

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office - 1 JUN 1939

Date of writing Report - 1 JUN 1938 When handed in at Local Office - 1 JUN 1938 Port of London

No. in Survey held at Newbury Date, First Survey 3 JANUARY Last Survey 18-5-1939

Reg. Book. on the "BARBOSA" (Number of Visits 10)

Built at Greenock By whom built Geo Brown. Yard No. 212 When built

Engines made at Newbury By whom made Plenty & Son Ltd. Engine No. 2770 When made 1939.

Boilers made at Glasgow By whom made Andrew Boiler No. When made

Registered Horse Power Owners Anglo-Siam Petroleum Co. Ltd. Port belonging to

Nom. Horse Power as per Rule 46.27 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines *Compound Surface Condensing* Revs. per minute

Dia. of Cylinders 11" 22" Length of Stroke 16" No. of Cylinders 2 No. of Cranks 2

Crank shaft, dia. of journals as per Rule *app^d* Crank pin dia. 5 1/4" Crank webs Mid. length breadth 6 1/4" Thickness parallel to axis

Intermediate Shafts, diameter as per Rule *app^d* Thrust shaft, diameter at collars as per Rule *app^d*

Tube Shafts, diameter as fitted *None* Screw Shaft, diameter as per Rule *app^d* Is the *tube* shaft fitted with a continuous liner? *Yes*

Bronze Liners, thickness in way of bushes as per Rule *app^d* Thickness between bushes as per Rule *app^d* Is the after end of the liner made watertight in the propeller boss? *Yes*

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *One length*

If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *tight*

If two liners are fitted, is the shaft lapped or protected between the liners? *Yes* Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft? *Yes* Length of Bearing in Stern Bush next to and supporting propeller 1'9"

Propeller, dia. 64" Pitch 69" No. of Blades 4 Material *Bronze* whether Moveable *no* Total Developed Surface 11.2 sq. feet

Feed Pumps worked from the Main Engines, No. *None* Diameter — Stroke — Can one be overhauled while the other is at work? *Yes*

Bilge Pumps worked from the Main Engines, No. *None* Diameter — Stroke — Can one be overhauled while the other is at work? *Yes*

Feed Pumps { No. and size 2 @ 1 1/4" and 1 Mini pump 4x6x7" Pumps connected to the { No. and size 2 @ 1 1/4" Main Bilge Line { How driven *Steam Engine*

Ballast Pumps, No. and size *None* Lubricating Oil Pumps, including Spare Pump, No. and size *None*

Are two independent means arranged for circulating water through the Oil Cooler? *Yes* Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room *Yes*

In Pump Room *Yes* In Holds, &c. *Yes*

Main Water Circulating Pump Direct Bilge Suctions, No. and size **Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size**

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes? *Yes*

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges? *Yes*

Are all Sea Connections fitted direct on the skin of the ship? *Yes* Are they fitted with Valves or Cocks? *Yes*

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates? *Yes* Are the Overboard Discharges above or below the deep water line? *Yes*

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel? *Yes* Are the Blow Off Cocks fitted with a spigot and brass covering plate? *Yes*

What Pipes pass through the bunkers? *None* How are they protected? *None*

What pipes pass through the deep tanks? *None* Have they been tested as per Rule? *Yes*

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times? *Yes*

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another? *Yes* Is the Shaft Tunnel watertight? *Yes* Is it fitted with a watertight door? *Yes* worked from *None*

MAIN BOILERS, &c.—(Letter for record *None*) Total Heating Surface of Boilers 924.5 sq. ft

Is Forced Draft fitted? *Yes* No. and Description of Boilers *One SB* Working Pressure 140 lbs.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? *No*

IS A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *No*

Is the donkey boiler intended to be used for domestic purposes only? *No*

PLANS. Are approved plans forwarded herewith for Shafting *Yes* Main Boilers *2-1-39* Auxiliary Boilers *None* Donkey Boilers *None*

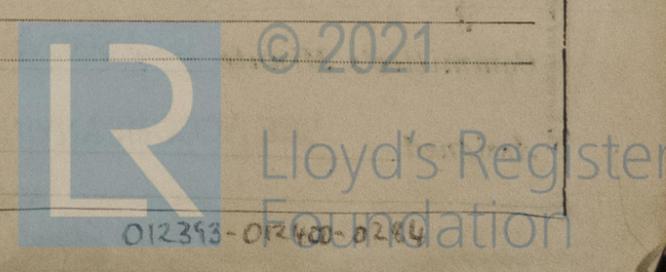
Superheaters *None* General Pumping Arrangements *None* Oil fuel Burning Piping Arrangements *None*

SPARE GEAR.

Has the spare gear required by the Rules been supplied? *Yes*

State the principal additional spare gear supplied. *1- 4 blade plus bronze propeller. 1- screw shaft. 1 Eccentric shaft, sheave & bolts. 1 LP slide valve spindle.*

The foregoing is a correct description,
FOR AND ON BEHALF OF
PLENTY & SON, LIMITED
Director & Secretary



1939. JAN 3. 12 FEB 7. MAR 9. 23. APR 5. 20. MAY 11. 15. 25

Dates of Survey while building: During progress of work in shops - - -
 During erection on board vessel - - -
 Total No. of visits: 70 (In Shops)

Dates of Examination of principal parts—Cylinders 23.3.39 Slides 23.5.39 Covers 23.3.39
 Pistons 20.4.39 Piston Rods 20.4.39 Connecting rods 20.4.39
 Crank shaft 9.3.39 Thrust shaft 9.3.39 Intermediate shafts 9.3.39
 Tube shaft None Screw shafts 9.3.39 Propeller P 20587 HYB. 25.3.39
 Stern tube 20ft. 5.4.39 Engine and boiler seatings Engines holding down bolts
 Completion of fitting sea connections
 Completion of pumping arrangements Boilers fixed Engines tried under steam
 Main boiler safety valves adjusted Thickness of adjusting washers
 Crank shaft material S Identification Mark 9383 Thrust shaft material S Identification Mark 9390 TDS
 Intermediate shafts, material S Identification Marks 9544 TDS Tube shaft, material Identification Mark
 Screw shaft, material S Identification Mark 54224 Steam Pipes, material Test pressure Date of Test
 Is an installation fitted for burning oil fuel Is the flash point of the oil to be used over 150°F.
 Have the requirements of the Rules for the use of oil as fuel been complied with
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo If so, have the requirements of the Rules been complied with
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with
 Is this machinery duplicate of a previous case No. If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) This machinery has been built under special survey in accordance with approved plans of tested materials. The materials & workmanship are good.
 The machinery has been forwarded to Greenock for installation on board the vessel.

The amount of Entry Fee ... £ 2 : - :
 Special 2/6 Fee ... £ 6 : - :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ 2 : 1 : 9

When applied for, -1 JUN 1939
 When received, 3rd July 1939

Committee's Minute GLASGOW 11 JUL 1939

[Signature]
 Engineer Surveyor to Lloyd's Register of Shipping.

The Surveyors are requested not to write on or below the space for Committee's Minute.

Assigned SEE ACCOMPANYING MACHINERY REPORT.

