Horse Power... Owners **ANGLO AMERICAN OIL Co. LTD.** Port belonging to **LONDON**

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

Date of Approval of plan... No. and Description or Type **2 Babcock + Wilcox Type**

Working Pressure **500** Tested by Hydraulic Pressure to **750** Date of Test **PORT - 18-10-48**

Total Heating Surface of Boilers **4934** **BOILER & WATER WALLS** **743** **SUPERHEATER**

Area of Fire Grate (coal) in each Boiler **4 T.O.D.**

Area of each set of valves per boiler **6.28** **sq. ins.**

Pressure to which they are adjusted **500 lbs/1"**

Height of boiler **21'-0"**

Width and length **11'-10" x 17'-6"**

Steam Drums:—Number in each boiler **One**

Inside diameter **42"**

Thickenss of plates **Shell 3/4" Tube plate 1 1/32"**

Range of tensile strength **Not known**

Are drum shell plates welded or flanged **Welded**

Have all the requirements of the Rules for Class I vessels been complied with **Yes**

Description of riveting:—Circ. seams **Yes** long. seams **Yes**

Pitch of rivets **Yes** Thickness of straps **Yes** Percentage strength of long. joint:—Plate **Yes**

Diameter of rivet holes in long. seams **Yes** Rivet **Yes** Diameter of tube holes in drum **4"** Pitch of tube holes **7"**

Percentage strength of shell in way of tubes **42.85**

Steam Drum Heads or Ends:—Range of tensile strength **Yes**

Thickenss of plates **1 1/4"** Radius or how stayed **Yes** Size of manhole or handhole **16" x 12"**

Water Drums:—Number in each boiler **5**

Inside diameter **5 3/4" Square** Thickenss of plates **3/4"** Range of tensile strength **Yes**

Are drum shell plates welded or flanged **Solid drawn**

Have all the requirements of the Rules for Class I vessels been complied with **Yes**

Description of riveting:—Circ. seams **Yes** long. seams **Yes**

Pitch of rivets **Yes** Thickness of straps **Yes** Percentage strength of long. joint:—Plate **Yes**

Diameter of rivet holes in long. seams **Yes** Rivet **Yes** Diameter of tube holes in **HEADER** **4"** Pitch of tube holes **6 1/32"**

Percentage strength of drum shell in way of tubes **Yes**

Water Drum Heads or Ends:—Range of tensile strength **Yes**

Thickenss of plates **1 1/2"** Radius or how stayed **Flat** Size of manhole or handhole **Yes**

Headers or Sections:—Number **14 UPTAKE 14 DOWNTAKE** Material **Steel** Thickenss **9/16"** Tested by hydraulic pressure to **Yes**

Tubes:—Diameter **1 1/4", 2" + 4"** Thickenss **13, 10 + 6 B.W.G.** Number **1148, 58 + 60**

Steam Dome or Collector:—Description of joint to **HEADERS** **Riveted** Inside diameter **5 3/4" Square** Thickenss of shell plates **3/4"** Range of tensile strength **Yes**

Description of longitudinal joint **Solid drawn**

Have all the requirements for the Rules for Class I vessels been complied with **Yes**

Diameter of rivet holes **Yes** Pitch of rivets **Yes** Thickness of straps **Yes** Percentage strength of long. joint:—plate **Yes** rivet **Yes**

Crown or End Plates:—Range of tensile strength **Yes** Thickenss **1 1/2"** Radius or how stayed **Flat**

Inside diameter **5 3/4" Square**

SUPERHEATER, Drums or Headers:—Number in each boiler **2**

Thickenss **3/4"** Material **Steel** Range of tensile strength **Yes**

Are drum shell plates welded or flanged **Solid drawn**

Have all the requirements of the Rules for Class I vessels been complied with **Yes**

Description of riveting:—Circ. seams **Yes** long. seams **Yes**

Diameter of rivet holes in long. seams **Yes** Pitch of rivets **Yes** Thickenss of straps **Yes** Percentage strength of long. joint:—Plate **Yes** Rivet **Yes** Diameter of tube holes in drum **1 1/4"** Pitch of tube holes **Yes** Percentage strength of drum shell in way of tubes **Yes**

Drum Heads or Ends:—Thickenss **Flat** Range of tensile strength **Yes**

Radius or how stayed **Yes** Size of manhole or handhole **Yes** Number, diameter, and thickenss of tubes **145-1 1/4"-11 B.W.G.**

Tested by hydraulic pressure to **750** Date of test **PORT - 18-10-48**

Is a safety valve fitted to each section of the superheater which can be shut off from the boiler **Yes** No. and description of safety valves **1-1 1/4" High Lift (Double) 1 1/2" nominal dia.** Area of each set of valves **1.22 sq. inches** Pressure to which they are adjusted **465 lbs/10"** 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.

Dates of Survey } During progress of work in shops - - }
 while building } During erection on board vessel - - }

Is the approved plan of boiler forwarded herewith

Total No. of visits

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This report is submitted for the information of the committee.**

Survey Fee ... £ : : When applied for 19
 Travelling Expenses (if any) : : When received 19

James H. Smyth 2020
Engineer Surveyor to Lloyd's Register of Shipping.

Date **LIVERPOOL 23 NOV 1948**

Committee's Minute **See Minute on Liverpool Machinery Rpt.**