Rpt. 4.

No. 51287

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 15 AUG 1941

Date of writing Report ... 19 ... When handed in at Local Office 14 AUG 1941 19 ... Port of HULL.

No. in Reg. Book. Survey held at HULL. Date, First Survey 7.9.40 Last Survey 21.5.1941 (Number of Visits 41)

on the steam Trawler BALTA.

Built at BEVERLEY. By whom built Messrs. Cook Welton & Gemmell Ltd Yard No. 672. Tons Gross 448 Net 144 When built 1941-5-

Engines made at HULL. By whom made C. D. Holmes Ltd. Engine No. 1572. When made 1941-5-

Boilers made at HULL. By whom made C. D. Holmes Ltd. Boiler No. 1574. When made 1941-5-

Registered Horse Power ... Owners The Admiralty Port belonging to ...

Nom. Horse Power as per Rule 156. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.

Trade for which Vessel is intended ...

ENGINES, &c.—Description of Engines Triple Expansion. CONTRACT. Revs. per minute 160.

Dia. of Cylinders 13½" 23" 38" Length of Stroke 27" No. of Cylinders 3. No. of Cranks 3.

Crank shaft, dia. of journals as per Rule 7.5. as fitted 7 7/8. Crank pin dia. 7 7/8" Crank webs Mid. length breadth — Mid. length thickness — shrunk Thickness parallel to axis 4 13/16" Thickness around eye-hole 3 15/16"

Intermediate Shafts, diameter as per Rule 7.15. as fitted 7¼. **Thrust shaft,** diameter at collars as per Rule 7.5. as fitted 7 7/8".

Tube Shafts, diameter as per Rule — as fitted — **Screw Shaft,** diameter as per Rule 8.2. as fitted 8.¼. Is the {tube / screw} shaft fitted with a continuous liner {—} No.

Bronze Liners, thickness in way of bushes as per Rule — as fitted — Thickness between bushes as per Rule — 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 Yes. If so, state type NEWARK Length of Bearing in **Stern Bush** next to and supporting propeller 36½"

Propeller, dia. 105". Pitch 9'-4" No. of Blades 3. Material C.I. whether Moveable Solid Total Developed Surface 30 sq. feet

Feed Pumps worked from the **Main Engines,** No. 2. Diameter 2½" Stroke 15" Can one be overhauled while the other is at work Yes.

Bilge Pumps worked from the **Main Engines,** No. 2. Diameter 2½ Stroke 15" Can one be overhauled while the other is at work Yes.

Feed Pumps {No. and size One 4" x 6" x 12" Weir. How driven Independent Steam.} **Pumps** connected to the **Main Bilge Line** {No. and size One 6" x 5½" x 15" Weir. How driven Independent Steam Also Donkey.}

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** None **Suctions,** connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room Eng. Rm. 2@2" Dia one at 3½" Dia Ridehalgh 2@2" Dia.

In Pump Room None In Holds, &c. One @ 2" Dia in each of the following:—Fore Peak, Chain Locker, Acetic Space, Magazine, Spirit Rm. Bunker, Shaft Space & Aft peak.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One @ 5". **Independent Power Pump Direct Suctions** to the Engine Room Bilges, No. and size One @ 3½ (included above) 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 Aft. W.L.

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 No

What Pipes pass through the bunkers Feed Vault Suction. How are they protected Wood Casing.

What pipes pass through the deep tanks None 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~~ SPACE watertight Yes. Is it fitted with a watertight door No. Access from flat above worked from ...

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 2650.

Which Boilers are fitted with Forced Draft All Which Boilers are fitted with Superheaters None

No. and Description of Boilers One S.E. Working Pressure 200 lbs.

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 domestic purposes only ...

PLANS. Are approved plans forwarded herewith for Shafting 17.7.39. Main Boilers 17.7.39. Auxiliary Boilers None Donkey Boilers None (If not state date of approval)

Superheaters None General Pumping Arrangements 17.10.39. 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 See attached List.

The foregoing is a correct description.

FOR CHARLES D. HOLMES & CO., LTD.

W. R. Evans

Manufacturer.

007442 - 007421 - 0166

Dates of Survey while building

During progress of work in shops - - 1940 Sep. 7. 30. Oct. 9. 23. 25. 31. Nov. 4. 7. 8. 11. 12. 14. 18. 23. 29. Dec. 6. 27. 30. 31. – 1941 Jan. 3. 4. 6. 8. 11. 25. 28. 31.

During erection on board vessel - - - Feb. 3. 7. 12. 20. Mar. 27. 11. 17. 25. 29. 30. May. 5. 7. 12. 13. 15. 16. 21

Total No. of visits 45

Dates of Examination of principal parts— *Cylinders* 4/1/41 27/12/40. 30/12/40 *Slides* 11-1-41. *Covers* 4/1/41. 27/12/40 30/12/40

Pistons 11-1-41. *Piston Rods* 8/1/41. *Connecting rods* 8/1/41.

Crank shaft 3/1/41. *Thrust shaft* 23-11-40 *Intermediate shafts* 8/11/40. 6/12/40.

Tube shaft ✓ *Screw shaft* 4/11/40. *Propeller* 18/11/40

Stern tube 14-11-40. *Engine and boiler seatings* 29-11-40. *Engines holding down bolts* 2-4-41

Completion of fitting sea connections 18/11/40

Completion of pumping arrangements 29-4-41. *Boilers fixed* 2-4-41. *Engines tried under steam* 16-5-41.

Main boiler safety valves adjusted 29.4.41. *Thickness of adjusting washers* 3/8" both.

Crank shaft material M.S. Coupling 264. W.N. 26/7/40. Plain. Journal 404. E.H. 7-9-40. *Identification Mark* *Thrust shaft material* M.S. *Identification Mark* 403. E.H. 6/9/40

Intermediate shafts, material M.S. 403. E.H. 6.9.40. 471 E.H. 12-E.H. 8.5.40. *Identification Ma* 8.10.40. *Tube shaft, material* ✓ *Identification Mark* ✓

Screw shaft, material M.S. *Identification Mark* 264 W.M. 20/7/41. *Steam Pipes, material* Steel *Test pressure* 600 lbs/in² *Date of Test* 17/4/41.

Is an installation fitted for burning oil fuel No *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 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 No.

Is this machinery duplicate of a previous case Yes. *If so, state name of vessel* H.M.T. BIRCH.

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

The machinery of this Vessel has been constructed & fitted on board in accordance with the approved Admiralty plans, the Specification & the Society's Rules. The workmanship & material are good & when tried at as near full power as practicable in the basin it was found satisfactory in every respect.

The Vessel is eligible, in our opinion, when classed to have the words ✠ L.M.C. 5.41 + A.G. & the notations T. 3. Cy. 12½, 23, 38 – 27 c 157 N.H.P. 200 lbs. I.S.B. 3 cf G.S. 63 H.S. 2650 F.P.

Certificate to be sent to

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

The amount of Entry Fee ... £ : :
Special ... ... £ 7/5 : :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :

When applied for, 14.8. 1941

When received, ... 19.....

J. Freeman Digby Hall Allison

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 19 AUG 1941

Assigned + LMC 5.41 FD OG.