

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

21 MAY 1948

Received at London Office 22 MAY 1948

Date of writing Report 19 \_\_\_\_\_ When handed in at Local Office 19 \_\_\_\_\_ Port of HULL.

No. in Survey held at HULL. Date, First Survey 23. 1. 48 Last Survey 13. 3. 1948  
 Reg. Book. on the *STN TWLR* "BRACONGLLEN" (Number of Visits \_\_\_\_\_)

Built at Lowestoft By whom built Richard Ironworks Ltd. Yard No. 377 Tons { Gross \_\_\_\_\_ Net \_\_\_\_\_  
 Engines made at Hull By whom made Amos & Smith Ltd. Engine No. 746 When built 1949  
 Boilers made at Greenock By whom made Kinkaid & Co. Ltd. Boiler No. 345 When made \_\_\_\_\_  
 Registered Horse Power \_\_\_\_\_ Owners The Boston Deep Sea Fishing & Ice Co. Ltd. Port belonging to \_\_\_\_\_  
~~Norm. Horse Power~~ as per Rule MN 174 Is Refrigerating Machinery fitted for cargo purposes \_\_\_\_\_ Is Electric Light fitted \_\_\_\_\_  
 Trade for which Vessel is intended Ocean-going trawler.

**ENGINES, &c.**—Description of Engines Triple expansion (See Hull Report No. 54837) Revs. per minute \_\_\_\_\_

Dia. of Cylinders \_\_\_\_\_ Length of Stroke \_\_\_\_\_ No. of Cylinders \_\_\_\_\_ No. of Cranks \_\_\_\_\_

Crank shaft, dia. of journals as per Rule \_\_\_\_\_ as fitted \_\_\_\_\_ Crank pin dia. \_\_\_\_\_ Crank webs Mid. length breadth \_\_\_\_\_ Mid. length thickness \_\_\_\_\_ Thickness parallel to axis \_\_\_\_\_ shrunk \_\_\_\_\_ Thickness around eye-hole \_\_\_\_\_

Intermediate Shafts, diameter as per Rule \_\_\_\_\_ as fitted 7 3/8" approd. Thrust shaft, diameter at collars as per Rule \_\_\_\_\_ as fitted 7 3/8" approd.

Tube Shafts, diameter as per Rule \_\_\_\_\_ as fitted \_\_\_\_\_ Screw Shaft, diameter as per Rule \_\_\_\_\_ as fitted 8 1/4" approd. Is the { tube / screw } shaft fitted with a continuous liner { Yes / No } \_\_\_\_\_

Bronze Liners, thickness in way of bushes as per Rule \_\_\_\_\_ as fitted 9/16" approd. Thickness between bushes as per Rule \_\_\_\_\_ as fitted 9/16" approd. 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 \_\_\_\_\_

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 tub shaft \_\_\_\_\_ If so, state type \_\_\_\_\_ Length of Bearing in Stern Bush next to and supporting propeller \_\_\_\_\_

Propeller, dia. 10'3" Pitch 10'6" No. of Blades 4 Material C.I. whether Moveable Solid Total Developed Surface 38 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 15" Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 15" Can one be overhauled while the other is at work Yes

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 \_\_\_\_\_ In Pump Room \_\_\_\_\_ In Holds, &c. \_\_\_\_\_

**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 \_\_\_\_\_

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 \_\_\_\_\_

Are all Sea Connections fitted direct on the skin of the ship \_\_\_\_\_ Are they fitted with Valves or Cocks \_\_\_\_\_

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

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

What Pipes pass through the bunkers \_\_\_\_\_ 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 \_\_\_\_\_

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 \_\_\_\_\_ Is the Shaft Tunnel watertight \_\_\_\_\_ Is it fitted with a watertight door \_\_\_\_\_ worked from \_\_\_\_\_

**MAIN BOILERS, &c.**—(Letter for record \_\_\_\_\_) Total Heating Surface of Boilers 2179 & 885 (spt).

Which Boilers are fitted with Forced Draft Yes \_\_\_\_\_ Which Boilers are fitted with Superheaters Yes \_\_\_\_\_

No. and Description of Boilers 1 cyl. Working Pressure 200 lb.

**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** No—built at Greenock.

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

Can the donkey boiler be used for domestic purposes only \_\_\_\_\_

**PLANS.** Are approved plans forwarded herewith for Shafting 14.3.47 Main Boilers straight shafting ✓ Auxiliary Boilers \_\_\_\_\_ Donkey Boilers \_\_\_\_\_

Superheaters \_\_\_\_\_ General Pumping Arrangements \_\_\_\_\_ Oil fuel Burning Piping Arrangements \_\_\_\_\_

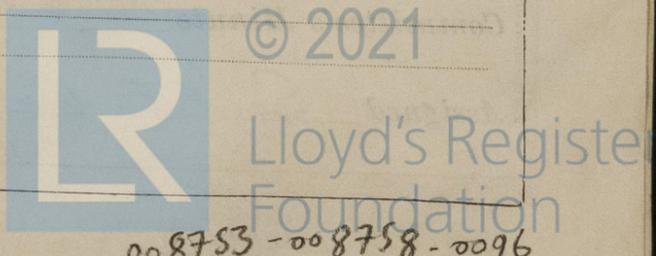
### SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied \_\_\_\_\_

The foregoing is a correct description.

Manufacturer.



008753-008758-0096

REPORT ON STEAM RECIPROCATING ENGINE

1948. Jan 23. Feb. 6. 9, Mar 13.

Dates of Survey while building

During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits 4

Dates of Examination of principal parts—Cylinders - Slides - Covers -

Pistons - Piston Rods - Connecting rods -

Crank shaft - Thrust shaft 11.6.47. Intermediate shafts 18.7.47.

Tube shaft - Screw shaft 11.6.47. Propeller

Stern tube - 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 Identification Mark Thrust shaft material SM St1. LLOYD'S CP. 19.5.47

Intermediate shafts, material SM St1. Identification Marks 9654 WSS 18.7.47. Tube shaft, material - Identification Mark 9310 WSS 11.6.47.

Screw shaft, material -do- Identification Mark LLOYD'S CP 8.4.47. WSS 11.6.47. 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 Yes If so, state name of vessel Richard Ironworks Yard No. 376.

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

The main engine was built in 1945 under the Society's supervision (See Hull Report No. 54837) and when completed was placed in Admiralty stock. The line shafting, main condenser, attached pumps and boiler fittings have now been supplied by Messrs. Amos & Smith Ltd., and examined by the Society's Surveyors. When satisfactorily installed the machinery will be eligible for the Notation +L.M.C. as stated in the Secretary's letters of 24.3.47 and 23.4.48.

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

2/5 at 1944 rate £17: 10: 0d. (Credit Hull)

The amount of Entry Fee ... £ 10: 10: 0d (Credit Ipswich)

1/5 at 1947 rate ... £

Special ... £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

When applied for, 21 MAY 1948

When received, 19

For W.S. Shields & Self, N. Chambers  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 20 MAY 1948**

Assigned See F.E. Welch. spt.

