

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

22 JUL 1930

Date of writing Report *21 July 1930* When handed in at Local Office *21 July 1930* Port of *Sidney*

No. in Survey held at *Sidney* Date, First Survey *16 May* Last Survey *18 July 1930*

Reg. Book. *85521* on the *Twin Screw Tug "SUPERIOR"* (Number of Visits *11*) Gross *255.42* Tons

Built at *Sidney* By whom built *Cochrane & Sons Ltd* Yard No. *1080* When built *1930*

Engines made at *Leeds* By whom made *Leeds & Sons Ltd* Engine No. *2641* when made *1930*

Boilers made at *Stockton* By whom made *Riley Bros.* Boiler No. *5985* when made *1930*

Registered Horse Power \_\_\_\_\_ Owners *Argentine Navigation (Incorporated) Ltd* Port belonging to *Buenos Ayres*

Nom. Horse Power as per Rule *83* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*

Trade for which Vessel is intended *For towing services*

**ENGINES, &c.**—Description of Engines *Triple Expansion* Revs. per minute \_\_\_\_\_

Dia. of Cylinders *9. 15. 24* Length of Stroke *18* No. of Cylinders \_\_\_\_\_ No. of Cranks \_\_\_\_\_

Crank shaft, dia. of journals \_\_\_\_\_ as per Rule \_\_\_\_\_ Crank pin dia. \_\_\_\_\_ Crank webs \_\_\_\_\_ Mid. length breadth \_\_\_\_\_ Thickness parallel to axis \_\_\_\_\_

Intermediate Shafts, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Thrust shaft, diameter at collars *9.5217* as per Rule \_\_\_\_\_ as fitted \_\_\_\_\_

Tube Shafts, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Screw Shaft, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Is the *tube* shaft fitted with a continuous liner \_\_\_\_\_

Bronze Liners, thickness in way of bushes \_\_\_\_\_ as per Rule \_\_\_\_\_ Thickness between bushes \_\_\_\_\_ as fitted \_\_\_\_\_ Is the after end of the liner made watertight in the propeller boss \_\_\_\_\_

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

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 \_\_\_\_\_

If two liners are fitted, is the shaft lapped or protected between the liners \_\_\_\_\_ Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft \_\_\_\_\_

Propeller, dia. *36* No. of Blades \_\_\_\_\_ Material \_\_\_\_\_ whether Moveable \_\_\_\_\_ Total Developed Surface \_\_\_\_\_ sq. feet

Feed Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_

Bilge Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_

Feed Pumps \_\_\_\_\_ No. and size \_\_\_\_\_ How driven \_\_\_\_\_ Pumps connected to the Main Bilge Line \_\_\_\_\_ No. and size \_\_\_\_\_ How driven \_\_\_\_\_

Ballast Pumps, No. and size \_\_\_\_\_ Lubricating Oil Pumps, including Spare Pump, No. and size \_\_\_\_\_

Are two independent means arranged for circulating water through the Oil Cooler \_\_\_\_\_ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room *one aft, 2 forward, all 2"*

In Holds, &c. *fore peak, 1@3" Cow Space 1@2" Shaft space 1@2" A. Peak, 1@3"*

**Main Water Circulating Pump Direct Bilge Suctions, No. and size** *one 3"* **Independent Power Pump Direct Suctions to the Engine Room Bilges,** \_\_\_\_\_

No. and size *one @ 2 1/2"* 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 *Both*

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 *Above*

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 \_\_\_\_\_

What pipes pass through the deep tanks \_\_\_\_\_ Have they been tested as per Rule \_\_\_\_\_

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 \_\_\_\_\_ worked from \_\_\_\_\_

**MAIN BOILERS, &c.**—(Letter for record *S.*) Total Heating Surface of Boilers *1650 sq. feet*

Is Forced Draft fitted *Yes* No. and Description of Boilers *one Single ended* Working Pressure *190 lbs.*

**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** *Yes*

**IS A DONKEY BOILER FITTED?** *Yes* If so, is a report now forwarded? *Yes*

**PLANS.** Are approved plans forwarded herewith for Shafting *Yes* Main Boilers *Yes* Auxiliary Boilers *Yes* Donkey Boilers *Yes*

(If not state date of approval)

Superheaters *Yes* General Pumping Arrangements *Yes* Oil fuel Burning Piping Arrangements *Yes*

**SPARE GEAR.** State the articles supplied:—  
*Spare for as per London Report No. 95217.*

The foregoing is a correct description,

Manufacturer.



NOTE.—The records which do not apply should be deleted.

011947-011950-0220

During progress of work in shops - -

Dates of Survey while building

During erection on board vessel - - -

1930. May 26. 28. June 6. 6. 11. 13. July 2. 4. 5. 15. 28.

Total No. of visits

Dates of Examination of principal parts—Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft Propeller

Stern tube Engine and boiler seatings 4. 7. 30. Engines holding down bolts 4. 7. 30

Completion of fitting sea connections

Completion of pumping arrangements 15. 7. 30. Boilers fixed 4. 7. 30 Engines tried under steam 15. 7. 30

Main boiler safety valves adjusted 15. 7. 30. Thickness of adjusting washers S. 1 1/2" P. 3/8"

Crank shaft material Identification Mark Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material Copper Test pressure 380 lbs. Date of Test 11. 6. 30

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

Is this machinery duplicate of a previous case Yes. If so, state name of vessel Salvador

General Remarks (State quality of workmanship, opinions as to class, &c.)

Please see London Rpt. No 95214.

" " "Middlesbrough" " 14042.

The engines & boiler of this vessel have been satisfactorily fitted on board, tried under working conditions - found in good order.

It is eligible in my opinion to have record of +L.M.C. 7.30 06.

It is submitted that this vessel is eligible for THE RECORD. +L.M.C. 7.30 06.

Signature: J. J. [unclear]

22/7/30

CERTIFICATE WRITTEN 22/7/30

Certificate to be sent to

The amount of Entry Fee ... £ : : When applied for,

1/5 Special ... £ 8 : 1. : Applied for on

Donkey Boiler Fee ... £ : : When received,

Travelling Expenses (if any) £ : : 9 July 1930

Committee's Minute

Assigned

Signature: J. J. [unclear]

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 25 JUL 1930

+L.M.C. 7.30 06