

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 24 JUL 1944

Date of writing Report 30-5-44 When handed in at Local Office 19 JULY 1944 Port of HULL  
 No. in Survey held at HULL Date, First Survey 6.9.43. Last Survey 4.7.1944  
 Reg. Book on the STEAM TUG ANTICER A/MS 790 (Number of Visits 55.) Tons { Gross 762.24 Net 77.82  
 Built at SELBY By whom built Cochrane & Sons Ltd Yard No. 1282 When built 1944  
 Engines made at HULL By whom made Chas. D. Holmes & Co. Ltd Engine No. 1672 When made  
 Boilers made at HULL By whom made Chas. D. Holmes & Co. Ltd Boilers No. 1672 When made  
 Registered Horse Power Owners The Admiralty Port belonging to  
 Nom. Horse Power as per Rule 269 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which vessel is intended Government Service.

ENGINES, &c.—Description of Engines TRIPLE EXPANSION. CONTRACT Revs. per minute 120.  
 Dia. of Cylinders 18", 29 1/2", 49" Length of Stroke 34" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 10.0926 as fitted 10 1/4" Crank pin dia. 10 1/4" Mid. length breadth — Thickness parallel to axis 6 5/8"  
 Intermediate Shafts, diameter as per Rule 9.612 as fitted 9 7/8" Crank webs shrunk Mid. length thickness — Thickness around eye-hole 4 5/8"  
 Tube Shafts, diameter as per Rule — as fitted NONE Screw Shaft, diameter as per Rule 11.037 as fitted 1 1/4" 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 —  
 Propeller, dia. 11'-10 1/2" Pitch 12'-0" No. of Blades 4 Material C.I. whether Moveable Solid Total Developed Surface 53 sq. feet  
 Feed Pumps worked from the Main Engines, No. NONE Diameter — Stroke — Can one be overhauled while the other is at work —  
 Bilge Pumps worked from the Main Engines, No. Two Diameter 3 1/4" Stroke 18 1/2" Can one be overhauled while the other is at work Yes  
 Feed Pumps { No. and size Two 6" x 8 1/2" x 18" one Duplex 7" x 5" x 6" Pumps connected to the Main Bilge Line { No. and size One 7" x 7" x 8" Duplex 3" Electric Hand pp. How driven Independent Steam Steam St. C'dam.  
 Ballast Pumps, No. and size One 7" x 7" x 8" Duplex 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 2@ 2 1/2" dia. 2@ 3" Dia from Ejector. 3@ 1 1/2" in Gutterway.  
 In Pump Room Afterdam one @ 2" In Holds, &c. One @ 2" Dia in each of the following: Fore Peak.  
 Water Ballast P+S After peak  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size One @ 7" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One @ 3" Steam Ejector. 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.  
 Are all Sea Connections fitted direct on the skin of the ship Valves fitted a Blow-off Bone Cocks direct. 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 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 watertight NONE Is it fitted with a watertight door — worked from —

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 4300.  
 Which Boilers are fitted with Forced Draft BOTH Which Boilers are fitted with Superheaters NONE  
 No. and Description of Boilers Two S.B. Working Pressure 220 @ 10"  
 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 6.5.43 Main Boilers 15.3.43 Auxiliary Boilers — Donkey Boilers —  
 Superheaters — General Pumping Arrangements 28.6.43 Oil fuel Burning Piping Arrangements 6.10.43

### SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes  
 State the principal additional spare gear supplied As per Specification.

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

W.R. Evans

Manufacturer.



6.28.31.  
 1.4.12.23.

**"ENTICER"**

**PILLARS**

Dates of Survey while building

During progress of work in shops - - - 1943 Sept. 6. Oct 15. Nov. 5. 9. 25. 30. Dec. 17. 1944 Jan. 3. 13. 14. 25. 28. 31. Feb. 4. 11. 18. 25. Mar. 6. 7. 10. 16. 17. 18. 23. 24. 31. Apr. 3. 4. 21. 28. May 5. 12. 25. June 3. 5.

During erection on board vessel - - - 1944 FEB 4 MAR 8, 15 APR 4. JUN 1, 5, 6, 7, 9, 12, 13, 14, 20, 21, 22, 23, 26, 27. July 3, 4.

Total No. of visits 55.

**Centre 1 Stiffer**

Dates of Examination of principal parts - Cylinders 18/3/44 10/3/44 16/3/44 Slides 23-3-44 Covers 18/3/44 10/3/44 16/3/44

Pistons 3/4/44 10/3/44 Piston Rods 10/3/44 Connecting rods 24/4/44

Crank shaft 3/4/44 Thrust shaft 3/4/44 Intermediate shafts 17/12/43

Tube shaft - Screw shaft 17/12/43 Propeller 4/2/44

Stern tube 4/2/44 Engine and boiler seatings 5/6/44 Engines holding down bolts 7/6/44

Completion of fitting sea connections 4/2/44

Completion of pumping arrangements 21/6/44 Boilers fixed 7/6/44 Engines tried under steam 20/6/44

Main boiler safety valves adjusted 20/6/44 23/6/44 Thickness of adjusting washers FOR BLR P 11/32 S 3/8 AFT BLR P 5/16 S 3/8

Crank shaft material F.I. Steel Identification Mark 1781 EP 10/2/43 Thrust shaft material F.I. STL Identification Mark 1779, 17-12-43

Intermediate shafts, material D° Identification Marks 1780, 17-12-43 CP Tube shaft, material - Identification Mark -

Screw shaft, material D° Identification Mark 1778, 17-12-43 CP Steam Pipes, material S.D. STL Test pressure 660 lb Date of Test 3-6-44

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 ENVOY

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

The Machinery of the Vessel has been constructed in accordance with the approved plans, the Rules & the Specification, of tested material made by firms accredited by the Society.

The Workmanship & material are good

The Machinery & Auxiliaries have been fitted on board and when tried under steam at as best full power as practicable in the basin were found satisfactory in every respect.

Eligible in our opinion to be classed \* LMC 7,44. OG. and the notation T 3 Cy. 18", 29 1/2", 49" - 34". 269 NHP. 220 lb. 25B. 6 Cf. H 54300 f F D.

Fitted for oil fuel 7,44. FP above 150° F.

The amount of Entry Fee	£ 4 : 0	When applied for, 19 JULY 1944
Special LMC SPEC.	£ 65 : 7	
Donkey Boiler Fee	£ 16 : 7	
Travelling Expenses (if any)	£ :	When received, 19

*W. S. Shields & J. P. ...*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 1 AUG 1944

Assigned + LMC 7,44  
J.D. Og

