

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

THU. 23 MAY. 1924

Date of writing Report 19 When handed in at Local Office 23-5-24 19 Port of Middelesbrough  
 No. in Survey held at South Bank-on-Tees Date, First Survey 17th May 1923 Last Survey 17th May 1924  
 Reg. Book. on the machinery of the steel screw steamer "PEGAWAY" (Number of Visits 4)  
 Built at South Bank By whom built Smith's Dock Co. Ltd. Yard No. 782 Tons } Gross  
 Engines made at South Bank By whom made Smith's Dock Co. Ltd. Engine No. 238 When built 1924 } Net  
 Boilers made at West Hartlepool By whom made Richardsons Westgate Ltd. Boiler No D153 when made 1924  
 Registered Horse Power Owners Hill Shipping Co. Ltd. Port belonging to Newcastle-on-Tyne  
 Nom. Horse Power as per Rule 203 201 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion  
 Dia. of Cylinders 20 1/2-33-54 Length of Stroke 39 Revs. per minute No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journals as per rule 10.85 as fitted 11 Dia. of Crank pin 11 Crank webs Mid. length breadth 1.5 1/4 Thickness parallel to axis 7  
 Mid. length thickness 7 If shrunk Thickness around eye-hole 5/16  
 Diameter of Thrust shaft under collars as per rule 10.85 as fitted 11 Diameter of Tunnel shaft as per rule 10.32 as fitted 10.5 Diameter of Screw shaft as per rule 11.9 as fitted 12 1/2 Is the Screw shaft fitted with a continuous liner the whole length of the stern tube Yes 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 joints burned In one length 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 appliance fitted at the after end of the shaft to permit of it being efficiently lubricated No Length of Stern Bush 4-7 1/2 Diameter of Propeller 15-0  
 Pitch of Propeller 16-9 No. of Blades 4 State whether Moveable No Total Surface 70 sq square feet.  
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/4 Stroke 20 Can one be overhauled while the other is at work Yes  
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/4 Stroke 20 Can one be overhauled while the other is at work Yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps 2 1 @ 6x4x6 1 @ 10x11x10  
 No. and size of Pumps connected to the Main Bilge Line One 10x11x10  
 No. and size of Ballast Pumps One 10x11x10 No. and size of Lubricating Oil Pumps, including Spare Pump ✓  
 Are two independent means arranged for circulating water through the Oil Cooler ✓ No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3 @ 3" and in Holds, &c. 2 @ 3" in Nos 192 holds  
2 @ 2 1/2" in N° 3 hold 2 @ 2 1/2" in N° 4 hold Tunnel well 1 @ 2 1/2"  
 No. and size of Main Water Circulating Pump Bilge Suctions One 5" No. and size of Donkey Pump Direct Suctions to the Engine Room Bilges One 3" 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 (old rule)  
 Are all connections with the sea direct on the skin of the ship Yes Are they 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 Discharge Pipes 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 are carried through the bunkers suctions to forward holds How are they protected wood ceiling  
 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 Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from top platform

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 3154 sq  
 Is Forced Draft fitted No No. and Description of Boilers two single ended Working Pressure 180 lbs.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes, see West Hartlepool Rpt. N° 16080  
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? ✓  
 PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Yes Auxiliary Boilers ✓ Donkey Boilers ✓  
 (If not state date of approval) General Pumping Arrangements Yes Oil Fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:— One cast iron propeller, two each connecting rod top and bottom end and main bearing bolts & nuts, one set of coupling bolts & nuts, one set of feed & bilge pump valves, one set of main and donkey check valves, one safety valve spring, crank shaft gauge. A quantity of assorted bolts & nuts & iron of various sizes

The foregoing is a correct description,  
Smith's Dock Co.

H. Scott  
Manufacturer.

1923/ May 17 Oct 11, 23, (1924) Jan 15, 18, 21 Feb 15, 19, 22, 25, 27 Mar 5, 7, 10, 12, 13, 14, 17  
 During progress of work in shops - - 19, 21, 24, 25, 27, 31. ~~Apr 1, 4, 7, 10, 12, 15, 17, 24, 28, 30~~ May 2, 5, 7, 8, 10, 12, 17  
 Dates of Survey while building During erection on board vessel - - -  
 Total No. of visits 43

Dates of Examination of principal parts - Cylinders 10-3-24 Slides 4-4-24  
 Covers 19-3-24 Pistons 19-3-24 Rods 19-3-24  
 Connecting rods 19-3-24 Crank shaft Lith 29-5-23 Thrust shaft Lith 20-4-23  
 Tunnel shafts Lith 20-4-23 Screw shaft Lith 20-4-23 Propeller 19-2-24  
 Stern tube 22-2-24 Engine and boiler seatings 1-4-24 Engines holding down bolts 7-5-24  
 Completion of pumping arrangements 13-5-24 Boilers fixed 28-4-24 Engines tried under steam 13-5-24  
 Completion of fitting sea connections 1-4-24 Stern tube 17-4-24 Screw shaft and propeller 17-4-24  
 Main boiler safety valves adjusted 12-5-24 Thickness of adjusting washers Port boiler PV 9/32 SY 3/8 Starboard boiler PV 13/32 SY 11/32  
 Material of Crank shaft Ingot steel Identification Mark on Do. 547  
 Material of Thrust shaft Ingot steel Identification Mark on Do. 550  
 Material of Tunnel shafts Ingot steel Identification Marks on Do. 548  
 Material of Screw shafts Ingot steel Identification Marks on Do. 549  
 Material of Steam Pipes Solid drawn copper Test pressure 400 lbs Date of Test 5-5-24  
 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 carrying and burning oil fuel been complied with ✓  
 Is this machinery duplicate of a previous case No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under special survey. The materials and workmanship are sound & good. The engines, boilers and auxiliaries were examined under steam and all found satisfactory. The machinery is now in a good and safe working condition and renders the vessel eligible in my opinion to have the notation **⚓ LMC 5.24** in the Register Book.

Note:- This vessel is fitted with Electric Light & Wireless

It is submitted that this vessel is eligible for THE RECORD. + LMC 5.24. CL.

*Handwritten signature and date: 2/6/24*

*Handwritten signature: A.D. Morris*

Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 4 : 0 :  
 Special ... £ 29 : 15 :  
 Donkey Boiler Fee ... £ ✓ :  
 Travelling Expenses (if any) £ ✓ :  
 When applied for, 28.5.1924  
 When received, 10.6.1924

FRI 6 JUN 1924

+ L.M.C. 5.24  
 C.L.

Committee's Minute

Assigned

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

CERTIFICATE WRITTEN

