

and a List of

Rpt. 4.

No. 55512.

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 19... When handed in at Local Office **2 MAR 1949** 19... Port of **HULL**.
 No. in Survey held at **Beverley & Hull**. Date, First Survey **8. 6. 48** Last Survey **4. 2. 1949**
 Reg. Book **95617** on the **Steam Trawler "ST. LEANDER"**. (Number of Visits **25**) Tons {Gross **658**, Net **232**.
 Built at **Beverley** By whom built **Cook, Welton & Gemmell Ltd.** Yard No. **799** When built **1949**
 Engines made at **Hull** By whom made **C.D. Holmes & Co., Ltd.** Engine No. **1775** When made **-do-**
 Boilers made at **-do-** By whom made **-do-** Boiler No. **1775** When made **-do-**
 Registered Horse Power **-** Owners **T. Hamling & Co., Ltd.** Port belonging to **Hull**
~~Non-Excess Power~~ as per Rule **M.N. 230** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**
 Trade for which vessel is intended **Ocean-going trawler.**

ENGINES, &c.—Description of Engines **Steam reciprocating, triple expansion** Revs. per minute **130**
 Dia. of Cylinders **15", 25" 42"** Length of Stroke **27"** No. of Cylinders **3** No. of Cranks **3**
 Crank shaft, dia. of journals as per Rule **approd.** Crank pin dia. **8 1/2"** Mid. length breadth **16 1/8"** Thickness parallel to axis **5 1/2"**
 as fitted **8 1/2"** Crank webs **shrunk** Mid. length thickness **5 1/2"** Thickness around eye-hole **3.13/16"**
 Intermediate Shafts, diameter as per Rule **approd.** Thrust shaft, diameter at collars as per Rule **approd.**
 as fitted **8 1/8"** as fitted **8 1/2"**
 Tube Shafts, diameter as per Rule **-** Screw Shaft, diameter as per Rule **approd.** Is the ~~shaft~~ shaft fitted with a continuous liner **Yes**
 as fitted **-** as fitted **9" T.O.C.** as fitted **8.9/16"** as per Rule **approd.** as fitted **1/2"** 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 **fit**
 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 **fit**
 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**
 at **No** If so, state type **-** Length of Bearing in Stern Bush next to and supporting propeller **41 1/2"**
 Propeller, dia. **11' 0"** Pitch **8.27** **10.36** mean No. of Blades **4** Material **M.B.** whether Moveable **solid** Total Developed Surface **40.2** sq. feet
 Feed Pumps worked from the Main Engines, No. **2** Diameter **2 5/8"** Stroke **16"** Can one be overhauled while the other is at work **Yes**
 Bilge Pumps worked from the Main Engines, No. **2** Diameter **2 5/8"** Stroke **16"** Can one be overhauled while the other is at work **Yes**
 Feed Pumps | No. and size **2-2 5/8" x 16"; 1-7x5x6" Duplex** pumps connected to the | No. and size **2-2 5/8" x 16"; 1-7x5x6" Duplex, 3" bilge ejector**
 | How driven **M.E.** | **Steam Injector Main Bilge Line** | How driven **M.E.** | **Steam** | **Steam**
 Ballast Pumps, No. and size **2-7x5x6" separate pump** Lubricating Oil Pumps, including Spare Pump, No. and size **-**
 Are two independent means arranged for circulating water through the Oil Cooler **+** Suctions, connected both to Main Bilge Pumps and Auxiliary
 Bilge Pumps:—In Engine and Boiler Room **1-2" A.E.R. 1-2" F.E.R. 1-2" in boiler room, 1-2" to oil gutter.**
 In Pump Room:—In Holds, &c. **1-2" to each of for'd store hold, for'd and aft fish rooms, for'd and aft fish slushwells, cofferdam.**
 Main Water Circulating Pump Direct Bilge Suctions, No. and size **1 - 5"** Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges,
 No. and size **1-3" steam bilge ejector.** Are all the Bilge Suction Pipes in holds ~~and bilges~~ 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—except 3" ejector suction**
 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 **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 **-** 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 Part of **BR** Is it fitted with a watertight door **-** worked from **-**

MAIN BOILERS, &c.—(Letter for record **S.**) Total Heating Surface of Boilers **Blr. 2831 + Spt. 1140 = 3971** sq. ft.
 Which Boilers are fitted with Forced Draft **sole** Which Boilers are fitted with Superheaters **sole**
 No. and Description of Boilers **one S.E. multitubular** Working Pressure **225 lb/sq. in.**
IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**
IS A DONKEY BOILER FITTED? **No** If so, is a report now forwarded? **-**
 Can the donkey boiler be used for other than domestic purposes **-**

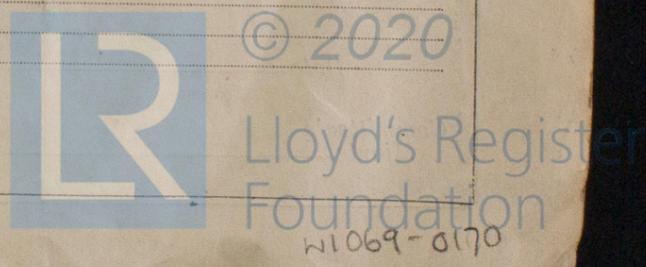
PLANS. Are approved plans forwarded herewith for Shafting **16.10.47** Main Boilers **16.10.47** Auxiliary Boilers **-** Donkey Boilers **-**
 (If not state date of approval)
 Superheaters **gen. approval** General Pumping Arrangements **10.5.48** Oil fuel Burning Piping Arrangements **11.5.48**

SPARE GEAR.

Has the spare gear required by the Rules been supplied **Yes**
 State the principal additional spare gear supplied **No major items.**

The foregoing is a correct description.
 FOR CHARLES D. HOLMES & CO., LTD.

W.H. Evans
 Manufacturer.



Dates of Survey while building

During progress of work in shops - - { 1948. June 8. 22. July 2. 21. Aug 19. Sept 2. 23. Oct 5, 13. 21. 27. Nov. 1. 24. 26. Dec. 10. 24. 1949. Jan 21. 24. 25. 27.

During erection on board vessel - - - { 1948. Dec. 31. 1949. Jan 5. 25. Feb. 5. 7.

Total No. of visits. 25.

Dates of Examination of principal parts—Cylinders 13.10.48 21.10.48 Slides 26.11.48 Covers 26.11.48

Pistons 26.11.48 Piston Rods 26.11.48 Connecting rods 26.11.48

Crank shaft 27.10.48 Thrust shaft 8.6.48 Intermediate shafts 2.7.48

Tube shaft - Screw shaft 23.9.48 Propeller 5.10.48

Stern tube 2.9.48 Engine and boiler seatings 5.1.49 Engines holding down bolts 5.1.49

Completion of fitting sea connections 5.10.48

Completion of pumping arrangements 5.2.49 Boilers fixed 24.1.49 Engines tried under steam 7.2.49

Main boiler safety valves adjusted 5.2.49 Thickness of adjusting washers P. 5/8", S. 7/16", Spt. 5/16"

Crank shaft material S.M. Steel Identification Mark NC 27.10.48 Thrust shaft material ILOYD'S 682 Identification Mark S.M. Steel

Intermediate shafts, material -do- ILOYD'S 708 CP 9.3.48 Tube shaft, material CP. 1.3.48; NC 8.6.48

Screw shaft, material -do- ILOYD'S 815 Identification Mark CP 17.4.48 Steam Pipes, material Steel Test pressure 6751b. Date of Test 24 & 25.1

Is an installation fitted for burning oil fuel Yes ✓ Is the flash point of the oil to be used over 150° F. ✓ Yes

Have the requirements of the Rules for the use of oil as fuel been complied with Yes ✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. No ✓ 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 "ST. APOLLO".

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

The machinery of this vessel has been constructed and installed under Special Survey in accordance with the Secretary's letters, approved plans and the Rules. The materials and workmanship are good. On completion the main and auxiliary machinery was examined under working conditions and found in order. The machinery is eligible in my opinion to have the Notation:-

+L.M.C. 2,49 C.L. 3 cyl. 15", 25", 42" - 27".
 225 lb. 1 S.B. (spt.).
 3 cf. H.S. 3971 sq.ft. F.D.
 Fitted for oil fuel 2,49 F.P. above 150° F.

The amount of Entry Fee ... £ 69 : -

Special ... £ : :

Donkey Boiler Fee ... £ : :

Travelling Expenses (if any) £ : :

When applied for, MAR 1949

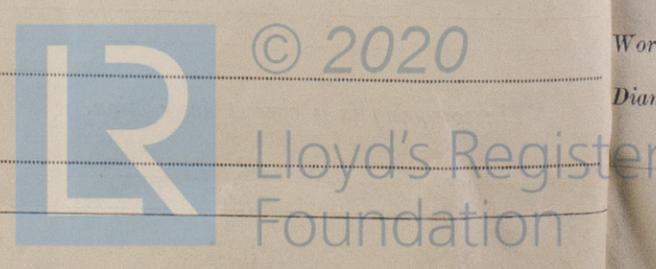
When received, 19

Date FRI. 1 APR 1949

N. Chambers.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute + LMC 2,49

FITTED FOR OIL FUEL 2,49 FLASH POINT ABOVE 150°F. F.D. C.L. 15B 225lb Spt.



Certificate to be sent to

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