

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19... When handed in at Local Office **29 JUN 1943** Port of **Alice**  
 To. in Survey held at **Goole** Date, First Survey **25. 2. 42** Last Survey **25. 6. 1943**  
 Rep. Book (Number of Visits **26**)  
 on the H.M. moving Vessel (Single Screw) **"MOORELY"** Tons { Gross **457** / Net **172**  
 built at **Goole** By whom built **Goole Shipbuilding & Repg. Co. Ltd.** Yard No. **385** When built **1943**  
 Engines made at **Glasgow** By whom made **Blair's Ltd.** Engine No. **3810** When made  
 Boilers made at **Leeds** By whom made **Clayton Son & Co. Ltd.** Boiler No. **659 1/2** When made  
 Registered Horse Power Owners **Admiralty** Port belonging to  
 Nom. Horse Power as per Rule **150** Is Refrigerating Machinery fitted for cargo purposes **no** Is Electric Light fitted **yes**  
 Trade for which vessel is intended **Admiralty moving vessel**

**GINES, &c.**—Description of Engines **Triple Expansion** Contract Revs. per minute **150**  
 Dia. of Cylinders **12 1/2", 20", 33"** Length of Stroke **24"** No. of Cylinders **3** No. of Cranks **3**  
 Crank shaft, dia. of journals as per Rule **6.559** Crank pin dia. **6 5/8"** Mid. length breadth **10"** Thickness parallel to axis **4 3/8"**  
 as fitted **6 5/8"** Crank webs Mid. length thickness **4 5/8"** shrunk Thickness around eye-hole **2 1/8" & 3 1/2"**  
 Intermediate Shafts, diameter as per Rule **6.247** Thrust shaft, diameter at collars as per Rule **6.559**  
 as fitted **6 1/4"** as fitted **6 5/8"**  
 Tube Shafts, diameter as per Rule **7.35** Is the { tube / screw } shaft fitted with a continuous liner { **no liner** }  
 as fitted **7 3/8"** as fitted  
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the  
 as fitted 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 **yes**  
 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 **yes**  
 If two liners are fitted, is the shaft lapped or protected between the liners **yes** Is an approved Oil Gland or other appliance fitted at the after end of the tube  
 at **yes** If so, state type **NEWARK** Length of Bearing in Stern Bush next to and supporting propeller **2' 8 3/8"**

Propeller, dia. **9' 0"** Pitch **7' 3"** No. of Blades **3** Material **Bronze** whether Moveable **Solid** Total Developed Surface **23** sq. feet  
 Feed Pumps worked from the Main Engines, No. **none** Diameter Stroke Can one be overhauled while the other is at work **yes**  
 Bilge Pumps worked from the Main Engines, No. **none** Diameter Stroke Can one be overhauled while the other is at work **yes**  
 Feed Pumps { No. and size **Two 5" x 12" stroke x 7" stroke cyl. dia.** Pumps connected to the { No. and size **One 7" x 15" x 8 1/2" & One 6" x 12" x 7" also semi-port pump**  
 How driven **Independent Steam (weirs)** Main Bilge Line How driven **Independent Steam (weirs)**  
 Ballast Pumps, No. and size **One 7" x 5" x 8 1/2" One 6" x 12" x 7"** Lubricating Oil Pumps, including Spare Pump, No. and size **none**  
 Are two independent means arranged for circulating water through the Oil Cooler **yes** Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps:—In Engine and Boiler Room **3 at 2 1/2" in ER. Two at 2 1/2" in BR**  
 In Pump Room **none** In Holds, &c. **One 2" in FP. One 2 1/2" for pump. One 2 1/2" dump in fore crew space.**  
**Two 2 1/2" in Hold. One 2 1/2" in A.P.**

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 2 1/2" to 40 ton pump. One 2 1/2" to 20 ton pump** 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 **either direct or heavy G.M.** Are they fitted with Valves or Cocks **Valves**  
 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 **Valves to Admiralty reqt**  
 What Pipes pass through the bunkers **wash deck service aft bilge main** How are they protected **Steel plates**  
 What pipes pass through the deep tanks **yes** Have they been tested as per Rule **yes**  
 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 **no** worked from **yes**

**MAIN BOILERS, &c.**—(Letter for record **S**) Total Heating Surface of Boilers **2886 sq ft for two boilers.**  
 Which Boilers are fitted with Forced Draft **Both** Which Boilers are fitted with Superheaters **none**  
 No. and Description of Boilers **Two S.E. Cyl. multitubular** Working Pressure **180 lb**  
**IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes**  
**IS A DONKEY BOILER FITTED? No** If so, is a report now forwarded? **yes**  
 Can the donkey boiler be used for domestic purposes only **yes**

**PLANS.** Are approved plans forwarded herewith for Shafting Main Boilers **15.7.41** Auxiliary Boilers **—** Donkey Boilers **—**  
 (If not state date of approval)  
 Superheaters **—** General Pumping Arrangements **15.9.41** 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 **as per attached list**

The foregoing is a correct description.

Manufacturer.



40-2  
 20. 23.  
 14. 17. 20.  
 13. 19.  
 12. 13.  
 90.

"MOORFLY"

Rpt. 4.

During progress of work in shops - - - *See Gls. Rpt. No. 66247*  
 Dates of Survey while building - - - *1942 Feb 25, JUN 22, JUL 11, AUG 10, OCT 1, 27, DEC 18, 29, 1943 JAN 25, FEB 1, MAR 1, 3, 5, 23, 29, APR 1, 7, 15, MAY 3, 6, 10, 11, 13, 14, June 21, 25.*  
 Total No. of visits 26.

Dates of Examination of principal parts - Cylinders \_\_\_\_\_ Slides \_\_\_\_\_ Covers \_\_\_\_\_  
 Pistons \_\_\_\_\_ Piston Rods \_\_\_\_\_ Connecting rods \_\_\_\_\_  
 Crank shaft *See Gls. Rpt. No. 66247* Thrust shaft \_\_\_\_\_ Intermediate shafts \_\_\_\_\_  
 Tube shaft \_\_\_\_\_ Screw shaft \_\_\_\_\_ Propeller 11.7.42.  
 Stern tube 11.7.42 Engine and boiler seatings 10.8.42. Engines holding down bolts 29.12.42, 29.3.

Completion of fitting sea connections 11.7.42.  
 Completion of pumping arrangements 28.4.43 Boilers fixed 29.3.43 Engines tried under steam 28.4.43, 11.5.43  
 Main boiler safety valves adjusted 28.4.43 Thickness of adjusting washers *PB P 3/8" 5 3/8" SB P 3/8" 5 1/16"*

Crank shaft material *See Gls. Rpt. No. 66247* Identification Mark *No 66247* Thrust shaft material \_\_\_\_\_ Identification Mark \_\_\_\_\_  
 Intermediate shafts, material *See Gls. Rpt. No. 66247* Identification Marks *LCD. 15.9.42* Tube shaft, material \_\_\_\_\_ Identification Mark \_\_\_\_\_  
 Screw shaft, material *66247* Identification Mark \_\_\_\_\_ Steam Pipes, material *Steel* Test pressure *540 lb* Date of Test *3.3.43 7.*

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   
 Is this machinery duplicate of a previous case *YES* If so, state name of vessel *MOORBURN Hull Rpt No. 51810*

General Remarks (State quality of workmanship, opinions as to class, &c.)  
*The machinery of this vessel has been installed under Special Survey in accordance with the Society's Rules, the Specification and Admiralty Requirements and is of good materials and workmanship. When tried under working conditions the machinery was found satisfactory in every respect. It is eligible in my opinion to have the records \* LMC 5,43. OG. with the notation of T 3cy. 12 1/2", 20", 33" - 24". NHP 150 25B. 180 lb 4c.f. GS. 78. HS 2886 F.O.*

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	£	:	:	When applied for,
Special	80	:	0	29 JUN 1943
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	£	:	:	19.

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

Committee's Minute *TUES. 6 JUL 1943*  
 Assigned *See for machinery etc.*

